

### Criterion B - Solution/Design Overview

#### Input / Output

Input	Data Type	Normal Range	Example
Username	String	1 - 50	KujoJotaro
Password	String	Minimum 8	goawayhacker123
Enter Task	String	1 - 20	Mow the lawn
Urgency	String	Urgent, Moderate, or Trivial	Urgency = Moderate
Task ID	Int	1 - 10	Task = Task 4
Time	Double	0.00 - 24.00	14.00
Day	String	Sunday - Saturday	Monday
Twitter account	String		Inputting username and password for Twitter inside the application
Enter League of Legends (LoL) data about player	String		Inputting username and password for a League of Legends API inside the application

Output	Data Type	Normal Range	Example
User	String	1 - 50	KujoJotaro's profile and data
Planner	String		Column: Sunday Row number: 4 Task: Finish Homework
Status of Work	Boolean	True or False	Can you play?: No
Twitter			Displaying Twitter inside application
League of Legends (LoL) Statistics	String	Either empty or not	Displaying LoL statistics

# Prototype

## 1. Original GUI Prototype

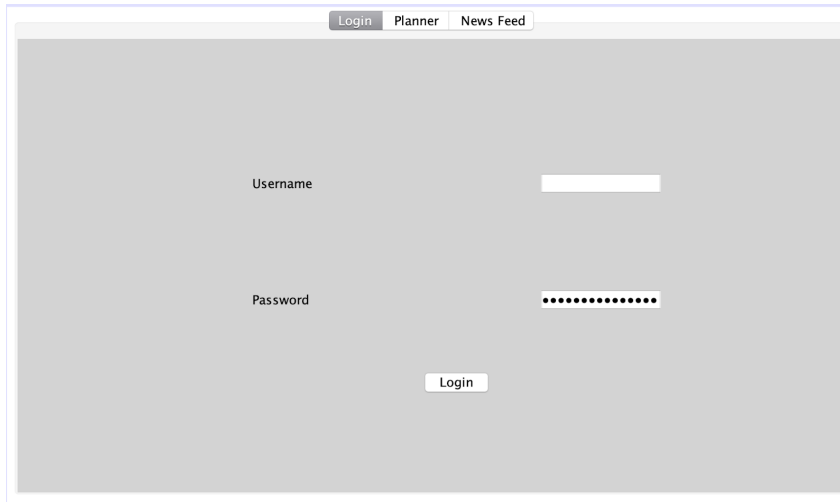


Figure 1: Login Page

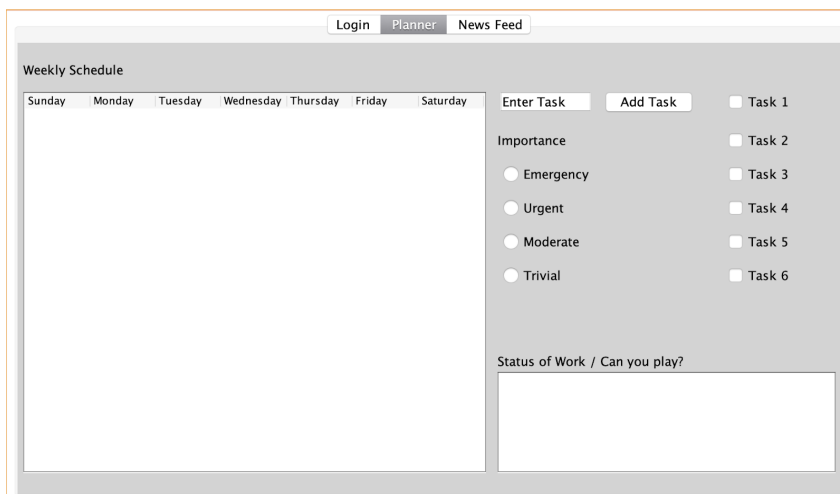


Figure 2: Planner Page

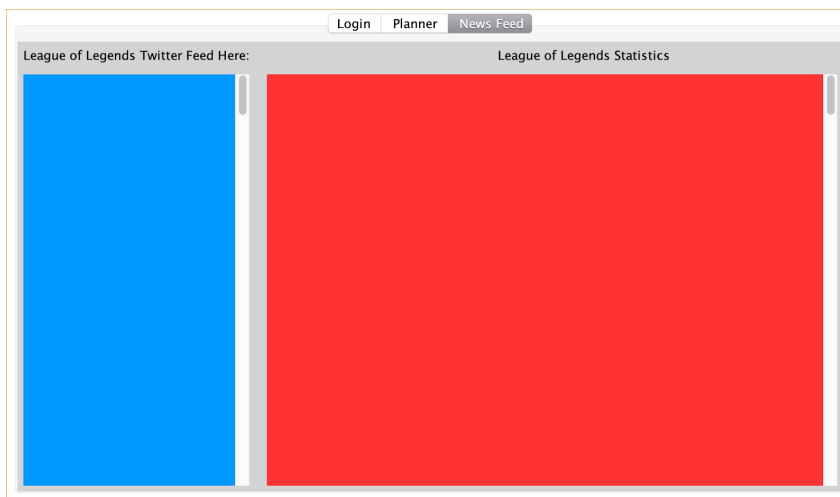


Figure 3: News Feed Page

## 2. Picture of Changed Prototype

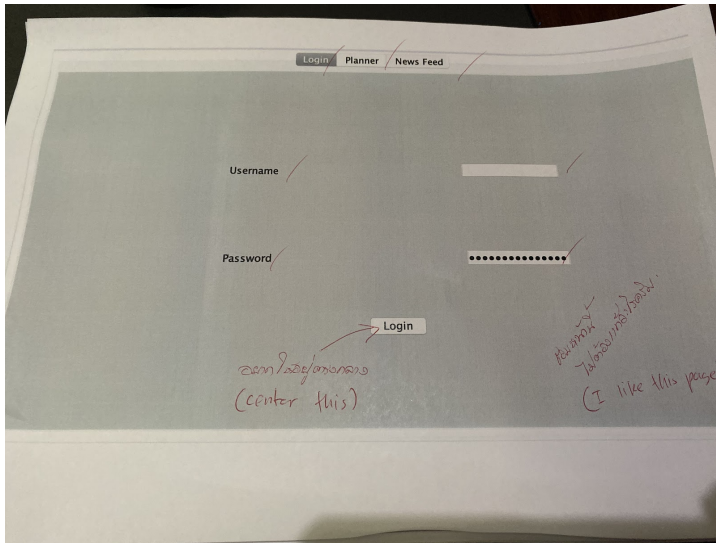


Figure 4: Login Page Edited

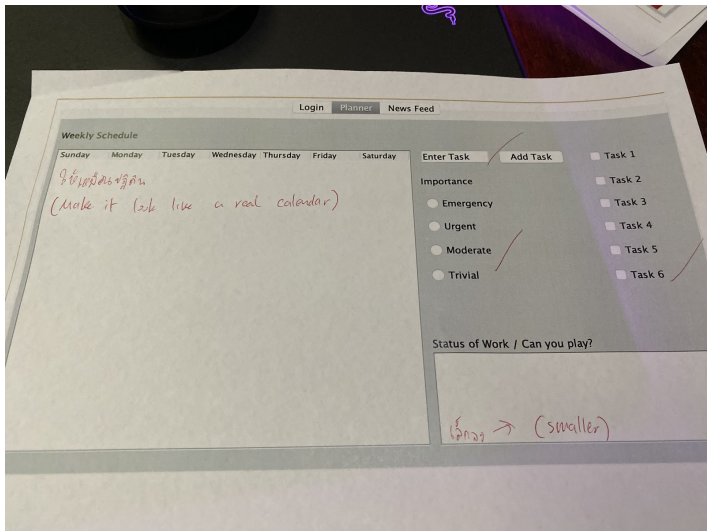


Figure 5: Planner Page Edited

