Collaborative movie-making with Moviestorm

A guide for schools

Moviestorm 1.4.1

Information in this guide is given in good faith, but no warranty is made or implied as to its accuracy or completeness. Updates to the Moviestorm software may render some of this information obsolete.

Note that all screenshots are taken from Windows versions of the software. Mac versions may differ slightly.

HOW TO USE THIS BOOK

You don't need to read the whole book!

There's a lot more to movie-making than you can take in at one go, so focus on the bits you need to know right now. As long as someone in your team has read each section, that's enough to get you through. Once your role is assigned, you can read the sections for that role. You can then come back later and read the other sections if you're interested.

- **Making your first movie (6 pages)**
  Everyone should read this section. It explains the roles in a movie crew and helps you decide who's going to do what.

- **How Moviestorm makes it easier (2 pages)**
  Everyone should read this section. It will help you understand how to get the best out of Moviestorm.

- **Before you start filming (3 pages)**
  Everyone should read this section. It will save you a lot of time further along the process.

- **Creating your film with Moviestorm**
  Just read the sections for your role(s). If your assigned role is **producer**, **writer** or **actor**, this doesn't involve using Moviestorm, and you can skip this whole section.

    Production designer (7 pages)
    Director (5 pages)
    Editor (4 pages)
    Sound designer (6 pages)

  Note: the number of pages in this section isn't a guide to how much work is involved, how long it'll take you, or how important the job is. It's an indication of how many different tasks are involved.

- **More information (4 pages)**
  This is purely optional. Follow it up if you want to find out more, otherwise you can skip it.

Just learn the bits of Moviestorm you need

*Each section in **Creating your film with Moviestorm** has links to Moviestorm tutorial videos and other information. Watch the tutorials and practice the skills you need for your role. It doesn't hurt to learn what the other roles do, but you don't need to if you don't want to.*

MAKING YOUR FIRST MOVIE

Movie-making involves a lot of different skills and usually a lot of people working together. The first time you try making your own movie, you may find it confusing, and feel like you're not sure what to do. Don't worry, though. Once you understand what's involved and break it down into small tasks, it's much easier to put everything together into a finished film. Then it's just a matter of practice, practice and more practice...

ROLES IN YOUR MOVIE CREW

When you watch the credits of a movie, there are literally hundreds of roles. You probably know what the director and actors do, but what about everyone else? What does a dolly grip do? Or a swing gang foreman? Or a foley artist? Well, don't worry about them right now.

For your first movie, there are just seven roles that cover everything.

Producer

The producer is in charge of the whole project. His job is to make sure the movie gets made on time. It's not a creative role. It's a management role. The only time the producer gets involved with the creative side is to tell people, usually the director, that something he wants to do is too expensive or will take too long. It's not a glamorous job either - everyone knows their favourite directors and stars, but who even knows who the producer is on most movies? If the producer does their job well, the creative team get the credit. But if the movie is a failure, it's the producer's fault.

The producer's jobs

- **Manage the schedules**
  It's your job to ensure that everyone knows what they're doing, what they have to deliver, and when. It's your decision when to stop working on the story and start on the script, when to start filming, and when the film is finished.

- **Make the final decision as to what's in the movie**
  It's up to you to get the film finished on time. The creative team will always want to do more to it - add in an extra scene, do some cool effects, and so on. The chances are, they'll want to do more than you have time for. You have to strike a balance between what they want to do, and what your time and budget allow. This is a very tricky role, requiring a lot of diplomacy and people skills.

  Being a **producer/director** can work well, as that means one person is in charge of the creative and the management side, so there are fewer arguments about what you're making. This is quite common for indie movies. This is great if that person has a strong vision of what they want to achieve and has the discipline to work within their capabilities. However, it's often a good idea to have the producer and director as two separate people, so there's someone to act as a check on the director's ambition.

Director

The director is responsible for filming the movie and is the head of the creative team. It's the most high profile job on the team, but it's also the most work. In a small animation team like this, the director's role also includes the cameraman's job. It can save a lot of time to have one person controlling both the characters and the camera. It also overlaps quite strongly with what the editor normally does.

The director's jobs

- **Coordinate the creative team**
  Work with everyone else to make sure that everything fits together. You get to approve the production designs and script, and ask your team for changes. Don't forget, though, you can always be overruled by the producer if you ask for too much. And don't be a dictator - that just means everyone will get fed up with you. Take suggestions from everyone else, particularly in their area of responsibility. Your job is to get the best out of everyone, not to boss them around.

- **Direct the action**
  Tell the actors where to go on set, and what you want them to do. Supervise the dialogue recording too, so that you get the emotion you want from them.

- **Shoot the movie**
  Decide how you want to film it: whether to use close-ups or long shots, where to place the cameras, and so on. You should work closely with your editor throughout to make sure she has whatever she's going to need to edit it all into a finished film.

  Directing can combine well with any other role, particularly if the movie is very much one person's idea and they know what they want. **Producer/director**, **writer/director**, **director/editor** and **director/designer** are all common combinations that can work well. If your director does take on two roles, be careful the rest of the team don't feel they don't have enough input, and make sure the director hasn't taken on too much work.

Production designer

The production designer creates everything that's going to be in the movie. In a small team like this, the production designer's role includes several different departments: wardrobe, set design, casting, make-up, costuming and lighting. In short, it's their job to provide everything that the director is going to need to shoot the movie.

The production designer's jobs

- **Work out what you need**
  Start with the script and figure out exactly what's going to be included in the film - every location, every prop, every extra. Then go through with the director and see what else he needs - if he thinks it would be cool to have a hot dog stand on a street corner, note that down.

- **Come up with designs**
  When the writer says the scene is in "John's living room", this could mean anything. Your job is to decide what John's room actually looks like. Work with the director to make sure it's easy to film in and he has enough space to work with. Find out if there are any special props he's going to want, like an armchair or a photo of his mum on the desk. Do the same with the characters and everything else.

- **Build everything**
  Finally you create everything you've listed above. If you've been working well with the director, you can make sure you only build what's actually needed - you don't have to build a whole room if you're only going to film in one corner, for example.

  Production design can go very well with any other role, and has to work closely with the **sound designer**. It's also something you can easily split between several people, with one person dealing with the set and lighting, and someone else doing characters. You can split that even further, and have one person creating faces and hair and someone else doing the costumes.

Editor

The editor takes all the bits from everyone else and assembles the finished movie. It's one of the most important roles in the entire team, but one that's rarely recognised. The editor's role here is a bit different to usual, as the director does a lot of the editing as they're filming. On the other hand, the editor has to do things a typical movie editor doesn't do.

The editor's jobs

- **Edit the film**
  Take the footage from the director, and cut it into the finished movie. Be prepared to ask for things to be redone: you may need bits of the set redesigned, some scenes reshot, the lighting set up differently, or even for actors to say their lines again. The more closely you can work with the rest of the crew in the early stages, the less likely you are to have to go back and do things again.

- **Add titles, credits, subtitles, etc**
  These are important touches that make a big difference.

  A **director/editor** can work extremely well if the director knows exactly what they are trying to achieve. It makes it easy for them to film what they know they are going to need, and they can go back and reshoot things quickly and easily when required. On the other hand, splitting these roles up has the advantage that you now have an extra person available to spot problems and making suggestions. **Editor/sound** is a great combination too.

Sound designer

Sound is one of the most important parts of a movie, but it's often overlooked. Many movies are let down by poor sound, and a good sound person will make a huge difference. It can be one of the most creative parts of the process, as sound can completely transform what you see into something quite different.

The sound designer's jobs

- **Record the dialogue**
  Your first job is to get a good quality recording of the actors. Make sure you don't have clicks or background noise, and give the director several different takes to work with.

- **Add sound effects and music**
  The creative side of the job is to add in whatever sounds are necessary. You'll have to decide what sounds are needed, find them or record them, and work with the editor to put them into the movie. This could be anything from footsteps to traffic noises, phones ringing, or a soundtrack.

  Editing and sound go together extremely well. Let the director handle filming the movie, and have someone else put it all together. **Sound and production design** can also make a good combination.

Writer

The writer writes the script. That's about it.

The writer's jobs

- **Write the dialogue and the events**
  Your main task is to write the actual words being spoken by the characters, and provide a description of what's happening. Don't go into too much detail - remember that deciding how to film it is the director's job.

- **Be prepared to rewrite**
  What looks good on paper doesn't always work well when the actors say their lines or when the director tries to film the scene. Work closely with the director and producer and be prepared to change the script if necessary. This doesn't mean your script was bad: most movies get rewritten over and over as people come up with new ideas and ways to improve things.

  Any member of the team can be the writer as well as everything else, or you can collaborate on the writing. **Writer/director** can be a great combination if one person has a really strong idea for the movie, but it can leave everyone else feeling left out. **Writer/production designer** makes a great combo too, as it means the writer can create the characters and sets exactly the way they imagine them in the script.

Actor

The actor's job is the most straightforward of all when you're making animated movies, and takes the least time. They just have to say the lines in the script - no physical acting, make-up or costumes required!

