

The University of Sheffield Students' Union

# **Committee Details System Documentation**

Installation Guide

User Manual

Maintenance Guide



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## System Requirements

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- Computer with internet connection
  - Server with PHP, MySQL support
    - *Please be aware, that in case your server does not support JSON, the system will not be able to work correctly.*
    - ***If your version of PHP does not support JSON, please follow this installation guide on how to install it and set it up.***
- `http://www.php.net/manual/en/json.setup.php`
- Web browser (**Chrome** is highly recommended, Internet Explorer 7 or higher) with JavaScript support enabled
  - At least 10 MB of free server space

## *How to install*

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In case you do not know what these types of data mean, please consult the Glossary of terms.

Before you begin the installation process, please make sure your computer is connected to the internet. Insert the installation disc into your CD/DVD-ROM and open the

**"The University of Sheffield Students' Union Societies Manager"**

folder on the disc.

Now copy the whole content of this folder to your desired place on your server

eq. using `/www/yourlocation` folder

will result in the system being accessible with the address

**`www.yourserver.ac.uk/yourlocation`**

Once the content has been copied, follow these steps to set up the system:

### **1. Set up database connection**

Open file

**`application/config/database.php`**

with text editor and scroll down to the bottom of the file. Now change these settings on lines 44 - 47

```
$db['default']['hostname'] = '';  
$db['default']['username'] = '';  
$db['default']['password'] = '';  
$db['default']['database'] = '';
```

so that you fill in required data in the quotes on the right hand side accordingly

eq.

```
$db['default']['hostname'] = 'yourhostname';  
$db['default']['username'] = 'yourusername';  
$db['default']['password'] = 'yourpassword';  
$db['default']['database'] = 'yourdatabase';
```

**Save the file.**

## 2. Set up the user table connection

Open the following file with text editor

`application/models/model.php`

and change these settings on lines 21 - 24

```
$this->user_table = '';  
$this->user_id_column = '';  
$this->user_username_column = '';  
$this->user_password_column = '';
```

so that you fill in required data in the quotes on the right hand side accordingly  
eq.

```
$this->user_table = 'users';  
$this->user_id_column = 'id';  
$this->user_username_column = 'username';  
$this->user_password_column = 'password';
```

**Save the file.**

If the user table stores users' passwords as encrypted strings, please open the file

`application/models/User.php`

and uncomment (remove two forward slashes from the beginning of the line) line number 59. Make sure you are using correct encryption method (MD5 is set by default).

**Save the file.**

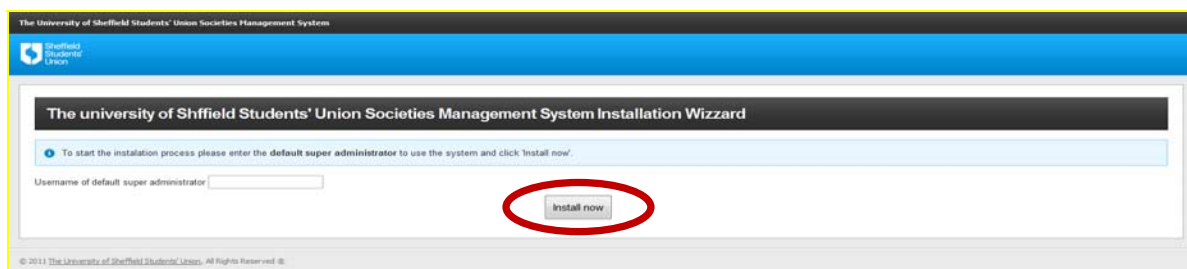
## 3. Install database tables

Open your browser and type the address of the system followed by forward slash (/) and the installation file (install.php)

eq. (using the example above)

`www.yourserver.ac.uk/yourlocation/index.php/install`

Type in the default super administrator username and click the "Install now" button.



The University of Sheffield Students' Union Societies Management System

The university of Sheffield Students' Union Societies Management System Installation Wizard

To start the installation process please enter the default super administrator to use the system and click 'Install now'.