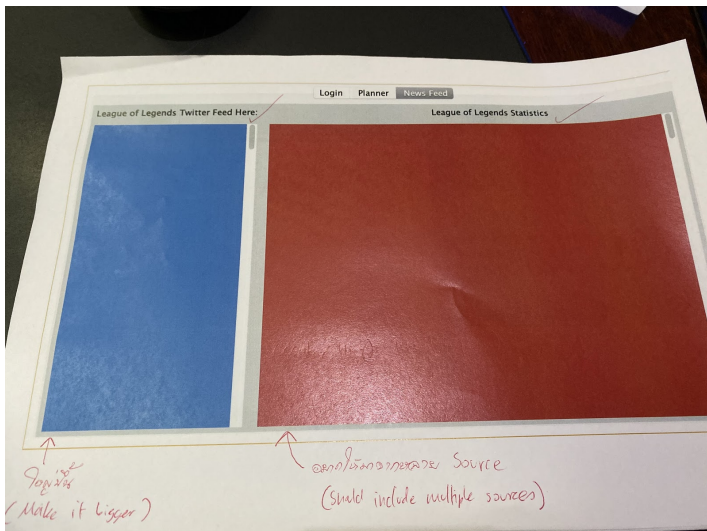


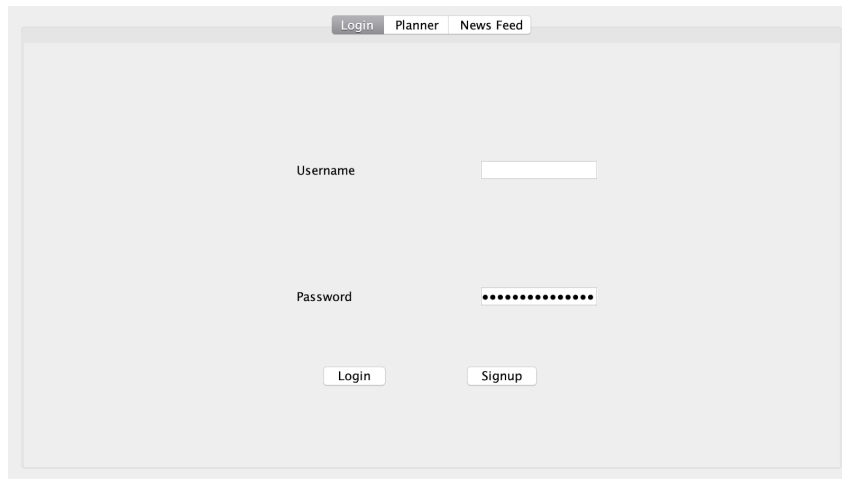
Figure 6: News Feed Page Edited

### 3. Changes Paragraph

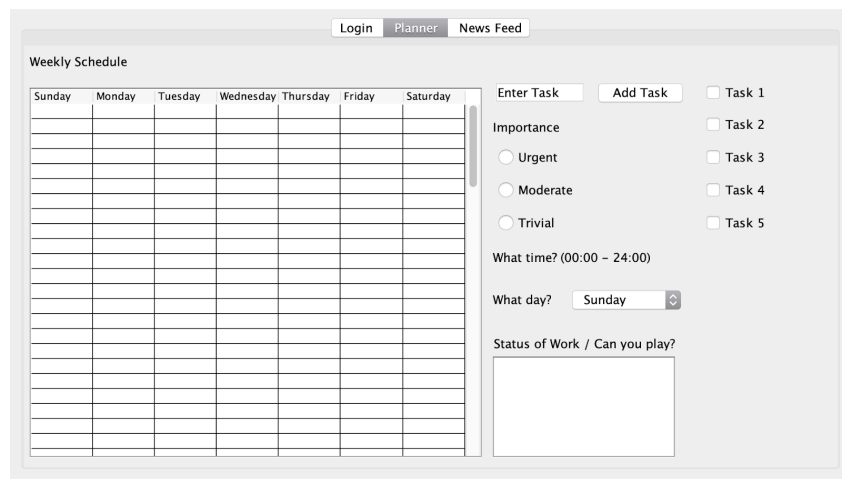
For the Login page, Mr. Manee (the client) wanted was for the components of the page including the login and register buttons, username and password labels, and the two text fields to be more centered in the application. In the Planner page, Mr. Manee wanted the “status” box smaller and weekly schedule to look more like a calendar. Thus, I made the “status of work/can you play?” box smaller and made table into a calendar. Finally, on the News Feed page, the only change that Mr. Manee wanted to make the space for Twitter larger.