The actor's job

- **Record your lines**
  The most important thing is to really think yourself into the character, so that people really believe in what they're seeing on screen. A good performance is what the audience will remember more than anything else.

  Any member of the team can do acting as well - and of course, you can bring in friends, family, or anyone else who wants to help out, even if it's just for one line!

SUGGESTED TEAM ORGANISATION

Now that you've got some idea of what's actually involved in making a movie, think about what you'd like to do and how to divide the work between you.

There are many ways you can organise your teams: these are just some suggestions, and everyone has different ways of doing things. Figure out what works best for you.

Remember, every role is important, and they all require a lot of commitment. There are no minor roles in a small team.

There are two approaches you can use, depending on whether you prefer to have one person specialising in each part of the movie-making process, or whether you all want to have a go at each of the different bits.

Whichever approach you choose, assume that everyone gets to do some acting.

Pick roles for each person

Divide the roles between the team members. Some people will have to take more than one role if there are only a few of you.

- **What's good about this method?**
  This works well if there are some people who are more comfortable with Moviestorm than others. For example, the producer and writer probably don't have to use Moviestorm at all, but the director has to be familiar with quite a lot of it and will spend all their time using it.

  This also works well if you all have very definite ideas of what you want to do - and what you don't like doing. If one person really likes just building stuff, then they'll enjoy being production designer. Each person gets to "own" one bit of the movie and have an area of expertise.

- **What's bad about this method?**
  Only one person gets to be hands-on in each part of the process - particularly when it comes to actually filming your movie. At some points, there's nothing for some people to do. It's important to make sure the rest of the team are always included by asking for suggestions and encouraging people to put forward their ideas.

  Here are some ways you can divide up roles in a small team. You don't have to do it this way - if one person really wants to produce and write the movie, and someone else wants to do production design and sound, and everyone's happy with that, then do it however you like!

4 people	3 people	2 people
1. Producer	1. Producer / production designer	1. Producer / writer / director
2. Director	2. Director / writer	2. Editor / production designer / sound designer
3. Editor / sound designer	3. Editor / sound designer	
4. Writer / production designer		

Splitting the roles between people

For each of the roles, divide up the different tasks between you.

For maximum variety, you can share the roles completely. If you have two sets in your movie, two people can build one each. Or else one person can create the rough set, and someone else can add set dressing. One person can direct one scene, and someone else can direct the next scene. One person can find music, and another can look after sound effects. There are plenty of ways to split the jobs up.

- **What's good about this method?**
  This works well if everyone wants to have a go with Moviestorm, and everyone wants to get some experience with the whole movie-making process. It keeps everyone involved throughout, and you don't put too much work onto one person - otherwise it can often feel like the director's doing everything and everyone else is just sitting around while they make the movie.

  Since several people are involved in each stage, there's usually someone in the team who knows how each thing works, and you can solve irritating problems much quicker.

- **What's bad about this method?**
  It can be slower to work this way. Only one person at a time can operate Moviestorm, so you have to keep switching between people as you move between the different tasks. Be prepared to surrender control of the keyboard and mouse frequently!

  Everyone has to be familiar with most of Moviestorm, so there's a lot for everyone to learn. Some people won't feel as comfortable with all parts of the process, and this can get frustrating at times. Always work as a team and ask the rest of your crew for help. If you're really having problems with getting the results you need, it may be best to let someone else control Moviestorm and just tell them what you want them to do.

  Here are some ways to split up the three major Moviestorm-related roles. You could split them even further if you like - have one person putting together rough versions of each stage, and then let someone else come in and add more detail and extra polish. In directing, for example, one person can do the basic choreography and dialogue and someone else can add in gestures and moods. Just make sure that every job has been given to someone!

Director	Production designer	Editor
• Directing • Filming	• Sets • Lights • Cast (faces & hair) • Costume	• Editing • Titles and credits • Filters and effects • Rendering

MAKING THE MOST OF MOVIESTORM

Moviestorm's just one of many ways you can make a movie. It's not quite the same as traditional movie-making or animation, but it has a lot of advantages, especially when you're just starting out.

Flexibility - you don't have to get it right first time

Probably the most important thing about working with Moviestorm is that you're not stuck with the traditional pre-production - production - post-production process. You can go back and forth until you're happy with the results. This takes a lot of the pressure off when you're just learning how everything works. You won't get to the end and realise there's something you should have done differently right at the start.

- **Change anything, any time**
  You can easily go back and make changes, even when you've started editing. You can add bits to the set or move things around, you can change the costumes or the character's faces, you can change the lighting, you can change the actors' performances and you can redo the camerawork.

- **Start filming early: no need to storyboard**
  You can start filming right away, even before you've finished building your sets and characters. This gives you a rough cut at an early stage, and you can quickly see which bits work and which bits need to be thought out again. If a scene isn't working, you've got time to rewrite it if necessary. You'll also find out early on what you actually need to build, so you don't waste time creating things that never get shown on screen.

Large content library - you don't have to create everything

With Moviestorm's built-in assets, you're not limited to what you can buy or borrow from school, friends or family. You can add to that with third party mods if you need them. You only need to create your own content if you can't get it any other way.

- **Customisable props, sets and costumes**
  Need a police uniform? A recording studio? A flaming torch? A country garden? All those and much more are right at your fingertips as soon as you open up Moviestorm.

- **Character creator**
  It doesn't matter if none of your actors look right for their part. You can also have one actor playing several different parts, and nobody will notice if they use different voices.

- **Ready-made animation**
  Moviestorm has a huge selection of things your actors can do. You don't have to laboriously create animations by hand: just pick something appropriate and customise it. It's as easy as playing a game.

You can think big!

Because everything's done on a computer, you can film scenes you can't easily do in real life. Let your creativity go wild!
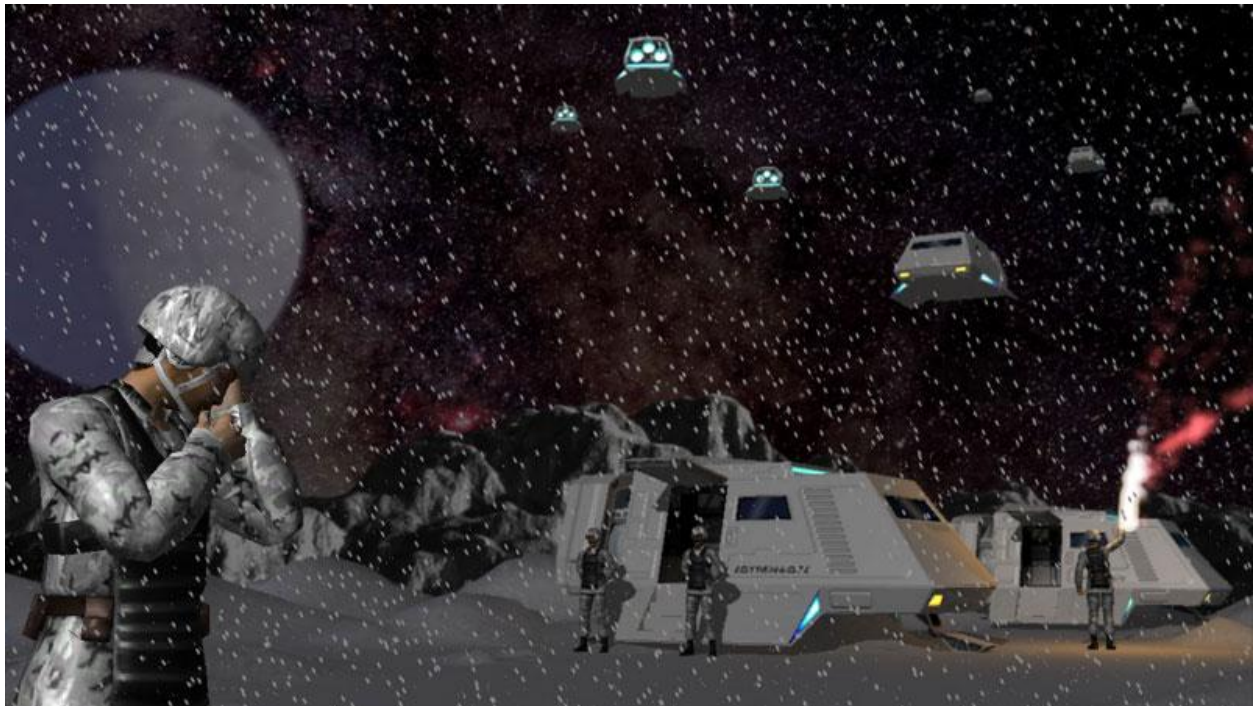
- **Action scenes**
  You can do much more with Moviestorm than just filming your friends. Even on a student budget, you can have fight scenes, car chases, or even UFOs landing.

- **Big crowds**
  It's hard work filming scenes with lots of actors and extras. With Moviestorm, you can have as big a cast as you need.

- **Exotic locations**
  With Moviestorm, you can film in places like Miami Beach, the White House, or an alien planet, all without leaving your chair. And you don't have to worry about the weather! Filming at night's a snap too - just change the lighting and you're done.

