

Diary

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Pre-Commencement:

Ideas discussed during the Meeting?

Skype call discussing the project description, idea's and ambitions for the final product. Idea's were similar across the whole group.

- Use of translucent cards
- Use of smartphones
- Server Side
- Client Side
- Developer API
- Languages (Python, HTML/CSS/Javascript, C, Objective-C)
- Platforms (Web, iOS, Linux, possibly Android)
- Cross-platform code design

What goals have been set for the upcoming week?

Considering we are still on UniBreak, just keep on thinking of ideas. Look at similar products around the world.

Thoughts on the project's progress?

Very Good, we have already agreed upon a direction in which we want to take the final project. I feel we have very well rounded team who each have their individual talents.

Week One: 6 March 2013

Ideas discussed during the Meeting?

We have rubbished the idea of using translucent cards, as PassWindow has a very similar product already. We broke down the Project Description and questioned the definition of "What is Visual Cryptology?"

- Gave constructive feedback on other ideas brought to the table
- Aspect which would attract users to use the product.
- Goumin gave us a little bit of guidance (QR Codes)
- ZBar for decrypting QR Codes

What team and individual goals were achieved this week?

Just came back from holidays, Just ides have been generated.

What goals have been set for the upcoming week?

Continue think of better ideas. Collaborate through Google Drive, and slowly add ideas when they come to mind. Made a KICKASS Development Diagram. Still find other ways other than using QR Codes. Research more similar products.

Thoughts on the project's progress?

I am happy that we are slowly gaining progress. I am really pushing for a system which requires the the user to only enter their username and the authentication process is automated using their personal smartphone.

Week Two: 13 March 2013

Ideas discussed during the Meeting?

Clarified the sequence of events of how a user will login. Also the need to improve the security of the offline method of authentication. Ideas expressed of the possibility of the secret being revealed in real time.

What team and individual goals were achieved this week?

Assignment Two nearly completed (group collaboration was placed under the correct headings, just need to be reformatted a tiny bit, things look pretty sweet)

What goals have been set for the upcoming week?

In the meeting Adam found a piece of freeware that is able to read QR Codes. So we would like to have be able to read the QR then experiment with what we can do with this piece of freeware. A Development Diagram will need to be produced which shows the physical connections between nodes and the execution environment (processes related to software). The rest of the group will continue to learn and become more familiarized with the languages we need to produce the product.

Thoughts on the project's progress?

Very happy, more ideas were expressed. Ideas seem to be more focused on how the user interacts with the product rather that the technical backend side to the software. We should get our act together in producing Data Flow Diagrams's, Sequence Diagrams, Use Case Diagrams etc. maybe it will become a more important issue next week. Ill message the group through the week to see how they are going with attaining their goals.

Week Three: 20 March 2013

Ideas discussed during the Meeting?

Development Approach: Prototyping, Agile. Modifications to the Freeware to the QR Code image reader. Looking for a workaround for opening web sockets. Two different servers and so we can still use python for the bulk on server side? We are not short polling, too much bandwidth. eg. Long Polling, Nodejs - need communication layer. Comet Polling vs Web Sockets - IE Support
Event based server is optimal. Event bus? We are no longer using Zbar

What team and individual goals were achieved this week?

Adam is progressing well with the image reading code. Better understanding of how the system will work.

What goals have been set for the upcoming week?

Diagrams. More research on the image reading. How to support long polling. Familiarize with GitFlow.

Thoughts on the project's progress?

Good. Very Good. WE NEED A NAME!

Week Four: 27 March 2013

Ideas discussed during the Meeting?

Agreeing on Architecture. NodeJS Server. SSH or HTTPS Mobile to Server. AWS Elastic Beanstalk. Amazon S3. REST API. Design our architecture so we can move services out once we have overall functionality. (See "Server Architecture" LucidChart)

All are happy with the Activity Diagram.

Project Name: snapin

URL: snapin.io

Starting working on our API in Google Docs. We are not using QR Codes anymore. Because Adam found something on the net, and he is smart!