Username of default super administrator:

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#### 4. Delete install file

Delete this file

```
application/controllers/install.php
```

***The installation is now complete.***

### ***Features***

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This system covers all the **features** that were discussed, covered and agreed on the requirements document. These include:

- Login
- The three user views (administrator, super administrator and general user)
- Inventory that can be exported to Excel
- Customisable forms
- Search and sort features for displayed records
  
- ***General user***
  - Filter records according to their category
  - Sort records by any accessible column in the table header
  - Search for strings contained in the records' details
  
- ***Administrator***

*In addition to General user features*

  - Export displayed records to CSV file
  - Compose email to different societies' members
  - Create a new society
  - View notifications about missing data in records
  
- ***Super administrator***

*In addition to Administrator features*

  - Add new admin
  - Delete an existing society
  - Manage society positions
    - create new
    - set/unset mandatory
    - remove
  - Manage society categories
    - create new
    - remove

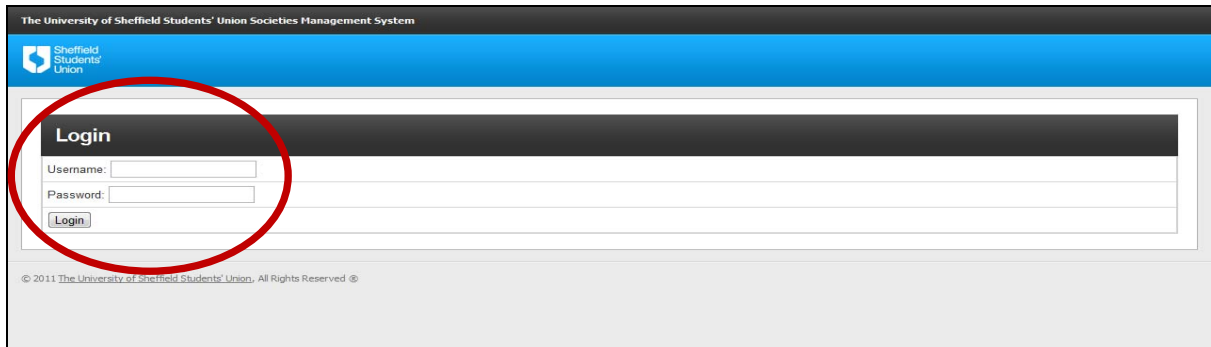


## How to use

All relevant locations every feature has been circled in red in each screenshot.

### Login

To start using the application, the user – super administrator must first login. The default login details for super administrator are to be specified during the installation process.



### Main page

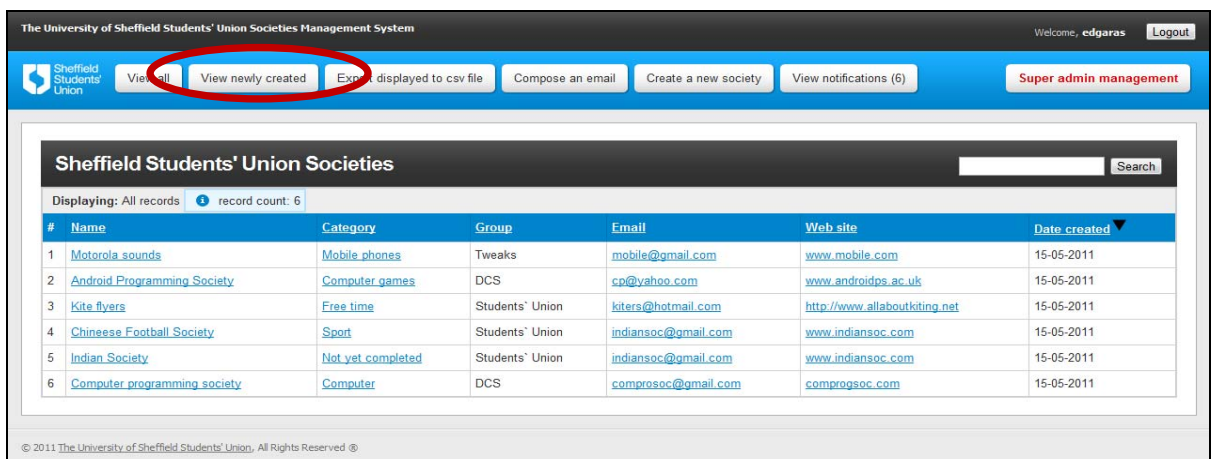
When the user logs in, they will see the list of their societies currently stored in the system. The view can be modified, using different filtering features, to suit the needs of the viewing administrator.

The administrator can see all the societies currently stored in the system. The menu on the top provides advanced features.

In addition to all the privileges the administrator has, the super administrator also has a **management button**, which will take them to a section where they can tweak the application using a simple tabs layout with options.

The **View all** button is used at any point in time to see all the basic society information at anytime. i.e. Name, Category, Group, Email, Website and date created.

The **View newly created** button is used at any point in time to see all the **recent** basic society information at anytime.