Scenes like this are easy with Moviestorm. If you were doing this with live action, you'd need a huge budget for costumes, props, sets, and special effects, and you'd probably need to do a lot of it with CG animation anyway.

BEFORE YOU START FILMING...

It's very tempting to try and start filming your movie right away. A little patience at the beginning, however, will save you a lot of time and frustration in the long run. So, before you start, there are three things you need to do. You'll be glad you did!

Find out what you've got to work with

You don't want to find yourself half-way through making your film when you realise that you can't actually get the cool shot you were depending on and you're going to have to rewrite everything. And you don't want to get to the end of the film and then discover that the perfect costume or animation you needed was there all along. It's well worth spending time really getting to know what you can or can't do, then you can plan your movie to take advantage of that.

- **Learn about Moviestorm and any other tools you need**
  Make sure you at least know the basics about how everything works. Make a couple of quick test movies so you're familiar with what's possible. If you're going to use other tools as well, such as *Audacity* for voice recording, give them a try out, and make sure you know exactly how they integrate with Moviestorm. You don't want to be trying to figure out your tools when you're trying to concentrate on getting your movie done in time or thinking about how to get a great movie.

- **Know what assets are available**
  Look through all the costumes, sets, props, animations and sounds provided by Moviestorm. There's quite a lot, so this can take a while. If Moviestorm doesn't supply what you need, you can look elsewhere. There are third party mods that may be useful, and Moviestorm comes with modding tools so you can create your own. Also, you should research sources of copyright-free music and images if you're planning on using them. You also need to consider what voice actors you'll be able to work with.

A tiny selection of the huge library of props and set dressing available in Moviestorm

TIP: if you're working as a team, give one person the job of researching the assets. They can then tell you whether what you want to do is possible. This is an ideal job for the *production designer*. It's essential that your **writer** and **director** know what the limits are, so they don't end up trying to do the impossible.

Plan your story

Once you know what you can do, you're in a position to decide exactly what you're going to do. Start by coming up with lots of ideas for the story, and think about whether they're possible. When you've got the basic story, then you can write your script and think about how you're going to film it.

- **Write your story outline**
  The most important thing in a successful movie is a good story, so spend plenty of time brainstorming at this stage. Think about what makes your characters interesting, and why your audience should care about what's happening. If you have ideas for cool scenes or shots, put them in now. Don't get into too much detail yet - just focus on the plot, and the characters. There are plenty of good guides to story-writing available online or in libraries.

- **Write your script**
  Once you've agreed on the story, then the *writer* can start on the script. You can use a scriptwriting tool like *Celtx* if you want, or else just use a word processor. Your script should make the following things clear:

      WHERE the scene is set
      WHEN it is happening (night or day)
      WHO is in the scene
      WHAT they are saying
      WHAT they are doing

  There are standard ways to lay out a professional screenplay, but you don't need to follow them strictly. As long as you all understand what's going on, that's perfectly good enough. Don't sweat about the layout, just make sure it makes sense to the rest of the team.
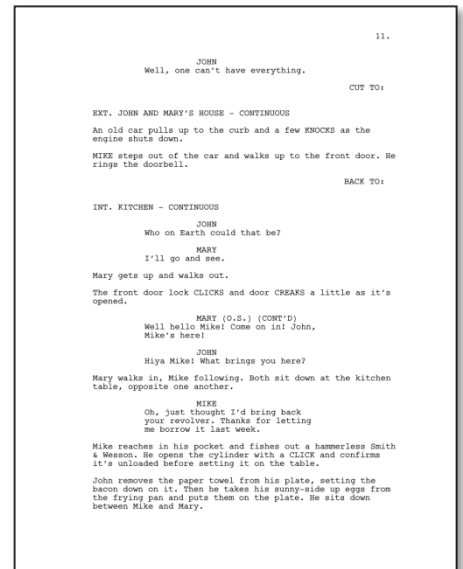
- **Come up with ideas for how you want it to look and feel**
  When you have a script, the entire crew should start coming up with ideas for how to turn that into a film. Think of rough ideas for the sets, costumes, music, and so on. If there's a scene in a shop, what kind of shop? A brightly lit supermarket or a small corner shop? Are there other customers or staff? Give the *production designer, sound designer* and *director* lots of ideas to work with.

- **Go back and do it again...**
  You will come up with all sorts of ways to make the script better. Rewrite the script, and go through the design stage again. Keep going until you're happy - but don't run out of time! Eventually, the *producer* has to make the decision to move on.

  TIP: most major movies go through at least ten rewrites, and often many more, so don't worry if it takes a few times to get your script the way you want it!

Plan your project

*So now you know what you're going to make. But before you get stuck into filming, you need to make your final checklist and plans. It's really, really tempting to just skip this boring admin bit and start on your movie, especially as everyone's really enthusiastic right now, but don't. This is your last chance to spot and fix problems easily before they turn into a major headache. It's the **producer**'s job to make sure this is done right, and then to make sure everyone sticks to the production schedule.*

- **Assign roles**
  If you haven't done this already, now's the time to decide who's doing what!

- **Figure out what you're going to need**
  Go through the script with and work out exactly what you're going to need; how many sets, how many characters, how many voice actors, what sounds and music, and so on. If you're going to need mods or other custom content, decide whether you can download them or whether you'll have to make them.

- **Schedule each piece of work**
  Decide exactly what needs to happen when. In some cases, you won't be able to get on with one part of your movie until you've got everything you need from someone else - or maybe several people! Make sure those people know that other people are depending on them to deliver on time.

  TIP: allow more time than you think. Things *will* go wrong, and you'll also find that you want to go back and re-do things you thought you'd finished. That's guaranteed, every time!

- **Review your plan and make sure you can do everything in time**
  You may realise you've been too ambitious. Perhaps you've got too many characters and don't have enough actors. Perhaps your movie's just too long, or some of the scenes are too complex. If so, now's the time to go back and rewrite your script until you're down to something manageable.

CREATING YOUR FILM WITH MOVIESTORM

This section explains how you actually use Moviestorm to make a movie. It's split up by roles, so you can just read the sections that are relevant to you. Note that three of the roles (producer, writer and actor) aren't included in this section as there's no need to use Moviestorm for those roles.

Whatever role you take, there are several useful resources online:

- **Video tutorials**
  A selection of short video tutorials covering all aspects of Moviestorm. Most are only a couple of minutes long.

  Everyone should be familiar with the basics of Moviestorm, even if their role doesn't require them to use it. The producer especially should understand what everyone else has to do. There are two videos that give you a great overview very quickly:

  Moviestorm Made Easy - getting started http://www.vimeo.com/20516290 (4 minutes)
  Introduction to Moviestorm http://www.vimeo.com/21082127 (15 minutes)
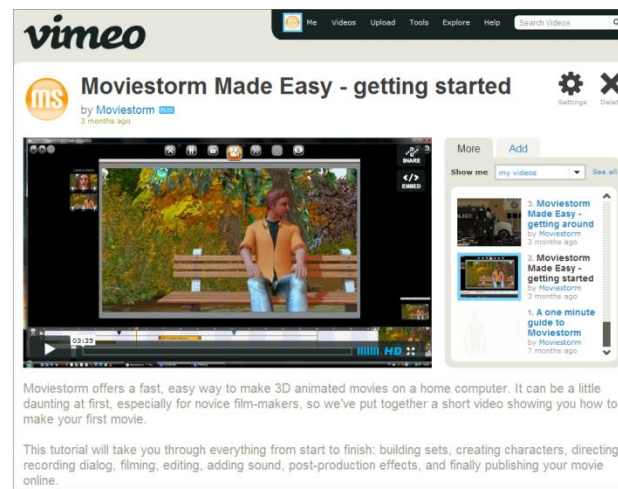
- **Moviestorm user manual**
  A complete 36-page guide to using Moviestorm.

- **Hints and tips**
  A selection of useful suggestions.

- **Moviestorm help forums**
  The Moviestorm community is very helpful. If you're stuck, try here first.

- **Moviestorm modding**
  For more advanced users, you may want to try making your own assets. This may require additional tools.

PRODUCTION DESIGNER

You're going to do far more than a production designer normally does. You're not just going to design everything in the movie, you're going to make it all as well. You may find that the best way to work is to create rough versions of each set and the speaking characters as quickly as possible so the director and editor can get on with filming, then you can add in more detail while they're doing that. Doing it that way also means you only have to build what's going to be on screen, and you're not wasting time building things that will never be seen. You'll spend most of your time in two parts of Moviestorm: the Set workshop and the Character workshop.

Set building

It may seem obvious, but the purpose of set building is to tell the audience where something is happening. Do that well, and your story is that much more believable. A badly designed set will put your audience off and make it hard for your director and editor to create something stylish and memorable. A good set doesn't need to be complicated - it just needs to be right for the story.

Designing for filming

Building a movie set isn't anything like building a real place. You need to be aware of giving the director enough room to film in, and you don't need to build complete rooms. In some cases, you may be able to get away with just one wall, or use a photograph as a backdrop and film in front of that.

