Joshua Fawcett (JF), Max Hopkins (MH), Meghan Riehl(MR), Yuyao Zhuge(YZ) Date last updated: 5/31/21

## **Meeting Notes**

These will be the meeting notes for our meetings, and the unique topics that pertain to those meetings. Joshua will lead the meetings but we will take turns on taking notes during meetings. We will start with Max, and rotate down the group members alphabetically by last name. Josh is exempt from notes in order to focus on leading meetings.

## Meeting Notes for 5/28/21 at 3:00

Attendance: all 3:00 - 3:50

### Topics to discuss

\_v\_ Progress and next steps

#### Notes:

- Change color of pause to red when activated, color of play to green when activated
- Add one button for pause/play
- Add indicator for what speed you are on
- Split button into visualization and testing (if time permits)
- Error message on screen
- Format buttons correctly
- Limit input (prevent overlap with letters and table)
- Fix issue with screen being black when changing screen size while animation is paused

Max - Not too much progress since last meeting. Next: menus set up (all buttons between menus) (use menu, ...), Holding Back: No

Josh - Integrated table into the main program. Added pacing functionality (pause/play, step forward/back, speed up/down, restart). Next:

Yuyao - Not too much progress since last meeting. Next: Print current message, keyword, and result to screen and implement highlighting specific letters. Possibly help with other tasks. Holding Back: No

Meghan - Not too much progress since last meeting. Got some stuff typed up. Next: get it into scene manager. Holding back:

# Meeting Notes for 5/26/21 at 3:45 - Meeting with Prof. Joe Li

Attendance: all + Professor Joe Li

3:50 - 5:00

## **Topics to discuss31**

v Talk about prototype

- \_v\_ Get feedback from professor Li
- \_v\_ Progress and next steps

#### Notes:

To make better:

- indicate which line is ciphertext, which is key (Label what is what)
- more descriptions, which color is for what
- Describe which process is currently being shown
- One more thing suggest: Vernam cipher (1 time pad? 1 time pass?) (if time permits), if done in time can possibly show in next class for applied cryptography,

Max - work on next: Work on some more menus and integration between the scenes
Josh - update pacing, using values from encrypt/decrypt to dynamically highlight correct values
Yuyao - Animation, cipher/table integration
Meghan - Info write up and formatting, project plan paperwork

# Meeting Notes for 5/25/21 at 12:00 - Group Meeting

Attendance: all 11:45 - 1:00

## **Topics to discuss**

v Check up on everyone's progress

#### Notes:

Josh - worked on pacing and visualization highlighting. Next: work on integration Meghan - buttons for animation scenes, work on pausing game Yuyao- Made letter grid, looked at highlighting stuff, Next: focus on animation, not sure what next task is, focus on integration Max - Worked on changing between menus, and

# Meeting Notes for 5/21/21 at 3:00 - Group Meeting

Attendance: Max Hopkins, Meghan Riehl, Yuyao Zhuge

### **Topics to discuss**

v Check up on everyone's progress

#### Notes:

Josh: Worked on: Created Cipher.py with basic encrypt/decrypt functionality. Started basic research about pygame to help with understanding of each module. Next: update Cipher.py? Maybe help implement other modules? Holding Back: Not sure what I need to do next, waiting

for progress on other parts to see how Cipher.py might need to be modified, or if there are other parts of the project that I need to help with.

Meghan:worked on: Pseudo code, learning pygame. Next task: add mouse logic/buttons for the speed up/speed down buttons. Holding back: TIME.

Yuyao: Worked on table/grid. Next task: Update table to include letters and highlighting. Holding back: Time.

Max:worked on: Setup test menu/learn pygame. Next task: Setup main menu to have inputs and load the next screens. Holding back: Other assignments/time.

- Don't use slider for speed, use buttons.
- Speed up/speed down buttons will display a number on the screen showing your speed.
- Need step forward and step back as well.
- Main menu will have input/start buttons, it will load visualization menu.
- Josh could help Meghan with her next task over the weekend.
- Possibly CC Hornof to the prototype meeting.
- Need to have a prototype done by 5/24, some slack time for a meeting on Wednesday.
- Send an email to Joe Li by Monday.

