
Message Locker: and encryption decryption tool

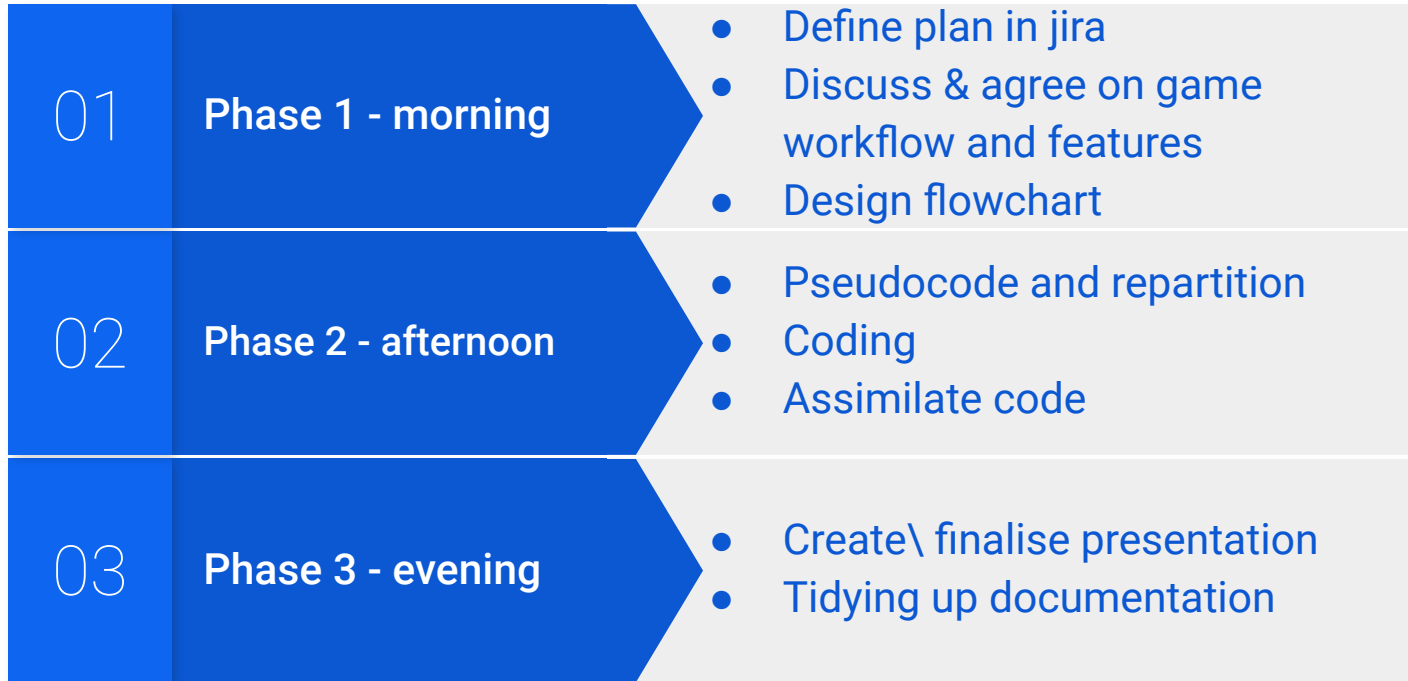
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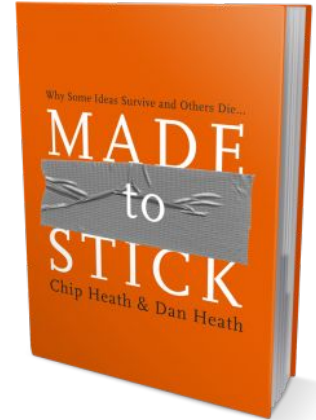
Project plan



Description of Message locker

This tool allows you to encode a message wrote in English, and then exports it as an encrypted message in a text file.

The user can then come back at a later date to decrypt the message.



Challenges faced

Agreeing design

Many different possibilities:

Coding : Decrypting

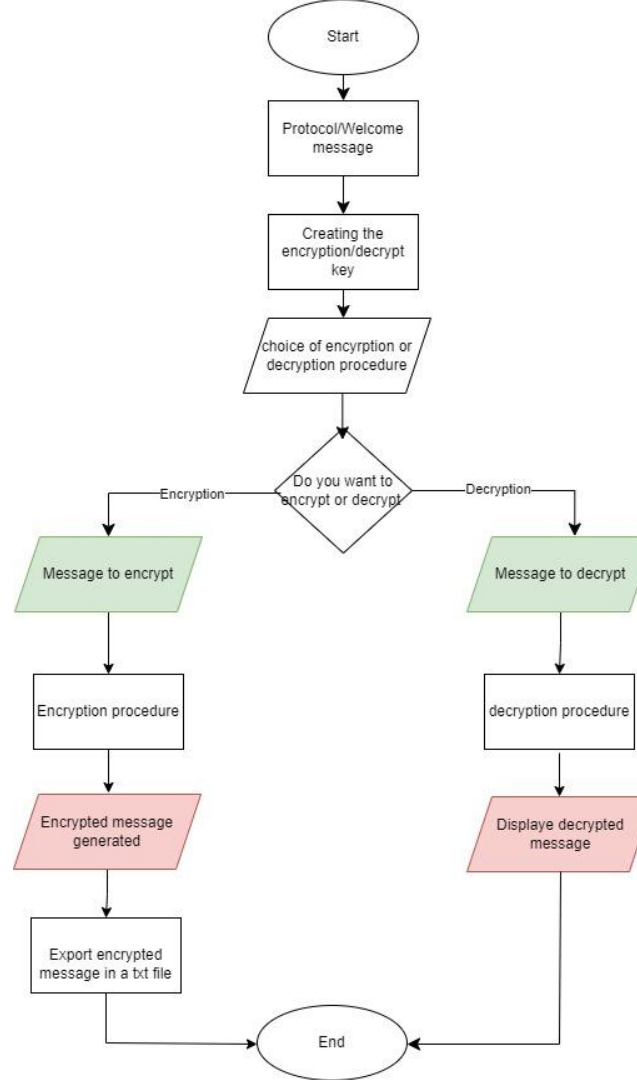
Lots of time trying to decrypt using dictionary values to return key

Time..

Maybe too ambitious for amount of time assigned - we let go of some features e.g. password

And code not as annotated as desired

Process



Features dropped:

Security feature with a user name and password

Key Features: Encryption key

- Encryption key
 - 3 characters per letter e.g. **A = @f&**
 - Generated using **random.choice**
 - No duplication of key codes
 - Only generated once
 - Dictionary for character - encryption key created



Key Features: Encryption procedure

- Encryption procedure
 - Encrypts each character from input string
 - String -> list of individual characters [H, E, L, L, O]
 - Iterate through each character, matching with encryption key in dictionary
- Outputs decrypted message as text file

Key Features: Decryption procedure

- Uses regex to slice encrypted message every 3 characters
- Loops through encrypted message,
 - For every 3 letters in message, key found in dictionary
 - character appended to new message
- Message converted to string

Encryption List : `['"K_', 'i#H',]`



Dictionary: `{'h': '"K_', 'i': 'i#H',}`



List : `['h', 'i',]`



String : `"hi"`

Highlights

**Getting to grips
(or not) with tools
like git and jira**

**Working as a
team**

For coding this was quite cool, except when we got stuck and then it sucked up man hours

**Having a working
tool...**

Quotes for illustration purposes only

And now for the demo...