## Searching and Sorting Features

The user can filter the information in the system to what they are looking for using the search feature. The society records shown at any time can also be sorted alphabetically (ascending and descending) for every column.

The University of Sheffield Students' Union Societies Management System

Welcome, edgaras Logout

View all Export displayed to csv file Compose an email Create a new society View notifications (6) Super admin management

### Sheffield Students' Union Societies

Displaying: All records record count: 6

| Name                           | Category       | Group           | Email               | Web site                      | Date created |
|--------------------------------|----------------|-----------------|---------------------|-------------------------------|--------------|
| 1 Android Programming Society  | Computer games | DCS             | cp@yahoo.com        | www.androidps.ac.uk           | 15-05-2011   |
| 2 Chinese Football Society     | Sport          | Students' Union | indiansoc@gmail.com | www.indiansoc.com             | 15-05-2011   |
| 3 Computer programming society | Computer       | DCS             | comprosoc@gmail.com | comprosoc.com                 | 15-05-2011   |
| 4 Indian Society               | Culture        | Students' Union | indiansoc@gmail.com | www.indiansoc.com             | 15-05-2011   |
| 5 Kite flyers                  | Free time      | Students' Union | kiters@hotmail.com  | http://www.allaboutkiting.net | 15-05-2011   |
| 6 Motorola sounds              | Mobile phones  | Tweaks          | mobile@gmail.com    | www.mobile.com                | 15-05-2011   |

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## Top menu

Top menu will provide the administrators with buttons for various functions.

The University of Sheffield Students' Union Societies Management System

Welcome, edgaras Logout

View all View newly created Export displayed to csv file Compose an email Create a new society View notifications (5) Super admin management

## Exporting to .csv file

To export displayed records to .csv file, **press the corresponding button** in the top menu.

The University of Sheffield Students' Union Societies Management System

Welcome, edgaras Logout

View all View newly created Export displayed to csv file Compose an email Create a new society View notifications (5) Super admin management

## Composing email

This function enables fully customisable mailing lists for the different societies to be created. There are predefined default mailing lists that cannot be removed. These are the lists of all members of all societies and lists of all members occupying a mandatory position.

The screenshot shows the 'Compose a new email' page. The header includes the system name, user name 'edgaras', and a 'Logout' button. A navigation bar contains buttons for 'View all', 'View newly created', 'Compose an email' (circled in red), 'Create a new society', and 'View notifications (6)'. A 'Super admin management' button is also present.

The main content area is titled 'Compose a new email' and contains a form with the following fields:

- Subject:** Welcome
- Your message:** Dear user,  
welcome to the University of Sheffield Students' Union.  
Your administrators
- Send** button
- Choose a mailing list:** --- Create a new mailing list ---
- Choose the society:** Indian Society
- Choose the position:** President
- Add** button
- Recipients:** A table with columns 'Society' and 'Position'. Below it is a 'List name' field and a 'Save' button.

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## Creating a new society

This button initiates the creation of a new society. The name of the society and the president's username are created with this button.

The screenshot shows the 'Create a new society' page. The header and navigation bar are identical to the previous screenshot, with 'Create a new society' circled in red.

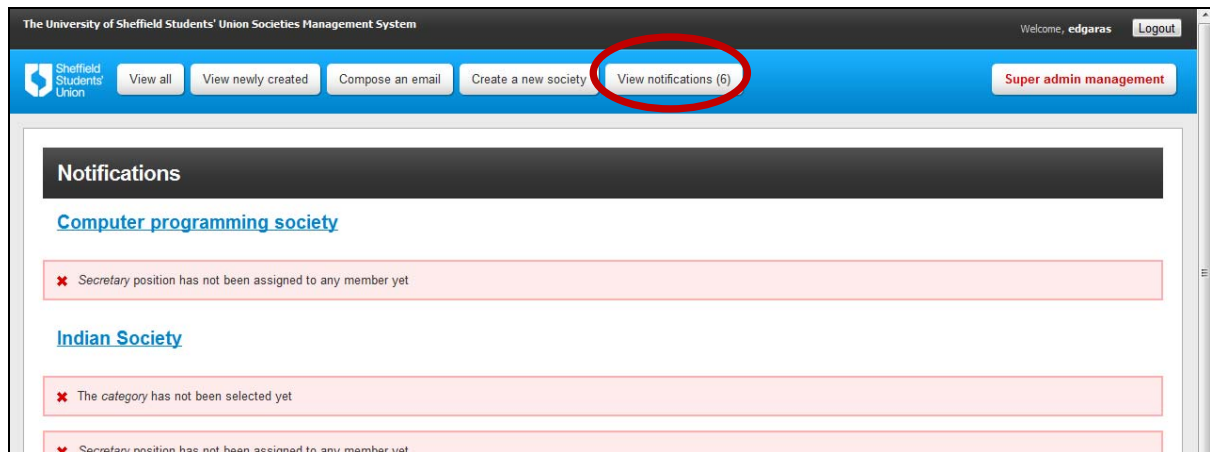
The main content area is titled 'Create a new society' and contains a form with the following fields:

- Society name:** [Text input field]
- President's username:** [Text input field]
- Create new society** button

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## Notification System

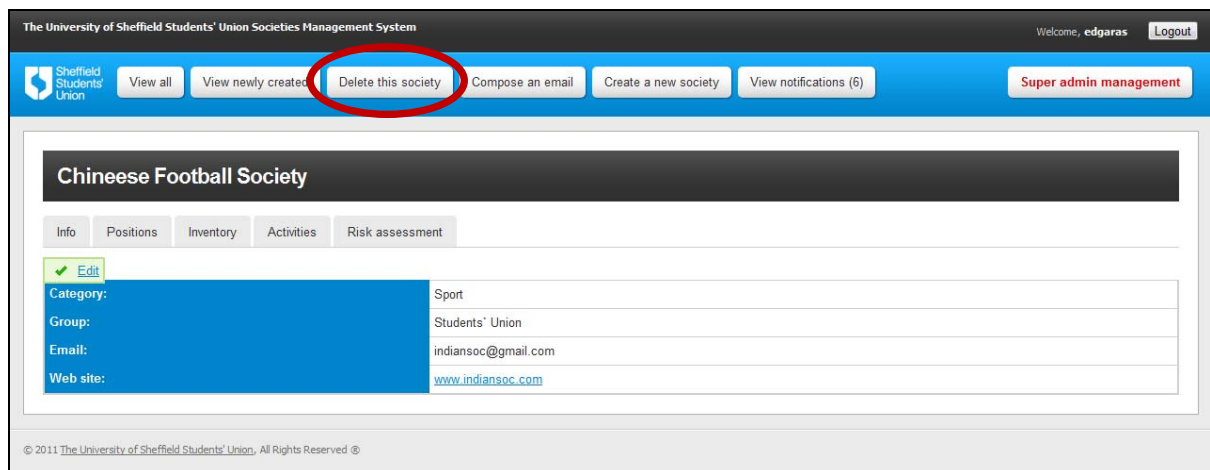
This gives the admin and super admin updates on recent activity per society that occurs in the system. It shows any missing data in every society.



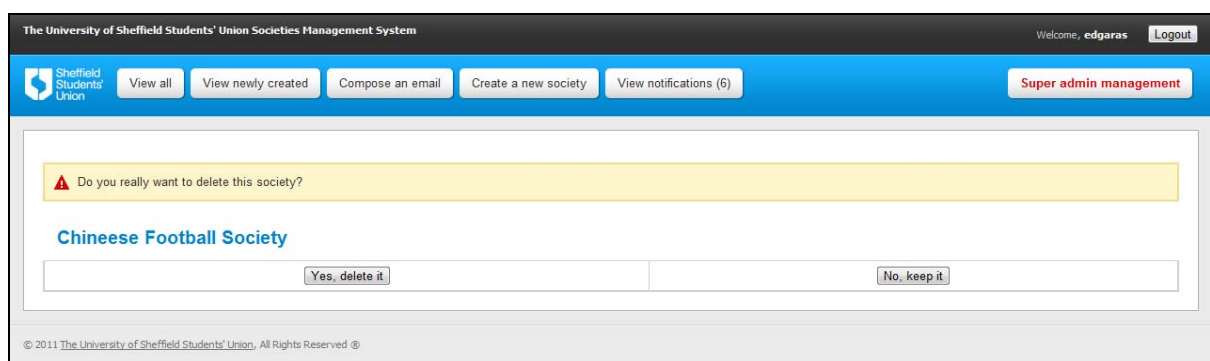
The screenshot shows the 'The University of Sheffield Students' Union Societies Management System' interface. The top navigation bar includes buttons for 'View all', 'View newly created', 'Compose an email', 'Create a new society', and 'View notifications (6)'. The 'View notifications (6)' button is circled in red. Below the navigation bar, the 'Notifications' section is displayed, showing two society-specific notifications: one for 'Computer programming society' stating 'Secretary position has not been assigned to any member yet', and one for 'Indian Society' stating 'The category has not been selected yet'.