- If you're building an interior, just build three walls, as if it was a stage set. The director can film through the open wall and not worry about running out of room. This means that the director can only really film in one direction, or else the empty space will be obvious, but that's actually good film technique.
- Start by building the absolute simplest set you can, so the director can figure out how to use the space effectively. For an interior, just put in walls, doors, and any essential furniture such as chairs or tables. Put the rest in later once the director is happy with the basic layout.
- Set dressing (pictures, plants, etc) serves two different purposes. It helps decorate the set and make it look real. It's also used to help make shots look better by adding in foreground and background objects. When you're adding set dressing, don't just think about what looks good in the set workshop view, start by thinking about what looks good on camera, and place your set dressing for best effect.
- Colours are really important for two reasons. Firstly, they affect the mood of your scene: greys and blues make a scene feel stark and depressing, warm colours are more romantic and happy. Secondly, you need to make sure you get contrast between your characters and your set so they stand out. You can do a lot of this with lighting, but it also affects your set design.
- Work closely with your sound designer to come up with ideas for how each set should sound.

Video tutorial: Moviestorm Made Easy - using backdrops http://vimeo.com/20964565

Choosing a stock set

Moviestorm includes a number of customisable stock sets. You can save a lot of time by starting with one of these and then adapting it to your needs.

- Spend time looking through the stock sets and get familiar with what's available. Talk through with your director and see whether anything would be suitable, and make notes of any changes that would be necessary.
- If none of the stock sets work, start with the empty set and build from scratch.

> **TIP:** do spend time customising your stock sets, or your movie will look just like everyone else's! Even just changing some colours, changing the lighting, or adding some set dressing can make a huge difference.

Construct your basic set

*Start with the basic layout. If you're used to games like **The Sims**, this will be familiar to you.*

- Create walls by clicking on the *Wall* tool. Click on the floor of the set, and then drag to where you want the wall to end. Click on a wall to add wallpaper, color or delete it.
- Add doors and windows by clicking on the *Doors* tool. Select the door or window from the panel and click on the wall where you want it to go. Click on a door or window to customize or delete it.
- Add floor and ceiling colorings by clicking on the *Floors* or *Ceilings* tools. Select a pattern from the panel and drag over the area you want to color.
- Change the sky by clicking on the *Skies* tool. Select the sky you want from the panel.

Left to right: a simple 3-wall test set in construction, showing walls, doors, windows and key features of the set design; completed interior set fully dressed and lit; a selection of some of the stock sets supplied with Moviestorm.

Video tutorial: Moviestorm Made Easy - building walls http://vimeo.com/21359525

Video tutorial: Moviestorm Made Easy - doors & windows http://vimeo.com/21167273

Video tutorial: Moviestorm Made Easy - ceilings http://vimeo.com/21166139

Video tutorial: Moviestorm Made Easy - changing the sky http://vimeo.com/21306531

Add props and set dressing

There are three types of props you'll need to add. First, add the props that the actors actually use, such as chairs. Next, add decoration to make the set feel real. And finally, put in extra objects that help with filming and make a better visual composition. See the Moviestorm manual for detailed instructions on using props.

- To add a prop, select the **Props** button.
- If you have to add a lot of the same object, save time by cloning props with the **Clone** tool.
- Most props have customization options. Click on the prop to bring up the customizer and see what you can do.

  Video tutorial: Moviestorm Made Easy - rotating objects http://vimeo.com/21300834
  Video tutorial: Moviestorm Made Easy - making buildings http://vimeo.com/21345982

This set is a variant of one shown on the previous page, and includes lots of extra set dressing to make it look authentically messy. The posters on the walls and computer screens were made by creating images in Photoshop and customising the standard items from Moviestorm. Colours were chosen to blend with the character's outfit.

What you can do later

One of the biggest advantages of Moviestorm is that you're not stuck with whatever you had when you started filming. You can change the set even once you've started editing.

- Move or add set dressing so that everything looks better through the camera.
- Adjust the colours so the characters stand out better.
- If an object's in the way, the director can hide it so it doesn't show up on camera. This may be better than removing it from the set altogether.

  Video tutorial: Moviestorm Made Easy - hiding objects http://vimeo.com/21302768
  Video tutorial: Moviestorm Made Easy - weather http://www.vimeo.com/20559230

Lighting

It's often overlooked, but lighting can make the difference between a film that looks amazing and one that looks mediocre.

Basic lighting design

When you're lighting a movie, you're doing four different things. It's not like lighting a real place.

- Making the set look realistic. Get the light and shadows right for the time of day, and add the sort of lights that should be there, such as table lamps, candles or street lights.
- Making it so the audience can see what's going on. This is very important for night scenes. Even if the lights aren't entirely realistic, you need to light whatever the director wants the audience to see.
- Setting the mood for the scene. The intensity and colour of the lighting can completely change what the scene feels like.
- Creating an interesting visual composition. By using lights properly, you can make individual shots look really impressive and memorable.

  The skill of a good lighting designer is to balance all of these. Most of the time the audience won't even notice the lighting if you've done your job right. They'll be too sucked into the story.

Main lighting

The main lighting gives you an overall light so you can quickly choose what time of day it is, what the weather's like, and so on.

- Click the *Lighting* tool in the set workshop to bring up the main lighting panel. You can select from several preset lighting setups, or create your own.

Video tutorial: Interior lighting
http://www.moviestorm.co.uk/community/index.php?page=videos&section=view&vid_id=106663

Video tutorial: Exterior lighting
http://moviestorm.co.uk/community/index.php?page=videos&section=view&vid_id=106662

Video tutorial: Mixed lighting
http://www.moviestorm.co.uk/community/index.php?page=videos&section=view&vid_id=106665

  TIP: you can also access the main lighting controls from the Director's view and Camera view. This helps you get a really good idea of how it'll look in your movie.

  TIP: if you have a large set, the shadows don't always work well. If your shadows look jagged and horrible, switch them off.

On-set lighting

You can create much more subtle lighting by adding in objects that emit light, such as street lights or table lamps. They affect a small area, and can be used to highlight parts of a scene.

- Customise the lights to get the right colour and range of the light.
- If the light is in the way of the camera, the director can hide it so it doesn't show up on screen. You'll still get the light from it, though.

    TIP: don't be afraid to experiment with strong colours. You don't have to be 100% realistic to make your scene look good.

    TIP: if you're feeling brave, switch the main lighting off completely and just use on-set lights. You can create some cool dramatic effects.

The same set before and after lighting. The set on the left uses a stanadrd preset daylight setting. The set on the right has a dim night setting, with on-set lights to highlight the three characters and make them stand out against the background.

Lighting it later

Once you've got a rough edit of each scene, go through with the director and editor and find ways to improve the lighting.

- Check that the shadows aren't falling in the wrong places.
- Change the main light setup from the camera view, so you can immediately see what your new lighting looks like on screen.
- Add hidden lights on set to brighten or colour specific objects.

    Don't forget if your editor has added visual filters, this will affect how your lighting looks in your finished film. Check it in the cutting room,. as that shows you what you're going to get when you render.

Creating your cast

Your cast are the most important part of your movie. They're the people the audience is interested in, and the story is about them. Get them right, and make them memorable. And remember it's not just about the Moviestorm characters - you have to get the right voice actors too.

Video tutorial: Moviestorm Made Easy - basic character creation http://vimeo.com/21165279

Choosing your cast

You've got two jobs to do. You have to pick voice actors for all the speaking parts, and you have to build Moviestorm characters for everyone who appears in the movie, including all the extras.

- Start by making rough descriptions of each character - what they look like, what they wear, and what they sound like - and discuss this with the director. This is a lot quicker than spending time making the character and then finding out you have very different visions.
- If possible, have several people try out for each part. You may be surprised to find someone works much better than you thought they would. It usually works best if you record the voice and then listen to the recording - people often sound very different to the way they sound in real life.
- If you have to have one person doing several parts, make sure they can do different voices, or the audience will get confused.
- To begin with, just create a random Moviestorm character for each member of the cast so the director can start filming right away. You can then make their individual heads and costumes as you go.

  TIP: Your voice actors don't have to look anything like the characters they play in the movie. They just have to sound right.

  TIP: you'll often get better ideas for how the characters should look after you've recorded their lines.

Creating heads

*You can select **Randomise** to generate a random face, or you can set it up manually. It's usually fine to have random faces for extras, but you should spend time getting your main characters exactly how you want them. See the Moviestorm manual for full instructions on character creation.*

- Drag the morph sliders to control the shape of the face.
- Alter the skin color and add details such as pimples or freckles/
- Add facial hair (male only)
- Add make-up and special effects such as scars, tears or wounds
- Select a hairstyle and hat.

  Video tutorial: Moviestorm Made Easy - creating heads http://vimeo.com/21302332
  Video tutorial: Moviestorm Made Easy - hairstyling http://vimeo.com/21301550

Creating costumes

Although the face is the most important part of the character, the costume is important for two reasons. First, it's easily recognisable for the audience, even if the character is in the distance or facing away, and secondly, it says something about who that character is.