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### 4. Final Prototype



*Figure 7: Final Prototype Login Page*



*Figure 8: Final Prototype Planner Page*



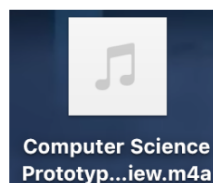
*Figure 9: Final Prototype News Feed Page*

## 5. Prototype Interview Picture

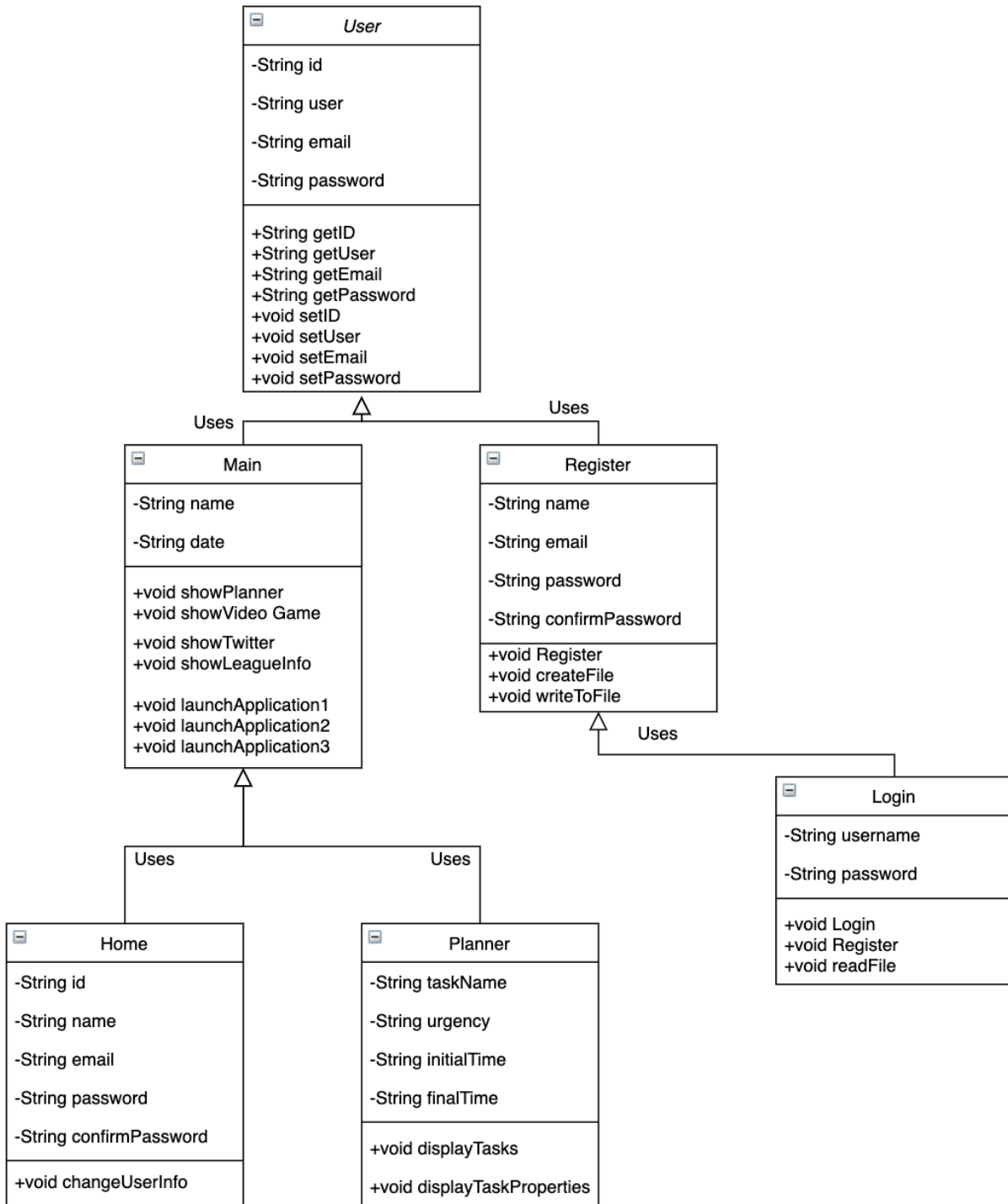
### **Translated important parts from prototype interview/transcript 2:**