## Delete society

As well as a society can be created, it can be deleted in the super administrator's view. Start the delete process by clicking on a society you want to delete and then click on **Delete this society** button in the top menu. Confirm your action.



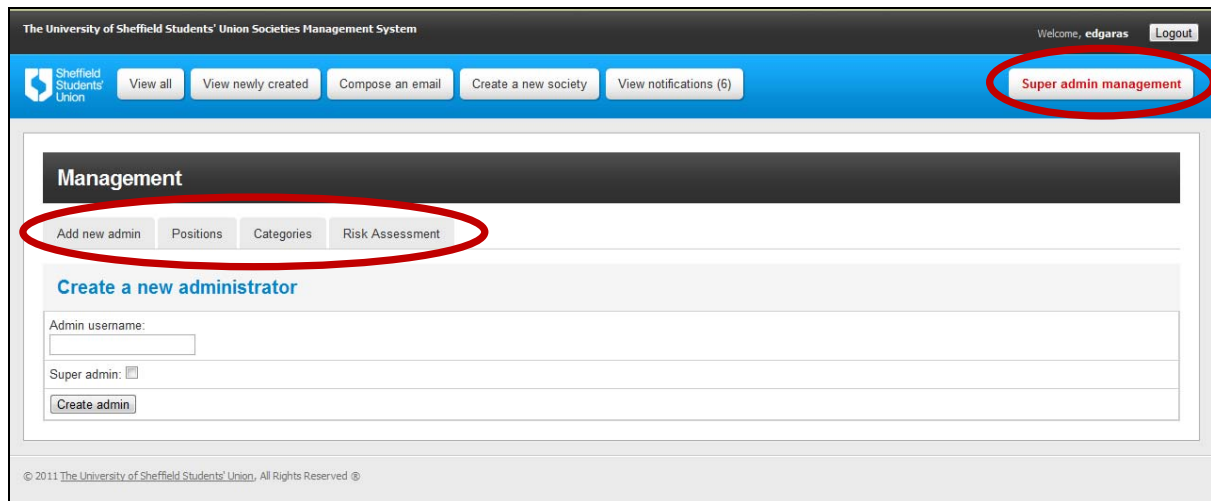
The screenshot shows the 'The University of Sheffield Students' Union Societies Management System' interface. The top navigation bar includes buttons for 'View all', 'View newly created', 'Delete this society', 'Compose an email', 'Create a new society', and 'View notifications (6)'. The 'Delete this society' button is circled in red. Below the navigation bar, the 'Chinese Football Society' details are displayed, including a table with columns for 'Info', 'Positions', 'Inventory', 'Activities', and 'Risk assessment'. The 'Info' tab is selected, showing fields for 'Category', 'Group', 'Email', and 'Web site'. The 'Delete this society' button is circled in red.



The screenshot shows the 'The University of Sheffield Students' Union Societies Management System' interface. The top navigation bar includes buttons for 'View all', 'View newly created', 'Compose an email', 'Create a new society', and 'View notifications (6)'. Below the navigation bar, a confirmation dialog is displayed with the text 'Do you really want to delete this society?'. The dialog includes a 'Yes, delete it' button and a 'No, keep it' button.

## Super admin management

This button provides the super admin access to the tabs that enable the addition of new administrators and management of society **positions**, **categories** and the **risk assessment form**.



## Creating a new (super)administrator

To create a new administrator/super administrator, simply click corresponding button in the management view. Insert their username and specify (by ticking a checkbox) whether they are super administrator or administrator.

## Managing categories

In the **Categories** tab, the super administrator can create new categories, change the existing ones or remove categories.

## Managing positions

In this tab, the super administrator can create new positions and set these to be mandatory. All mandatory positions must be occupied by a society member.

## Creating custom risk assessment form templates

The super administrator can create custom templates for risk assessment form. To do it, whilst inside the **Super admin management** section, click on the **Risk assessment** option. A page will show which allows the super administrator add new fields into the form. You add new fields by pressing **Add field** button. These fields include:

- Check boxes
  - Element that can be ticked.
- Combo boxes
  - Drop –down list which enables users select a value inside it.
- Tables
  - Table with header for column names and rows
- Text boxes
  - Text field enabling a user insert a text