- Select the **Costumes** tab and then pick a costume.
- Click on different parts of the costume to customise it. You may be able to select different patterns or colors. Not all costumes are customisable.

Video tutorial: Moviestorm Made Easy - making costumes http://vimeo.com/21167092

Left to right: creating heads; creating costumes.

More info

ZS Dissection Lab - Reflective Window http://www.youtube.com/watch?v=PZ2V046IQ5k *This is a detailed look at how to create a complex piece of set design. It may not be something you need for your movie, but gives you an idea of what an innovative production designer can achieve. For advanced users.*

Chroma Key Tutorial http://www.youtube.com/watch?v=vEsNlKlFMvk *You can film your characters on a green screen set, and then put them into a different environment using an external video editor. For advanced users.*

DIRECTOR

You're at the centre of the entire movie. You take everything from the writer, the actors, and the designers, and you turn it into a film that the editor can work with. You'll be doing two jobs that are very closely linked - directing the actors and shooting the movie. You'll spend most of your time in two parts of Moviestorm: the Director's view and the Camera view.
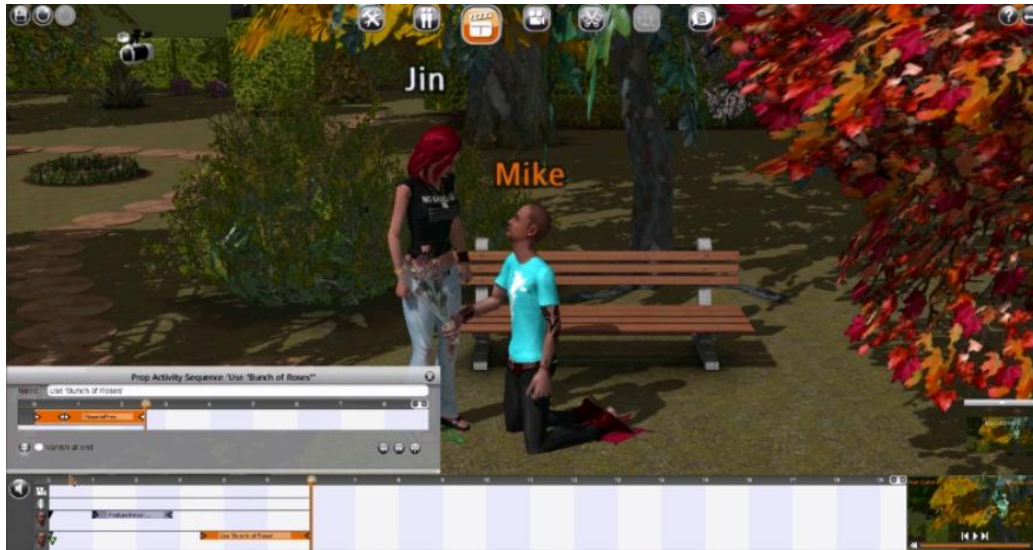
The Director's View, showing the prop controller and timeline.

Directing

Directing boils down to two basic tasks. Telling your actors what to do (choreography), and telling them how to do it (acting).

> **Basic directing techniques**

Although directing seems quite complicated at first, everything works in the same basic way. It's then just a matter of learning all the different things your actors can do and how to get the best out of them. (For full instructions on directing, see the Moviestorm manual and video tutorials.)

- First select an actor.
- Next click on an object or person to make your actor interact with it. If you click on the selected actor, they will do something by themselves. This will create an activity in the timeline.
- Click on activities in the timeline to edit them, delete them or move them.
- Repeat until you've finished your scene!

> Be prepared to spend a long time doing this and getting everything just right. It'll pay off in the end, though. It's the little details that make all the difference.

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Choreography in Moviestorm

When you create a scene, start off with the choreography. Get the actors going to the right places, doing the right things, and saying their lines at the right time. This is called blocking. You can then start filming once you have blocked out the scene, and then add in the acting later when you know what's going to be on screen.

- To have characters speak, click on the selected character and choose *Say* from the menu. This brings up the dialog controller. Although your sound designer will handle the recording, it's your job to make sure you get the performance you want from your voice actors.
- Move around the set by selecting a character clicking where you want them to go.
- Interact with objects on the set such as chairs or other characters by clicking on them.
- To use a prop, click on the selected character and choose *Use Prop* from the menu.

Video tutorial: Moviestorm Made Easy - getting around http://www.vimeo.com/20516764
Video tutorial: Moviestorm Made Easy - speaking http://www.vimeo.com/21343991
Video tutorial: Moviestorm Made Easy - what can I do? http://www.vimeo.com/21167559
Video tutorial: Moviestorm Made Easy - doors & windows http://www.vimeo.com/21167273
Video tutorial: Moviestorm Made Easy - taking a seat http://www.vimeo.com/21344879
Video tutorial: Moviestorm Made Easy - sitting on the floor http://www.vimeo.com/21306204
Video tutorial: Moviestorm Made Easy - driving cars http://www.vimeo.com/21166383
Video tutorial: Moviestorm Made Easy - watching TV http://www.vimeo.com/21167273
Video tutorial: Moviestorm Made Easy - gettin' smoochy http://www.vimeo.com/21307334
Video tutorial: Moviestorm Made Easy - flying spaceships http://www.vimeo.com/21346223
Video tutorial: Moviestorm Made Easy - using the phone http://www.vimeo.com/20802922
Video tutorial: Moviestorm Made Easy - cracking a safe http://www.vimeo.com/21306047

TIP: if your character walks through a prop or some scenery, don't worry. Move the prop or adjust the walk path. Or film it so the audience can't see, and they'll never know. Movie directors cheat like this all the time.

Adjusting the way a character walks with the Gait controller.

Acting

Make your characters more expressive by changing their emotions and adding in gestures and other body language. This is what will really bring your movie to life.

- Click on the selected character and choose ***Posture*** to change the way they stand or sit.
- Click on the selected character, then another object or characters and choose ***Look At*** to control their gaze.
- Click on the selected character and choose ***Change Mood*** to bring up the mood controller.
- Gestures are the most powerful of Moviestorm's dramatic controls. Click on the selected character and choose ***Gesture***. This brings up the gesture controller (known as the "gesturiser").

Changing the way a character stands with the Posture menu in the Director's view

Video tutorial: Moviestorm Made Easy - looking at things http://www.vimeo.com/21303620

Moviestorm has a huge library of hundreds of gestures and postures. Some of these are only available if you've done something else first to get the character into the right position. Spend lots of time just playing around to see what's available.

TIP: characters can perform several gestures at once. Combining gestures can produce some interesting results. Some work surprisingly well. Some don't. Experiment to find new and original combinations.

TIP: body language can often be more powerful than words. Use a shrug instead of "I don't know," or a shake of the head instead of "No". Or combine the words and gestures to emphasise the words.

TIP: people don't usually keep their heads still when talking, so add in small head movements. However, if you're in close-up, their head may go out of frame, so don't use head movements for close-ups.

Filming

Filming is what makes movies unique. It combines photography, theatre, and storytelling. You have to create something that looks good, that shows the audience what's going on, and draws them into the story. Your job throughout the entire production process is to think "what's this going to look like when filmed?" It's as if you have to see the entire world through a camera lens. You choose what to show, where to show it from, and, perhaps most importantly, what not to show.

Camerawork basics

Moviestorm's camera system is very different to other animation systems or videogames. The key to Moviestorm camerawork is that it doesn't matter where the camera is. Moviestorm will work that out for you. ***What matters is what you see on the screen.***

- Compose a shot by moving the items on the screen into the position you want them to appear. So, if you want a close-up on your lead character, you select the lead character, resize his image until it's as big as you want it, drag it until it appears in the right place on the screen, and rotate around until you get the angle you want. (For full instructions on camerawork, see the Moviestorm manual and video tutorials.)
- You create a rough edit as you film by setting keyframes. You set up camera cuts and movement by choosing whether the camera moves or jumps to each keyframe. The editor can then create the final edit in the cutting room.
- You can create more advanced camerawork by setting the lenses and depth of field.

Video tutorial: Moviestorm Made Easy - basic camerawork http://www.vimeo.com/20518745
Video tutorial: Moviestorm Made Easy - moving cameras http://www.vimeo.com/21360585
Video tutorial: Moviestorm Made Easy - close-ups http://www.vimeo.com/21166780
Video tutorial: Moviestorm Made Easy - hiding objects http://www.vimeo.com/21302768

Basic rules of filming

Film camerawork, like writing, has rules you need to follow. When you're more experienced, you can find ways to break the rules and get away with it, but to start with, to stick to the conventions of filming.

- The most important rule is **the line**, also known as the **180 rule**. Imagine a line drawn between your characters, and always keep your camera on the same side of the line. If you "cross the line" between shots, characters will appear to flip from one side of the screen to the other, and it confuses your audience.