What team and individual goals were achieved this week?

William Ported Crypto library from MatLab to C. We produced a lot of Diagrams. We worked out how to use long polling.

What goals have been set for the upcoming week?

Need to work out how to manipulate the bitmap image. Functional Requirements. A few mock user interface designs.

Thoughts on the project's progress?

Really Happy.

Week Five: 3 April 2013

Ideas discussed during the Meeting?

Preparing slides and talk for week 6 presentation
interfaces for database and visual cryptography library

Presentation

Why?

Password authentication systems are weak.

- Password Guessing
- Malware, such as keyloggers
- Common attacks, such as brute force
- Stupidity

Think of how many passwords you have to remember.

How? how will we overcome the problem

- We will improve the security level by increasing the entropy of the secret key.
- We have done this by removing interaction between the user and a password.
- Hence, eliminating the need to remember passwords.
- avoids malware on public computers

What? What we will be doing to achieve the goal

We will be using a mobile phone application combined with visual to design a new authentication system

Open the website, open the App, hold your phone over the challenge image on the computer screen. Your phone uses a pre-shared secret image to decrypt the key stored within the challenge image.

In fact, our system also achieves two factor by using the pin on your phone

- something you have (your phone)
- something you know (your phones pin)

Visual Cryptography Explanation

-- A gif of visual cryptography --

Visual cryptography works by combining multiple shares of a single secret together. In our case we will be using two secrets a pre-shared secret image and a challenge image. When combined together they will produce the full secret.

Target Market

Personal, Business, Developers.

Design Methodology

Basically we are approaching this in a way where we make sure we have small parts of the system working.

We create one part of the system, then another part of the system in an Agile fashion. Once all core parts of the system have been completed, we will adopt a prototyping approach.

Technologies Used

Tools

- BitBucket
- In-house Testing and Documentation Server
- Google Drive

Web

- HTML5
- Javascript/JQuery
- CSS3

iOS Client

- Objective C

Server

- node.js
- C
- Database – MySQL
- REST API
- Amazon Web Services

What team and individual goals were achieved this week?

Got a little bit done on Functional Requirements.

What goals have been set for the upcoming week?

Need to work out how to manipulate the bitmap image. Functional Requirements. A few mock user interface designs. (continue last week goals)

Thoughts on the project's progress?

Really Happy. Ready for the Presentation almost!

Week Six: 10 April 2013**Ideas discussed during the Meeting?**

We discussed whether we need to produce some class diagrams, use case diagrams or module diagrams.

Confirmed Amazon, Elastic Beanstalk for our server of choice.

Amazon Relation Database Service works with MySQL libraries

Chris suggested he would write a python script to send email alerts if there has been an update to bitbucket.

Doxygen will be further researched and tested to see whether to produce documentation.

More ideas discussed were:

What to do if you have lost your phone

- Trusted computer (cookies, local storage)
- Web Based Management
 - Unregistered/Registered devices
 - Password Reset (Two factor authentication system)

Website Look and Feel

- Dynamic Website
- Storyboard for Website and Phone

We also worked through our Assessment 3, Requirements Documentation. We have completed our functional and non functional requirements. Still need to produce a project description. We also defined the image that will be sent to the browser (.png)

We also defined the structure of the private key.

We are now ready to write server side code.

What team and individual goals were achieved this week?

Finished Week 6 Presentation, and have prepared.

What goals have been set for the upcoming week?

Blake to finalise the Assessment 3 Requirements Document

Blake diaries production

Chris to draw Website Mockup

Chris to write script to check bitbucket for issues and email to everyone

William/James write up some doxygen javascript test

James Use Case Diagram

We all need to finish this weeks Diary, I'll be collecting everyones Diary.

Thoughts on the project's progress?

Very Happy, we are on track in regards to the timeline we unofficially discussed.

Week Seven: 17 April 2013

Ideas discussed during the Meeting?

We scrapped the idea of using Doxygen for generating documentation. We are going to use JSDoc.

Talked about the Website.

