# Graphical Enigma Simulator Majed Monem

Supervisor

**Prof. John Arnott** 

## Minutes of meetings

Date Time

05/09/2014 11:30

Which programming language to use?

**Brief Discussion** 

Introduction to project

Good Initial Discussion with Prof. Arnott Good idea to choose Graphics module!

08/10/2014 11:30

C++ will be used

Background reading

One rotor to start with - like a prototype#

Maybe 3 if time

Cryptomuseum.com

Look for Enigma simlators online

Graphical representation, 3D?

Maybe attack maethod to guess cipher text

Requirements

15/10/2014 11:30

The system shall unscramble cipher text to plain text

Attach method - encrypted plain text

Decryption requirements

Reference book titles

Intro and background of final report

Refine requirements

Gantt chart

Minutes of meetings!

Prototype sketches

Specification and design

22/10/2014 11:30

The Hut 6 book - good bg info

Send github link

Specification requirements

**Prototypes** 

28/10/2014 13:00

Spelling error in report!

Encrypt rotor types

Move on current letter being deciphered

26x26x26 - find out information

1 use case document

Start ethics!

04/11/2014 13:00

Reviewed ethics with Prof. Arnott

All Enigma capital E!

Change app/program to simulator!

Can also decrypt during testing

Demographic questionnaire - who?

Change group to I

Staff member

70 -> 60

must -> should

Give feedback to participants

Look at #7

Infosheet diag tool -> simulator

John's email

project -> simulator

product -> simulator(SUS)

Align - agree/disagree

Another draft for next week

Just before War polish broke enigma code

Reviewed Specification requirements

Try finish use cases

## 11/11/2014

Review 2nd draft of ethics

Comparing? No times - feedback

13:00

Should know which outcomes of evaluation questionnaire is

No '@' symbol on John's email - fix

Submit ethics

2 questionnaires not 1

Use case change player to user (exit) Change all of exit to match simulator!

Start UI?

Continue BG on report

#### 18/11/2014 13:00

Letters to light up?

Plugboard?

Start Developer - UI

#### 25/11/2014 13:00

**Ethics Approved!** 

#### 03/12/2014 12:00

Do some work over holidays!

Will get emailed about next meeting

### 20/01/2015 12:00

Put 2:1 for mid-term report

Tooltips? When user hover overs parts?

Add plugboard at end?

#### 27/01/2015 13:00

Showed progress of work done

Change viewpoint?

Get wires working!

**Specs** 

03/02/2015 12:00

Wires completed!

Wires to glow -yes!

Currenet path

Add reflector

Both, button and live action?

10/02/2015 12:00

Stick to one rotor - finish one rotor!

Have block for reflector?

As long as you can see current going in to reflector

Decryption! Then reflector maybe?

20/02/2015 16:00

Decrypt working!

Need only to show current passing back to decrypted letter

Different reflector and key rotor

Green and red wires

Need to start testing soon

Bring laptop to show

show what the current key is?

25/02/2015 13:00

Shown work done

Labels on components maybe

Help and info section explained that this is with one rotor

Testing - does this work? (angle as well of camera)

So does A cipher to X?

Reflector wire!

03/03/2015 12:00

Don't need to fix decrypt

If A 26 time, should come back, should come back not as A!

Bug report

Improve UI

Write test strategy

10 people for evaluation

10/03/2015 12:00

Cross over wire in reflector

Make reflector stuff rotate

Explain process - why green and red

Tweak interface and components

Test plan - include in appendix

17/03/2015 12:00

Testing complex

Start Evaluation

Otali Evaluation

Work on report

25/03/2015 13:00

**Evaluation done** 

# Write about 3 rotor in future work Add appendices

31/03/2015 12:00

Done Evaluation summary

29/04/2015 11:45

Project about develop educational tools Illustrate Enigma
Make very clear how letter working Reflector what I learnt.