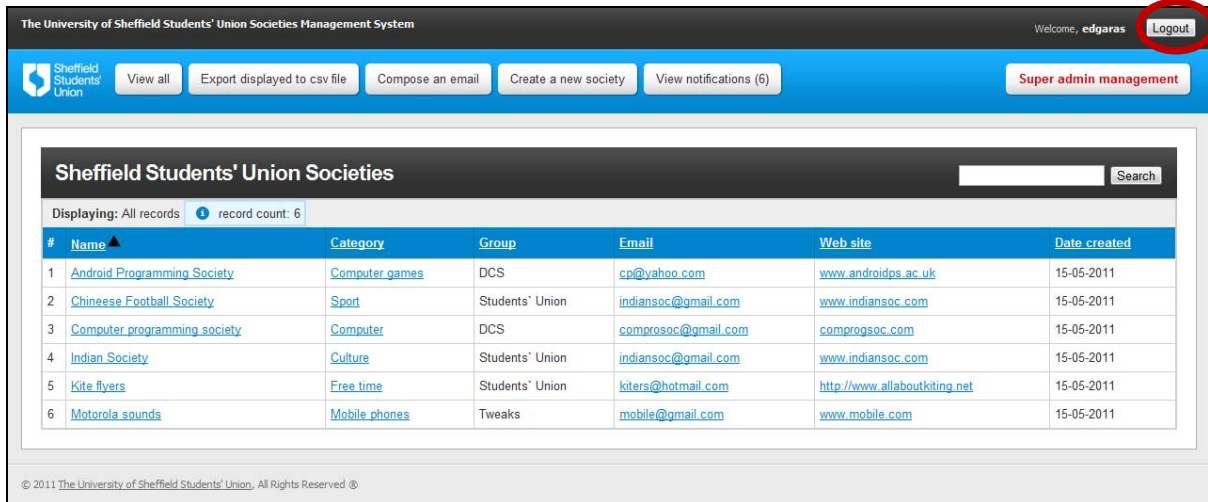
The super administrator can add as many of these fields as they like.

The screenshot shows the 'Manage risk assessment form template' interface. At the top, there's a navigation bar with 'View all', 'View newly created', 'Compose an email', 'Create a new society', and 'View notifications (1)'. A 'Super admin management' button is on the right. Below this, the 'Management' section has tabs for 'Add new admin', 'Positions', 'Categories', and 'Risk Assessment'. The 'Risk Assessment' tab is selected, showing the 'Manage risk assessment form template' page. This page features an 'Add Field' button and a list of existing fields: 'h' (table), 'i' (text box), 'j' (combo box), 'k' (checkboxes), 'l' (table), 'm' (table), and 'n' (table). Each field has a 'Remove' button. A 'Save' button is at the bottom left. The footer contains the copyright notice: '© 2011 The University of Sheffield Students' Union. All Rights Reserved'.

When the super administrator is done editing, **do not** forget to press save button at the bottom for any change to take effect. After saving the template, the added fields will be displayed in a more neat way so that the super admin can easily check the template is correct and possibly remove some existing fields. This option is enabled for every existing field, so to remove, press **remove**.

## Logout

This button is used to sign the user out of the system.



The screenshot shows the Sheffield Students' Union Societies Management System interface. The top navigation bar includes the Sheffield Students' Union logo, a search bar, and several utility buttons: 'View all', 'Export displayed to csv file', 'Compose an email', 'Create a new society', and 'View notifications (6)'. A 'Logout' button is circled in red in the top right corner. Below the navigation bar, the main content area displays a table of societies. The table has columns for '#', 'Name', 'Category', 'Group', 'Email', 'Web site', and 'Date created'. There are 6 records displayed, all created on 15-05-2011. A 'Super admin management' button is located in the top right of the main content area.

| # | Name   | Category                       | Group           | Email  | Web site  | Date created |
|---|--|--------------------------------|-----------------|--|---|--------------|
| 1 | <a href="#">Android Programming Society</a>  | <a href="#">Computer games</a> | DCS             | <a href="mailto:cp@yahoo.com">cp@yahoo.com</a>               | <a href="http://www.androidps.ac.uk">www.androidps.ac.uk</a>              | 15-05-2011   |
| 2 | <a href="#">Chinese Football Society</a>     | <a href="#">Sport</a>          | Students' Union | <a href="mailto:indiansoc@gmail.com">indiansoc@gmail.com</a> | <a href="http://www.indiansoc.com">www.indiansoc.com</a>                  | 15-05-2011   |
| 3 | <a href="#">Computer programming society</a> | <a href="#">Computer</a>       | DCS             | <a href="mailto:comprosoc@gmail.com">comprosoc@gmail.com</a> | <a href="http://comprosoc.com">comprosoc.com</a>                          | 15-05-2011   |
| 4 | <a href="#">Indian Society</a>               | <a href="#">Culture</a>        | Students' Union | <a href="mailto:indiansoc@gmail.com">indiansoc@gmail.com</a> | <a href="http://www.indiansoc.com">www.indiansoc.com</a>                  | 15-05-2011   |
| 5 | <a href="#">Kite flyers</a>                  | <a href="#">Free time</a>      | Students' Union | <a href="mailto:kitters@hotmail.com">kitters@hotmail.com</a> | <a href="http://www.allaboutkiting.net">http://www.allaboutkiting.net</a> | 15-05-2011   |
| 6 | <a href="#">Motorola sounds</a>              | <a href="#">Mobile phones</a>  | Tweaks          | <a href="mailto:mobile@gmail.com">mobile@gmail.com</a>       | <a href="http://www.mobile.com">www.mobile.com</a>                        | 15-05-2011   |