Discussed whether the authentication is more secure if we show the resultant secret onscreen or not.

Two Paths:

1. We use visual cryptography, use OCR, and we have a lower entropy and its a lot harder.
2. We don't use visual cryptography, we are able to just use a bit stream, we have a greater entropy, don't need to use OCR and its easier

Once the phone has decoded the secret, we have discussed how the user will interact with the phone or the website to complete the login process.

We finalised the Requirements Document.

Drew a use Case Diagram.

What team and individual goals were achieved this week?

Finished Requirements Document

Website design was drawn up

Library to read the contents of the challenge image was turned into a class

Use Case Diagram was drawn

What goals have been set for the upcoming week?

Allocated coding tasks

Thoughts on the project's progress?

Pretty Happy, we encountered a little problem, but it should be sorted out in no time at all.

Week Eight: 26 April 2013

Ideas discussed during the Meeting?

We discussed more in depth about the content being sent over the network. Is the data string of bits or bytes.

How are we storing this data on the server? Blobs, hexadecimal format.

In the challenge image, are we going to specify dates? how are we going to determine the session of which this challenge image is authenticating.

When we have decoded the challenge image, where does the response get sent? Is it a central endpoint all requests will be sent, then the server will work out what to do with the response. Are we going to bind the username into the response, so we can identify a session?

What team and individual goals were achieved this week?

Adam has been able to get the image reader to read an image on an angle. It needs to have a black pixel corners.

What goals have been set for the upcoming week?

Chris will start to play around with nodejs and c/c++ modules. I will need to continue the website. [Look at using bootstrap]

We haven't set much goals this week, since we all have crazy assignments due in. CSCI319, CSCI311 etc..

The group needs to start thinking about the user manual.

Thoughts on the project's progress?

We are going well, since we are in mid session break, the group was a little unorganised today, but when we return, we should be right.

Week Nine: 1 May 2013

Ideas discussed during the Meeting?

Need to figure out a way to handle error correction. May need a way to determine that there is an error. Maybe fix this by having an exact number of blocks.

How are we moving the image from the database to the C module. Blob. Binary Type.

Colour Scheme for SnapIn. App NavBar, complimenting the Website.

Making sure the image sent to the web browser is in fact the image the server sent. So we need some way that the image can be verified as a legit challenge. Take the average of each row, such that the result is an image strip of black and white alternative? Special pattern maybe?

What team and individual goals were achieved this week?

None

What goals have been set for the upcoming week?

None, we are under the pump with other assignments

Thoughts on the project's progress?

Pretty good, even though we are taking it easy, we are still progressing.

Week Ten: 8 May 2013

Ideas discussed during the Meeting?

There was no meeting

What team and individual goals were achieved this week?

None

What goals have been set for the upcoming week?

Adam is doing the iOS application

Blake is doing the website

Chris is working on the rest api

William is working on generating the images that will contain the data

James is writing a database abstraction layer

Thoughts on the project's progress?

Last few weeks, have been really unproductive due to other subjects

Week Eleven: 15 May 2013

Ideas discussed during the Meeting?

We again discussed security flaws in our system such as time based attacks, and being able to use a heat map to generate possible secret keys. We agreed to add noise into the secret images.

We quickly went over our feedback for assessment one and two and decided that we need to better convey what we are trying to do.

Since some members have been generating private and challenge keys, we have to now work out a way for the image to be display relatively the save size on the display. This is because some computer screens have a higher pixel per inch ratio.

We also agreed to use AES/Symmetric Encryption.

What team and individual goals were achieved this week?

Not much, we were about quarter through our last weeks goals

What goals have been set for the upcoming week?

Team goals was to do as much as possible on our individual goals. James is working on the database side, but is still under the pump with some other subjects. Adam is working on the iOS app. William is working on the cryptography. Chris is helping set up the website, since we made it priority.

Team goal is to work towards getting our act together for the user manuals and technical manuals.

Thoughts on the project's progress?

Still going strong, there was a little bit of a lull period but it looks like everything is running along smoothly.