- Don't put your characters dead centre in the screen unless they're talking direct to the camera like a news broadcast or lecture. It's much better to put them off to one side. Moviestorm has faint lines in the camera view to help you put your characters one third of the way into the frame.
- Don't have your characters looking direct to the camera for normal conversation. They should be looking at someone on the set, not at the audience.
- The simplest way to film a scene is to start with a shot that shows everything, called a master shot. This sets the scene. Then gradually move the camera in closer with each shot. Go back to a master shot if you need to show where people are moving to.
- If you're cutting between two people having a conversation, use matching size shots for each person. Don't use a long shot of one person and a close-up of another. It looks odd.
- 20 seconds is a long shot, especially if the camera's not moving. Cut to a new camera angle or move the camera. On the other hand, don't cut too fast, or the audience won't be able to keep up.
- Don't keep moving the camera unnecessarily. Stationary shots are easier for the audience to concentrate on what's happening. Very gradual camera moves can be surprisingly effective.

There's a lot to learn about film technique, so don't worry if it's hard going at first. Just watch a lot of movies and start thinking about how they film different types of scene.

TIP: If you can't show something on screen because there's no animation for it, find ways to cheat. For example, you can't actually show a character put a coffee cup down on a table. So instead show her lowering the cup so it goes out of sight and keep the camera on her upper body and face. Then in the next shot show the cup on the table and her hand empty. The audience will think they saw her put it down, especially if you add in the sound of the cup going down onto the table.


*A well composed and beautifully lit shot from the short film **That's Amore** by Throwaxe.*
This movie won "Most Romantic Movie" in the 2010 Moviestorm Valentine's competition.

EDITOR

There's a saying in Hollywood: a movie gets made three times, when it's written, when it's filmed, and when it's edited. You can make things much easier on everyone if you're involved with the production right from the start. Your job is to put everything together, so make sure your production designer, director and sound designer know what you're going to need.

Moviestorm editing is very different to traditional editing. The director has already made most of the camera editing decisions while filming. What you're doing is to polish what you get from the director into a finished product. Cut out any glitches, or trim out any unnecessary bits. You may find it helpful to work with the director during filming so you can suggest edits, or you may prefer to work with what you get, then suggest changes. It's entirely a matter of how you feel most comfortable.

Start by making rough edits as soon as possible, then everyone can see what you're all working towards. Your rough edits are the storyboards, so it will really help everyone if they can see how the film's turning out. As they watch the rough edits, they'll have ideas for ways to improve everything, from the lighting to the costume design, set dressing, and sound effects. You'll spend most of your time in two parts of Moviestorm: the Cutting room and the Publisher's view.
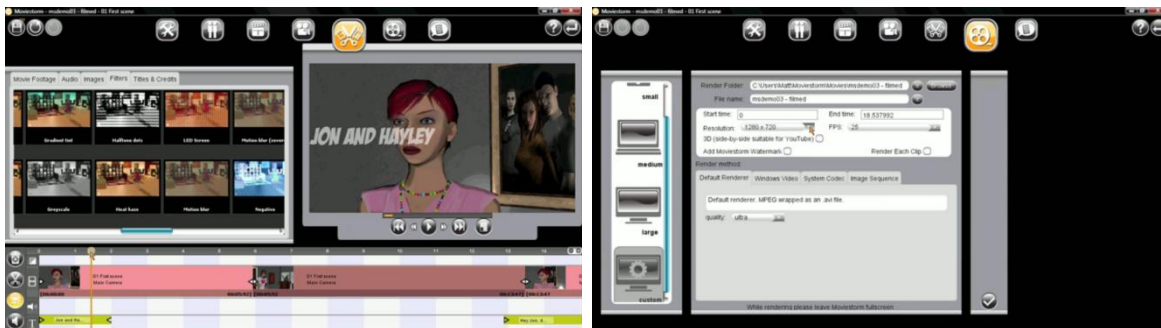
Left to right: the cutting room and the publisher's view.

Editing basics

*Moviestorm creates clips (short pieces of film) that you assemble into your final movie. Unlike working with film you've shot in a video camera or traditional animation, these are **live** clips. If the director changes something on set or changes the camera angle, this will instantly show up in your edit. This is a very powerful way of working, as you can make adjustments and immediately see the results without having to do anything to the edit.*

- You can quickly add everything you've done to the timeline by pressing **Add all clips**. If you've got several scenes in your movie, it will add them all in order. You can also add all the clips in a scene. If you prefer to do it manually, you can drag clips one at a time into the timeline. If you drag a clip on top of another clip, Moviestorm will insert it before the clip that's already there.
- You can duplicate a clip that's already in the timeline: click on it and select **Duplicate**.

- To move a clip, drag it on the timeline to the new position. You can't have blank space in the video track, so Moviestorm will close up any gaps automatically. If you need blank space, add a still (see video tutorial).
- To split a clip, place the timeline slider where you want to split a clip, and then press the *scissors* button. This will cut the clip in two, and you can now move each part individually.
- At the start and end of each clip is a small arrow. Drag that to trim the beginning and end of each clip. Note that if you trim the start, the end and all following clips will move back along the timeline to compensate.
- To delete a clip, click on it and select *Delete*. If the clip is used more than once, you can select *Delete all instances* to remove all copies of it.

> **Video tutorial: Moviestorm Made Easy - basic editing http://vimeo.com/21165832**
> **Video tutorial: Moviestorm Made Easy - adding stills http://vimeo.com/21344632**
>
> **Tip:** if the director makes huge changes to the camerawork for a scene, this can mess up the editing. If that's the case, scrub the edit for that scene and start over. It's frustrating but it'll save time in the long run. Work closely with your director to make sure he doesn't do this to you by accident when he suddenly has a great idea!

Adding text

It might seem an odd thing to do, but you'll find a lot of reasons to add text to your movies. Titles and credits are just one example.

Titles and credits

Adding titles and credits makes your movie feel professional. You don't need to do anything too fancy, but it's worth making them look stylish and well thought out. Simple is often best, unless you have a really cool idea for your title and credits sequences.

- Open the Titles & credits tab and drag one of the title or credit templates onto your timeline.
- Add text, and adjust the size, font and color of your text as you wish. Make sure it's easy to read, even on a small screen or squished into a YouTube window.

> **Video tutorial: Moviestorm Made Easy - adding titles and credits**
> **http://vimeo.com/21345207**
>
> If the template has an image behind it, the text will be overlaid onto your movie. If the template has a solid background, it is a clip, and will be inserted into your movie.
>
> Don't forget to credit modders and anyone whose music, images or sounds you used. But don't make your titles and credits too long! Your audience will get bored.

Subtitles

Subtitles are usually optional - it's up to you whether to use them. You can use the same techniques for adding other text to the screen. This is often used to specify the location and time.

- Add them in the same way you add titles and credits. Choose one of the subtitle templates.

Finishing your video

When you've got all everything looking good in Moviestorm, it's time to add some final touches and then turn everything into a video file. You may have to do this several times before you've really finished. It's actually sensible to make a video fairly early so you can all see how everything's progressing.

Adding visual effects

Visual effects make a huge difference to the style of your movie. You don't need to use them, but it's worth taking a look to see what you could do.

- To add an effect, open the Filters tab and drag the effect onto a clip.
- Some filters can be modified. Click on them in the timeline and bring up the menu. If there is a *Presets* option you can use this to get different versions of the filter.
- To delete a filter, click on it in the timeline to get the menu and select *Delete*.
- You can also create a cartoon style look using cel shading - see the tutorial video below.

    Video tutorial: Moviestorm Made Easy - cinematic filters http://vimeo.com/21166588
    Video tutorial: Moviestorm Made Easy - cel shading http://vimeo.com/20872942

The effect of using visual filters. Bleach Bypass changes the colours and makes everything look a little more washed out, which works well for documentary style or gritty movies.

Rendering

Rendering is where you turn everything you've done so far into a video file you can watch, share and upload.

- Go to the **publisher's view** and select a render setting. The smaller settings create smaller files and render quicker, but don't look as good.
- In the **custom settings**, you can choose where to put the file and what to call it. You can also choose the output resolution and other options.
- While your movie is rendering, don't use the computer for anything else. Go and get a snack or take a walk!
- Watch your video when it's done, make notes on anything that's not good enough, and then go back and fix them. Carry on making improvements until your producer tells you it's time to stop!

    Tip: make lots of quick renders at low quality while you're creating your movie so everyone can see where you've got to. Then do high quality renders when you get near the end, as these take a lot longer to process.

    Tip: you may find rendering goes a lot quicker if you save your movie, shut down Moviestorm, and restart it. Also switch off all other applications running in the background.

Advanced editing

If you're already familiar with other video editing tools like Adobe Premiere, or Final Cut Pro, you can continue to work on your movie using those tools. This allows you to put in additional effects, mix it up with other footage, and so on.

- Import your rendered Moviestorm files into your usual editor and work with them as normal.

    You may need to experiment with different render settings or use a video converter to get the best results.

More tips

How long should credits be? http://www.moviestormblog.com/index.php/credits/

Should you subtitle your movies?
http://www.moviestormblog.com/index.php/do_you_subtitle_your_movies/

http://www.homemovieediting.co.uk/guides/ten-tips-for-editing/

http://digitalfilms.wordpress.com/2008/12/16/12-tips-for-better-film-editing/

http://www.lavideofilmmaker.com/filmmaking/film-editing-tips.html

http://www.helium.com/items/555846-film-editing-tips-and-techniques-for-creating-a-compelling-story

http://vimeo.com/videoschool/archive/editing

Sound designer

Most of the sound designer's work is usually done at the end, but you're going to be involved right from the beginning.