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In the unlikely event that the application causes problems, please consult the server's administrator or contact the development team on

[aca09ep@shef.ac.uk](mailto:aca09ep@shef.ac.uk) or [aca09vh@shef.ac.uk](mailto:aca09vh@shef.ac.uk) or [aca09ock@shef.ac.uk](mailto:aca09ock@shef.ac.uk)

## Maintenance Guide

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This section describes the system's design along with details about how to expand it.

The system is based on the CodeIgniter framework

[http://codeigniter.com/user\\_guide/](http://codeigniter.com/user_guide/)

and it uses the MVC architecture.

### Models

The files managing data manipulation in the database are stored in the model folder in the main application folder. Every existing model that the system is using (Positions, User, Society, Category, Activities, Assessment, Inventory, Mailing\_list) inherits from the "**model.php**" file which provides predefined functions for easy querying and data manipulation. This is achieved inside loadClasses() function in model.php. Inside this file, there are also variables storing the user table name and id, username and password columns. These settings are necessary to maintain the connection to the user table and therefore are crucial for correct user login functions. Every model, as their names already specify, is used to manipulate different tables in the database and used only for the purpose specific for its logic.

### Views

The view files contain HTML and JavaScript code to generate a page using PHP data as variables passed from operating controller. These view files are distributed over the **view** folder itself and **society** and **manage** subfolders. **Society** subfolder corresponds to views displaying the society data and options for members. **Manage** subfolder corresponds to views displaying the options for super admin in **Super admin management** section.

### Controllers

Controllers, as connection between models and views, incorporate the main application logic. All existing controllers are, as explained in the CodeIgniter's specifications, inherited from the default controller provided by the framework itself.

### Expanding of the system

In the need of expanding the system, it is necessary to keep the described design unchanged and only create new views, models and controllers. It is highly recommended that each new model is inherited from the super class **model** located in the **model.php** file. Also, newly created controllers need to be inherited from CodeIgniter's default controller class.

### Client/server-side communication

The communication between the server and client's browser is done in two ways:

- Simple form post and PHP script for generating dynamic web-pages
- Ajax using JSon library



- Ajax feature has its own controller in MVC architecture which allows manipulating data in the database. This is done in four main functions
  - `getData()`
    - Reads and returns data from the database.
  - `add()`
    - Data are be added to the database using this function.
  - `remove()`
    - All remove operations being applied to data are achieved with this function.
  - `edit()`
    - Simulates update queries on data changing in the database.