Week Twelve: 22 May 2013

Ideas discussed during the Meeting?

Today we discussed the current look and feel of the website. What do and do not like about the website in its current state.

Ways to get back a lost account

- Temporary password emailed
- challenge questions
- trusted friend
- fallback password

We discussed putting a pin lock on the SnapIn App, which would mean the app will have two factor authentication.

What team and individual goals were achieved this week?

Got the website pretty much sorted out.

What goals have been set for the upcoming week?

Pump out as much work on the User Guide and Technical Guides.

Thoughts on the project's progress?

Really good, wish we had an extra week, since our other subjects are starting to demand a little bit as well.

Week Thirteen: 29 May 2013

Ideas discussed during the Meeting?

Today we discussed the sequence of events need for a user to create a new account, link a new device. A particular issue we had was working out how to securely send information between the devices without compromising any information that would be needed for authentication.

We designed mock UI's for the iOS App. Drew a Sequence diagram of the linking a device process.

What team and individual goals were achieved this week?

Team goals were to get get a move on with the User and Technical Manuals which have been started but have a long way to go.

What goals have been set for the upcoming week?

Complete all diaries as well as Documentation. Finalise the website.

Thoughts on the project's progress?

We are going good, getting a little rushed since all of our other assignments are killing us. But we are doing a good job.

Week Fourteen: 5 June 2013

Ideas discussed during the Meeting?

We focused on finalizing all of our documents which needed to be submitted on Friday. We finalized some ideas which were unclear to some group members.

We looked at the diagrams James produced. Gave some feedback. Together as a group we updated and clarified our Requirements.

What team and individual goals were achieved this week?

Completed the User Manual
Almost Completed the Technical Manual
Made sure we were all up to date with Diaries.

What goals have been set for the upcoming week?

Finalize everything. Make sure we are done!

Thoughts on the project's progress?

We are going very well.

Week Fifteen - Seventeen: 12 June 2013 - 26 June 2013

Ideas discussed during the Meeting?

There was no meeting

What team and individual goals were achieved this week?

None

What goals have been set for the upcoming week?

None

Thoughts on the project's progress?

We can start developing for real!

Week Eighteen: 4 July 2013

Ideas discussed during the Meeting?

What has everyone done?

- William has refactored his code.
- Adam has been getting his image reader to work better
- Chris has started writing the API

What team and individual goals were achieved this week?

None

What goals have been set for the upcoming week?

James and I will work together to get the login page working. Chris will work on the server side. Adam will work on the iOS app, working on the VisCrypt Library.

Thoughts on the project's progress?

Happy!

Week Nineteen: 12 July 2013

Ideas discussed during the Meeting?

Git Sub Modules

TestFlight App

App: UI

Chris will teach us how to use Git Sub Modules.

What team and individual goals were achieved this week?

API works except the image.

Server code is getting there.

Global Login Page, everything works except the image (because of the server)

What goals have been set for the upcoming week?

Start Account Management Page (AngularJS?)

Adam plans to get the API stuff to work on the iOS App.

Will will continue to integrate graphics major into a static library. (He will upload his code soon) - and make it Asynchronous.

Thoughts on the project's progress?

Happy Happy!

Week Twenty: 19 July 2013

Ideas discussed during the Meeting?

Installed iOS App on the iOS devices we have on hand.
WhiteList - but we cant use an UDID,

James proposed how to the phone whitelist database(attributes, functions etc) and how to communicate with the client-side.

William is having trouble statically linking the the Graphics Magick Library. We may need to find an alternative.

What team and individual goals were achieved this week?

Not as much was completed this week, but next week we'll be in good form! My birthday and also my best mates birthday was in the past week.

What goals have been set for the upcoming week?

Continue on our own sections

Thoughts on the project's progress?

We are going okay!

Week Twenty One: 26 July 2013

Ideas discussed during the Meeting?

Today we discussed how we would go about stopping someone from trying to link up an infinite amount of devices to a singular account, ended up realising this will not be an issue after some discussion.