You'll need to record the actors during filming, or before filming starts if you're pre-recording lines. Although you'll mostly be adding sounds in the cutting room during editing, you should be thinking about what's needed as early as possible. While everyone else is thinking about what the movie looks like, your job is to think about what it sounds like. Start finding suitable music, background sounds and sound effects while they're building sets and filming, then you'll be able to add the sounds quickly and efficiently when they're ready for you.

There aren't many audio tools in Moviestorm to learn, but there are quite a few different types of things you can do with sound. You'll mostly spend time in the Cutting room, but you may also need to use the Set Workshop and the Director's view.

Sound basics

Most of the sound you add will be done in the cutting room. Work with your editor to ensure that sound and video are properly synchronised; remember that if you change the video edit, you may need to adjust your sounds to fit.

- Go to the **Audio** tab and click **Import**. You can now choose any audio file on your computer (.wav, .mp3 or .ogg). You also have quick access to the audio files included in Moviestorm content packs, or you can record audio directly if you have a microphone on your computer. This is particularly useful for voice-overs.
- Once you have clips in your audio clip bin, drag them to the timeline.
- To move a clip, drag it on the timeline to the new position. You can have blank space in the audio track, so other audio clips are not affected. You can have several audio clips simultaneously, which allows you to have background sounds, music, and sound effects all at once if you want.
- At the start and end of each clip is a small arrow. Drag that to trim the beginning and end of each clip.
- To delete a clip, click on a clip in the timeline and select **Delete**. Alternatively, right-click on a clip in the audio clip bin and you can then remove it from the timeline or from the clip bin. Removing it from the clip bin also removes it from the timeline.
- To change the volume of a clip, click on a clip in the timeline and select **Customize**.
- Click the **audio mixer** button to bring up the mixer controls. These affect the entire movie, so you may need to adjust individual clips as well. The **Live** controls affect the sound that comes with your movie footage, and the **Post** controls affect the sound you added in the Cutting Room.

Video tutorial: Moviestorm Made Easy - adding sound http://vimeo.com/21307705

Dialogue recording

Your first job will probably be to record the actors. There are two ways of doing this: you can record directly into Moviestorm, or you can record into an external file and load the line in later.

Video tutorial: Moviestorm Made Easy - speaking http://vimeo.com/21343991

TIP: don't worry, *everyone* gets the giggles when recording, even professionals. And sometimes the simplest lines seem to be the hardest to get right. Just relax and have fun.

This voice actress is using a "popper stopper" to reduce hiss and breath noises. You can make one yourself or buy one.

Recording into Moviestorm

This is the simplest way to record dialogue.

- Click on the selected actor and choose *Say* from the menu. This brings up the dialogue controller.
- Press *Record* to start recording, and *Stop* when you're finished. Press *Play* to hear what you just recorded.
- Actors in Moviestorm will lip sync automatically. However, you get much better results if you also type the lines into the text field. It's not necessary to do this, though.
- Adjust the amount of lip movement and the volume using the sliders.
- Press the tick when you're happy. The director can drag the speech activity on the timeline so it happens at the right time.
- If you're not happy with the actor's performance, click the speech activity and select *Redo Dialogue*. Then go through the same procedure as before.

TIP: If you want to have a character singing over a piece of music, try singing or speaking the vocals into Moviestorm at the right speed, then turn the lip movement up and the volume down. She'll now move her mouth in time to the music, and nobody will hear your vocals!

Recording into an external file

Recording externally is useful if your actor can't get to the computer where you're building your film, or if you want to add special voice effects.

- You can use your preferred voice recording software. Free tools like Audacity are more than good enough for what you need.
- Record the actor's lines. You can do this however you find easiest - do several takes of each line, or go through the whole script in one go and then go back and redo any you didn't like. You can record each line separately, or make one big recording of the whole session.
- Apply any effects or filters you want. *Noise removal* and *click removal* will get rid of small background noises, and *normalisation* will help get the volume constant. Add a little *reverb* if the scene is taking place in a large room.
- Pick your preferred takes of each line and save each one as an individual .wav file. (Note: it *must* be .wav. Other file formats won't work.) Give them sensible filenames so you can easily tell what they are (e.g. John-scene01-line017-take03 or John-01-017-03). It helps to have every line in the script numbered so you can find it quickly and ensure you have good takes of everything.
- To get the line into Moviestorm, follow the same procedure as above, except instead of pressing Record, press the **Import Audio** button.

TIP: after you've recorded a session with your actor, save the file, make a copy of it, and work on the copy. That way you can't accidentally erase everything you just recorded or ruin it with a bad filter.

TIP: you can record each actor separately or have the whole cast record the whole movie as if they were doing a play. Having everyone together is more fun, but you have to be careful they don't speak over each other.

Sound effects

There are two types of sound effects; sounds for things you can see, and sounds for things you can't see. Adding sounds for things you can see helps make the film more realistic. Adding sounds for things you can't see adds to the story. For example, if we're looking at a man in a room and we hear a car drive up and stop, we know someone has arrived, even though we can't see the car. You can do the same with even small actions: adding a clink when someone puts a glass down tells the audience what's happened, even if they can't see the glass going onto the table. Work closely with your director to decide how sound effects can help with things that aren't going to be shown on screen.

Adding sound effects in the cutting room

This is the normal way to add sound effects.

- Create sound effects yourself (.wav, .mp3 or .ogg), download them, or use the sounds built into Moviestorm.
- Add sound effects as shown in **Sound basics** above.

If you're using sounds you've found online, check whether they're legal for use in your movie. You may be required to include a credit for the sound in your movie - if so, remember to tell your editor.

Ambience

Ambience (also known as atmos or atmosphere) is background sound that you can add to make your set seem more realistic; traffic sounds, birds, wind, rain, people talking and moving around, and so on. Ambience can completely change the feel of a scene: you can make it seem as though the same room is in a busy city or a quiet village. You can add ambience directly to the set, or you can add it afterwards in the cutting room during the edit.

Ambience is also useful for covering up the silence between the actors' lines, otherwise they can sound very artificial. Whenever you record a line, you always get some background sound, known as **room tone**. When you play back the lines in Moviestorm, the room tone cuts in and out, which sounds weird. Experienced sound crew will record a few minutes of "silence" in each location to get the right room tone, then they use that to fill in the silence.

TIP: don't make your ambience too loud. If it's too loud, it's really distracting and irritating.

Adding ambience to the set

This is a quick and easy way to create a slightly randomised sound background that will play throughout the scene.

- In the **set workshop**, open the **lighting and audio** panel, then select the **audio tools**.
- Use the *+* button to find sounds. Use the sliders to control how loud the sounds are and how often they're played.
- Keep adding more sounds with the *+* button until you have an interesting mix.

Tip: if you want the exact same ambient sound in another scene on the same set, get the production designer to save the set as stock, and then use the stock set. It may be easier to just create the sound again from scratch. Most of the time, a little variation won't matter - it'll probably be a good thing!

Adding ambience in the cutting room

This is the normal way to add ambience. It's a little more work than adding it to the set, but it gives you more control and you can do it alongside all your other sounds.

- Create an audio file (.wav, .mp3 or .ogg) of your ambience, and add it as shown in **Sound basics** above.

Adding ambience to an object on set

This is a really easy cheat which is a handy way to test your background sounds. The director will be able to hear the atmos as he's filming, which helps him get a feel for the scene.

- Create an audio file (.wav, .mp3 or .ogg) of your ambience.
- Go to the **set workshop** and add an object like a speaker which plays audio. Put it out of sight.
- In the **director's view**, click on the speaker, select *Play audio*, and choose your ambience file.

> **Tip:** this can work just fine for your finished movie, but the volume of the background sound will change depending on how close the camera is to the speaker, so it's not recommended if you have several shots. When you're happy, take the speaker off the set and add the sound properly in the cutting room.

Music

Background music is really important, especially during titles and credits. It sets the mood for the scene, and helps your movie feel more professional. Talk with your production designer and editor at an early stage about the sort of music you want to use.

> If you want to use other people's music, check whether you have the rights to do so *before* doing it. If you've ripped a CD or bought the music from somewhere like iTunes, it's probably subject to copyright. You can find plenty of music online that's licensed for use in movies, often free of charge. You will probably be required to include a credit for the music in your movie - if so, remember to tell your editor.

Adding music in the cutting room

This is the normal way to add background music.

- Create music yourself, (.wav, .mp3 or .ogg), download it, or use the music built into Moviestorm.
- Add music as shown in **Sound basics** above.

> TIP: if your music is longer than you need, you can trim it in the cutting room. This will create a sudden stop in the music, so if you want it to fade, you'll have to edit your music track in an external audio editor. When you know exactly how long it needs to be, create your new track complete with fades and use that instead of your original music track.