# Meeting Notes for 5/18/21 at 12:00 - Group Meeting

All in attendance 11:45 - 12:20:

### Topics to discuss

\_√\_ pygame yes or no? Yes

- \_√\_ Talk about individual progress
  - What are your responsibilities on the project?
  - What have you done in the last few days?
  - What is your next task?
  - What, if anything, is holding you up from accomplishing that task?
- $\_\sqrt{\_}$  Discuss system building plan (What you'll build and how you'll build it)

### Notes:

Yuyao: Worked on: Looked at other visualization tools, leaning toward pyGame as the final decision. Considered other ways to use different models. Found other sources, sent questions to others about how to use pyGame. Contacted creator of the other software for Vigenere

cipher. Next: Communicate with contacts and creating a table in pyGame, learning how to do the animation. Holding back: learning pyGame.

Meghan: Worked on: Reading more about pyGame, how to use it and thinking about how to use specific functions for what we need. Considered memoization code for saving steps. Next: learn pyGame and how to translate encryption/decryption steps so pyGame can animate them. Holding back: time, working on other classes, learning pyGame.

Max: Worked on: looking into alternatives to flask server, created Github Repository. Programs that can compile the pygame files into an executable file we can send out. Found more citations for design specifications, with quotes. Next: Work on making a decision about which visualization tool to use. Holding back: learning pyGame.

Josh: Worked on: Researched best ways to implement encryption and decryption in python. Next: Get a working model of the encryption/decryption code. Holding back: time, working on other classes.

- -Max's research: important to control pacing, being able to rewind, hypertext.
- -If not using a flask server: how will we handle user inputs? PyGame has options to build an interactive menu.
- -How could we best deliver the final product to Prof. Joe Li? Ask him
- -Find and try games built by pyGame to test/learn how it works from a user standpoint
- -What information needs to be sent from the algorithm to the visualization? Have a separate animation code that doesn't necessarily talk to the algorithm?
- -Divide visualization into: animation, time control, user menu
- -Different colors for key, plain text, encrypted highlight
- -Make only one prototype so there's more to present to Prof. Joe Li (Target- 5/24)
  - Takes in user input ★MH
  - Provides proper encryption/decryption ★JF
  - Can highlight table (hopefully text too) ★ YZ
  - Some form of pacing (stepwise or controlled continuous) ★ MR

# Meeting Notes for 5/14/21 at 3:00 - Meeting with Prof. Hornof

Additional Persons: Anthony Hornof All in attendance 3:00 - 4:20

### Topics to discuss

\_	Organize	meeting	document
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\_\_ Review timeline plan

\_v\_ Discuss each individual member's progress

- What are your responsibilities on the project?
- What have you done in the last few days?
- What is your next task?

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Discuss interactions with Professor Li	
Discuss system building plan (What you'll build and how you'll build it)	

What, if anything, is holding you up from accomplishing that task?

#### Notes:

Yuyao: responsible for collecting information about how to do the visualization part. Just got started and found some helpful resources that we can use by using python, especially modules called matlib, pygame, dash, barchartrace. Next task: look more into it. Try to see if can plot table format based on libraries (evaluating libraries for ease of use/practical). Holding up: technical stuff: knowing how to plot table and how to do step by step animation. Suggestions: Meghan's book, save state for each step, pattern

Meghan: responsible for looking up visualization tools/techniques to show the vigenere cipher. Read through how pygame works (pygame book), best way to get interactivity from users (so far), meet with Yuyao next to discuss findings. May experience time constraints for the next task.

Max: responsible for findinding/reading research papers and getting the flask server set up with input fields. Has been working on SRS, SDS, got one paper quoted with a citation. Next, getting another citation or two then setting up a server with plain text and key input fields. Expressed being able to get a lot done over the weekend.

Josh: Responsible for researching articles to find more design specifications, needs to get started on cipher functionality (not visualization). Look into cryptanalysis if time permits. Hasn't had much time the last couple days, but has been able to look at a couple articles so far. Look into integrating cipher functionality with other modules nicely. Time constraints due to other classes.

Suggestions for leading meetings:

- Ask for specific answers
  - Be persistent
  - Rephrase questions
- Clarify Understandings
  - o Did that help?
  - o Did that answer your question?
- Lead the Discussion (with leading questions)

Action It	tems:			
Josh	ua will	find	software	pattern

Hard to make progress if tasks are too big. True for all projects. Specific tasks please continue like this figure out when to meet - "nice to meet in zoom with video" - "helps with group cohesion" Come up with agenda items

when you look at the papers... looking for ideas for specific things to add to system/design based on what does/doesn't work.

Flask - do you need flask server? Focusing on visualization aspect. Go to stakeholder: maybe he doesn't want flask server?