Removal of "Approving a Device", it now will be made possible to do all that from the mobile application

What team and individual goals were achieved this week?

Finish the API, Continue the iOS App, Rewrite the Image Library to use OpenCV.

What goals have been set for the upcoming week?

I need to flesh out the Account Management Page!

Thoughts on the project's progress?

Very Happy!

Week Twenty Two: 30 July 2013

Ideas discussed during the Meeting?

Chris and James talked about how they would get the User Information to and from the website (API-wise). Auto Update? no need for the submit button.

What team and individual goals were achieved this week?

I got the Account Management Page html fleshed out. Will got his code working with OpenCV and producing imagines in png format.

What goals have been set for the upcoming week?

Get acquainted with AngularJS, Chris and William will work on the encryption of the image now. James working on the database and also doing the backend of the Account Management Page.

Thoughts on the project's progress?

Excellent! Excellent!

Week Twenty Three: 6 August 2013

Ideas discussed during the Meeting?

Clarifying the sequence of events when in offline mode. We had a look at the Website and now I have better direction.

What team and individual goals were achieved this week?

Majority of people ran into some problems, but the issues have been cleared up now. I wasn't able to do much this week because my Management subjects required some more attention, especially with organising commerce students.

What goals have been set for the upcoming week?

We have decided to set next week as the week to have the MVP ready.

William will add RSA Encryption to the image, Adam is tinkering with the iOS app, James and Blake will continue to develop the website. Chris will purchase the snapinauth.com and help bring the rest of the project together.

Thoughts on the project's progress?

We are looking very good. I need to learn JavaScript again.

Week Twenty Four: 13 August 2013

Ideas discussed during the Meeting?

Today we discussed some issues which arose during the week just past. William realised we need to supply a 128bit encryption tag.

We need to implement a timeout for the SnapIn.

Instead of sending two keys, for the online and offline keys, just send the hash of both. Let's do what the Blizzard authenticator does.

Some more suggestion: Remember Me, User Analytics, and Revoking Service Access.

What team and individual goals were achieved this week?

Minimal Viable Product!

What goals have been set for the upcoming week?

Everyone is refractoring their code. I really need to get a move on with the website. My Management subjects are demanding too much from me!

Thoughts on the project's progress?

We have our first Iteration Complete! Minimal Viable Product! Boom!

Week Twenty Five: 20 August 2013

Ideas discussed during the Meeting?

Chris notified us that openID was pretty difficult. I was having some problems getting my localhost:8080 of snapin to send of requests, because cross-origin was being difficult. A workaround was found, and I now open Chrome with less security. (but SnapIn works fine with full security on snapinauth.com)

We bought snapinauth.com, and now we need to redirect the uow website to it.

Website needs a little changing, in terms of the user information.
Need for Kill session, and push notifications.

Blake is to start looking at the Business Model

What team and individual goals were achieved this week?

We worked as a team to fill out a couple of the forms Luke required.

What goals have been set for the upcoming week?

Continue looking at bitbucket for issues. Fix if you can. I need to ask my Business Teacher for advice.

Thoughts on the project's progress?

We are killing it!

Week Twenty Six: 27 August 2013

Ideas discussed during the Meeting?

Today we discussed iOS Application UI design. There were a few issues in regards the tour, as well as buttons, and what the screen flows should be.

Push Notifications was discussed more in-depth.

What team and individual goals were achieved this week?

Everyone had a fair bit of work from other classes, such as tests and assignments. But we all managed to do little bits here and there.

What goals have been set for the upcoming week?

Same as last week. Just keep pushing on.

Thoughts on the project's progress?

Again we are still killing it

Week Twenty Seven: 3 September 2013

Ideas discussed during the Meeting?

We talked about the iOS Tour, the need to change the fonts, and when we need to hand in the Diary.

James found a bug in my code.

What team and individual goals were achieved this week?

I need to learn how to install the webserver + all the needed technology from scratch. Adam will continue to find little things to tweak on the App. James Will and Chris all have a fairly large workload at the moment. Chris is helping Blake with npm install script.