Adding music to an object on set

Use this if you actually want the music to come from a specific place, like a stereo. Don't use it for background music.

- Go to the **set workshop** and add an object which plays audio.
- In the **director's view**, click on the object, select *Play audio*, and choose your music file.

Finishing touches

When you've finished adding all your sounds, go through everything and listen to your movie with your eyes closed. If anything sounds wrong, it's much easier to hear it this way, when you're not distracted by looking at the screen.

Sound balancing

One of the most common mistakes for novices is to have some sounds way too loud and others way too quiet. Make sure everything's at a level that sounds good.

- Make sure you can hear the dialog clearly over all the background sounds, music and effects.
- Check your sound levels and adjust each individual sound if you need to. You may have to go back to the **director's view** and change the volume of individual lines.

Advanced effects

If you have a lot of time on your hands and you want to get your movie sounding really good, here are two tricks you can try.

- Add reverb to the sounds using a tool like Audacity to suggest the size of the room. This puts on a small amount of echo, and can make a huge difference. Ensure you match the reverb for all sounds in a scene - you don't want to have one person sounding like they're in a small room while someone else sounds like they're in an auditorium.
- Using a tool like Audacity, experiment with the EQ of your sounds, particularly dialogue. This can make voice recordings much cleaner, and change the sound of the voice. If you've recorded lines in different places, they always sound slightly different, even when you're using the same actor, because of the acoustics of each room. This is a good way to make the lines sound more consistent.

More tips

Simple sound tips http://www.moviestormblog.com/index.php/simple_sound_tips/
Sound Design for Machinima, Part 1: An Introduction http://vimeo.com/16604546
Ricky's voice recording tips http://vimeo.com/11180970
Where to find sounds (free downloads, royalty-free and licensed for movie projects)
- http://blog.machinima-expo.com/free%20music%20links
- http://www.freesoundtrackmusic.com/
- http://www.freesound.org/index.php
- http://www.pacdv.com/sounds/
- http://www.soundjay.com/
- http://incompetech.com/m/c/royalty-free/
- http://www.jamendo.com/en/
- http://freemusicarchive.org/

MORE INFORMATION

Moviestorm resources

- **Video tutorials**
  Over 40 short video tutorials covering all aspects of Moviestorm. Most are only a couple of minutes long. Also available on **Vimeo**.

- **Moviestorm user manual**
  A complete 36-page guide to using Moviestorm.

- **Hints and tips**
  A selection of useful suggestions.

- **Moviestorm help forums**
  The Moviestorm community is very helpful. If you're stuck, try here first.

- **Moviestorm mods**
  Third party mods for using with Moviestorm. Most are free. You should check with your school whether you are permitted to download and install these.

- **Moviestorm modding**
  For more advanced users, you may want to try making your own assets. This may require additional tools.

Web sites

http://www.filmmakermagazine.com/
http://filmmakeriq.com/
http://thescriptlab.com/
http://www.filmslatemagazine.com/filmmaking
http://www.moviescopemag.com/
http://actioncutprint.com/
http://www.moddingstorm.co.uk/
http://www.filmmakingwebinars.com/
http://www.nyfa.org.uk/ (The National Youth Film Academy)
http://en.wikipedia.org/wiki/Filmmaking

Useful free tools

You should check with your school whether you are permitted to download and install these.

- **Celtx**
  Scriptwriting tool. It can also be used for a lot of your pre-production work when you get familiar with it.

- **Audacity**
  Simple sound recording tool.

Books

Write Better Movies, Phil South (e-book)
Let's Write a Story, Phil South (e-book)
Make Movies That Make Money! Philip R. Cable, McFarland & Co
Grammar of the Shot, Roy Thompson, Focal Press
Grammar of the Edit, Roy Thompson, Focal Press
Cinematic Storytelling, Jennifer van Sijll, Michael Wiese Productions
Setting Up Your Shots, Jeremy Vineyard, Michael Wiese Productions
Film Directing Shot by Shot, Steven D. Katz, Michael Wiese Productions
In the Blink of an Eye, Walter Murch, Silman-James Press

GLOSSARY OF TERMS

Actor	A person who takes on the role of a *character.*
Ambience, atmos	Background sound that helps create the mood on a set.
Camera angle	A description of where the camera is in relation to what is being filmed. So for example, a close-up on John from the side is a camera angle. The director can then decide to use the same camera angle later on, even if John is in a different place.
Cast	Everyone who appears in the movie. This could refer to your *actors* or your *characters.*
Character	A person in the story who needs to be created in Moviestorm. If the character isn't a speaking part, they don't need an *actor*.
Clip	A piece of audio or video that you use to construct your movie.
Cut, straight cut	A form of editing where you go straight from one *shot* to another without moving the camera.
Dutch tilt	When you tip the camera to one side so it's no longer level. Not to be confused with *tilt*.
Edit	An "edit" is what you get when you've assembled your film, e.g. a "rough edit" of a scene.
EQ, equalisation	A way of changing the sound to alter the amount of bass or treble.
Foley	The sounds naturally made by things happening on set, normally added in later to give the sound designer more control. Typically footsteps, furniture creaks, clothing rustles, etc.
Frame	What you can see in the camera. Something is "in frame" if you can see it, or "out of frame" if you can't. (Also "on camera" or "off camera" mean the same thing.) To "frame on" something means that it's the thing the director wants to see in the *shot*.
Master shot	A shot that shows everything in the scene. In theory, all you need is a master shot for the scene. Everything else just adds more detail and controls what the audience can see and is there to improve the storytelling.
Normalisation	A sound technique to get the volume constant.
Prop	Strictly speaking, a prop is something a *character* holds. *Set dressing* is sometimes also described as a prop.
Rendering	Creating a video file.
Reverb	A sound technique used to make it sound as if it's recorded in a different size room.
Room tone	A recording of the sound of a room with nothing happening that can be used to mask silence between lines of dialogue.
Screenplay	A document that has all the lines and the major actions in the movie.
Script	Same thing as the *screenplay*.
Set dressing	Things added to the set to make it look more interesting.
Shoot	Filming something is often called "shooting" it. A "shoot" is a filming session.
Shooting script	A version of the *screenplay* that is marked up with additional notes from the director and others about camera angles, music, sound, and so on.
Shot	This can mean either what the camera can see at any moment, or can mean a continuous view from one camera. Either of the following is a valid use of the word: "I love that shot of John walking into the room." "Let's start with a long shot on John and then move the camera round to end on a close-up shot on Amy."
Stock	A library of useful things such as costumes or sets.
Take	A single recording. Can be used for audio or video.
Tilt	Pointing the camera up or down.

THE TRADITIONAL MOVIE-MAKING PROCESS

Movies are traditionally made in five stages. This isn't exactly the way you're going to do things on your movie, but it may help if you understand how things are usually done.

Writing

The writer writes the script or screenplay. He then has to convince a studio to buy it.

Fewer than 5% of scripts get bought. It's a tough life being a scriptwriter. That's why so many indie directors also write their own movies - it's the only way to be sure their script gets filmed.

Development

The producer and writer will work on the script, rewriting it many times until they are satisfied that the movie will be a success. The producer also starts looking around to see who might be interested in being in the movie, directing it, sponsorship deals and so on. When the producer is happy, the production is "green-lighted", which means that the studio has finally decided to pay for it and give it the go-ahead.

Only about 10% of movies in development ever get made. That's why you hear about all sorts of films that people are working on, but which never happen.

Pre-production

Everything is planned down to the smallest detail. The script is finalised, the actors are cast, the locations are chosen, the sets and costumes are built and designed, and the schedule and budget are put together. Everything has to be thought out in advance - down to who's doing the catering, what sort of cameras you're going to use, getting copyright clearance for music, and how long it'll take to do the star's make-up each day.

Experienced production teams know that the more you can sort out in pre-production, the better. It's much better to deal with problems before they happen than have things go wrong on set when hundreds of people are standing around and time is precious. It's even more important to ensure that you don't find problems in post-production after shooting has finished and the editor doesn't have what she needs to finish the film - getting everyone back for reshoots is often impossible.

Production

The movie gets filmed. This always sounds like it should be the biggest part of the process, but often it's the shortest. Movies that take years to make are often filmed in just a few weeks. However, it's the most intensive part of movie-making. The costs each day are huge, and everyone's under a lot of pressure to make sure everything goes smoothly.

Star Wars Episode IV: A New Hope was shot in just ten weeks - and that was four weeks longer than planned! The whole film took over four years to make.

Post-production

The movie is finally assembled. The footage is edited, sound and music is added, special effects are created, titles and credits sequences are built, and subtitles are added. Often the movie gets shown to a test audience, and is then recut depending on what they say. Generally, the editor has to work with whatever she has - it's too expensive to get everyone back for more filming. Post-production usually takes five to ten times longer than production.

The director often has very little to do with the movie at this stage - it's mostly the editor's job now. That's why you sometimes get Director's Cuts of movies which are very different to the original.

Cameraman Francis Wai filming on location. Francis learned about filmmaking with Moviestorm and ended up working for a local television company as camera operator, video editor, and production assistant.