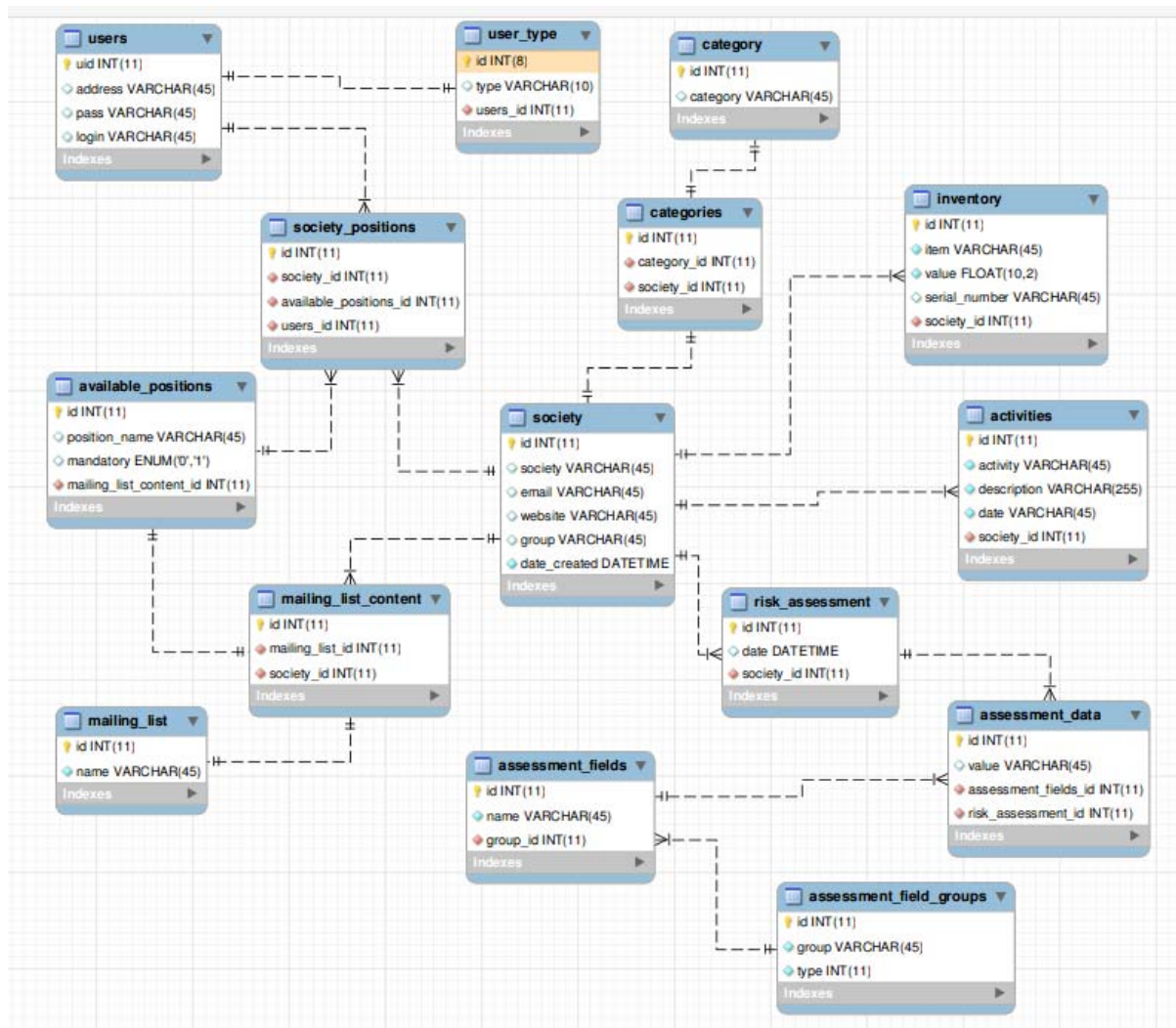
### *Error handling*

There are four types of error messages in CodeIgniter divided into four php files:

- `error_404.php`
- `error_db.php`
- `error_general.php`
- `error_php.php`

The file `error_404.php` contains the template for the info page appearing when a requested page could not be found and therefore 404 error is displayed. For the purpose of keeping the database table names and their column names hidden from the general users, in case an error message should be displayed the script in corresponding file redirects the page to non existing `404_error` page causing 404 error to be displayed.

## Database design



## *Glossary of terms*

---

- **Database**

A set of tables with records where data is stored.
- **Login/Logout**

Function that enables registered users to access the data.
- **Record**

An item (society) displayed in the main page view.
- **General user**

Member of a society who can only view societies they are a member of and manage data if their position is mandatory.
- **Administrator**

User who has more privileges than the General user does. Administrator can manage any data in any society, send emails to societies, export records to csv file, create new societies and see notifications about not completed societies.
- **Super Administrator**

User with absolute privileges. This type of user has their own section where they can create new administrators, change forms' templates and manage society positions and categories.
- **CSV file**

File format is a set of file formats used to store tabular data in which numbers and text are stored in plain textual form that can be read in a text editor.

### For Step 1 of Installation guide

- **yourhostname**  
The hostname of your database server.
- **yourusername**  
The username used to connect to the database.
- **yourpassword**  
The password used to connect to the database.
- **yourdatabase**  
The name of the database you want to connect to.

[CodeIgniter application/config/database.php file]

### For Step 2 of Installation guide

- **users**  
Table in the database where all users (general users, administrators, super administrators) are stored.
  - **id**  
Column in users table which contains unique identifiers of users.
  - **username**  
Column in users table which contains users' usernames. These are used for logging into the system.
  - **password**  
Column in users table which contains users' secret passwords.
- 
- **Text editor**  
A text editor is a type of program used for editing plain text files.

[[http://en.wikipedia.org/wiki/Text\\_editor](http://en.wikipedia.org/wiki/Text_editor)]