What goals have been set for the upcoming week?

Make sure all our parts were solid. Since we have to demo soon. Get our Diaries sorted out.

Thoughts on the project's progress?

We are going fine, Goumin even said! :)

Week Twenty Eight: 10 September 2013

Ideas discussed during the Meeting?

William is having some real difficulty in compiling the encryption library with nodejs. At this point I feel it may be wise to fall back onto QR Codes. This is big issue because this is what William has been

What team and individual goals were achieved this week?

Adam is shaping up the iOS app nicely, Chris investigating OpenID and the back end of the server, Im going really good with the UI of the Website still some bugs in terms of the error messages displayed client side.

What goals have been set for the upcoming week?

Do something about the Encryption!

Thoughts on the project's progress?

Even though we have hit a hiccup we should be fine overall!

Week Twenty Nine: 17 September 2013

Ideas discussed during the Meeting?

We discussed the issue whether to allow the user to customize the name of their device from the website, we decided against it. Chris, William and Adam talked about the encryption, and that it is now in the library,

rublon, a look at a potential competitor

What team and individual goals were achieved this week?

Encryption, I got swamped with Management this week :(

What goals have been set for the upcoming week?

Prepared for our little demo.

Thoughts on the project's progress?

We are going to make it, without much hassle.

Week Thirty: 24 September 2013

Ideas discussed during the Meeting?

We discuss how Account Recovery works. the changes QR codes will bring, and how it isn't a big change, except that it is more well supported than our own custom images.

How does off-line mode work? James described the process and showed us a little demo.

What team and individual goals were achieved this week?

James got offline mode working :)

What goals have been set for the upcoming week?

Implement all this Account Recovery and Offline Mode into the website

Thoughts on the project's progress?

Killing it! I say this every week, but the team is doing a great job.

Week Thirty One: 1 October 2013

Ideas discussed during the Meeting?

Account Recovery, Offline Mode, help with javascript.

What team and individual goals were achieved this week?

Chris almost has OpenId down pat!

What goals have been set for the upcoming week?

Fix the websites Account Management Schema

Adam will tie up the loose ends of the iOS App.

I need to do a lot of UI changes on the website.

Thoughts on the project's progress?

Should have MVP next week.

Week Thirty Two: 8 October 2013

Ideas discussed during the Meeting?

Design/Feedback the UI for the iOS App.
Redesign of the Poster after looking at a mockup.
Push Notifications and what is actually involved.

What team and individual goals were achieved this week?

Small backend tweaks.

What goals have been set for the upcoming week?

Documentation.

Thoughts on the project's progress?

We are not even stressing.

Week Thirty Three: 15 October 2013

Ideas discussed during the Meeting?

Adam asked for an endpoint to check whether a device is STILL attached to an account.
Our approach to the Trade show Slides and also the Pitch

What team and individual goals were achieved this week?

Website pretty much completed. Updated information, made navigation a tiny bit more intuitive on the website.
Tidied up the user manual.

What goals have been set for the upcoming week?

Technical Document

Thoughts on the project's progress?

We are not even stressing

Week Thirty Four: 22 October 2013

Ideas discussed during the Meeting?

Clarifying idea's concepts, so when writing our documentation we don't accidentally explain something wrong or cause confusion for others in the group.

What team and individual goals were achieved this week?

We are about half way through the goals set last week.

What goals have been set for the upcoming week?

Finish the User Manual, Technical manual, Website, push out a final commit of the App.

Thoughts on the project's progress?

Yeah yeah! I am so happy.

Week Thirty Five: 29 October 2013

Ideas discussed during the Meeting?

What are we going to wear at trade show. ;)

But seriously, making sure we haven't been silly and forgotten anything.

What team and individual goals were achieved this week?

User Manual Complete

Technical Manual Complete

Website Complete

iOS Complete (more so satisfied, theres always the ability to improve)

What goals have been set for the upcoming week?

Prepare your brains for Trade show!

Thoughts on the project's progress?

Come at us!