- Introduction and purpose of the interview
  - Asking Mr. Manee if he still has around 5 minutes
    - He agrees and I conduct the prototype interview
- Letting Mr. Manee annotate
  - Asking Mr. Manee to annotate the three screenshots I brought for the prototype of the application in let me change or adjust some aspects
    - Mr. Manee agrees and works on annotating
- Asking for any final thoughts and feedback
  - Asking Mr. Manee for any final thoughts or feedback that he would like to let me know
    - Mr. Manee says he is, overall, satisfied with the product however there were some aspects such as the appeal and presentation of the application
- Thanking Mr. Manee
  - Thanking Mr. Manee for the interview

*Screenshot 1: Prototype Interview Screenshot*



# Class Diagrams



## **Chronological Development Plan**

- Finishing up GUI programming - 1 week
  - Assigning all variable names
  - Add basic functions to buttons, radio buttons, text fields, etc
  - Finish up minor changes in positioning
- Making basic and necessary sort and search algorithms - 1 day (5 hours)
  - Making sorting algorithms with methods such as the bubble sort in order to sort data needed/inputted into the application
  - Making searching algorithms with methods such as the binary search in order to search for data needed/inputted into the application
- Creating template classes - 2 days (8 hours)
  - Creating template classes for various parts of the application such as the schedule, tasks, and newsfeed
  - Creating classes for each user and their connected data as well
- Start programming and adding functionality to the program - 2 weeks
  - Applying searching and sorting algorithms into the application
  - Programming so that each user will have unique information for each user
  - Enabling the schedule to be able to add tasks by time and urgency of the tasks
  - Utilizing APIs from Twitter and sources from League of Legends in order to display Twitter and League of Legends statistics

## Testing Plan

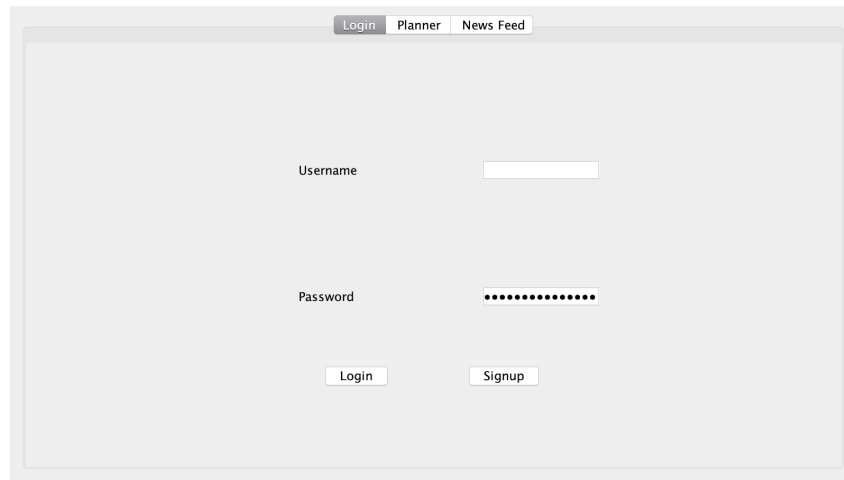


Figure 10: Final Prototype Login Page

Input	Normal	Border	Abnormal	Extreme
Username	TallGeese	Short usernames: MV No usernames	Characters that are not English: マンビライラク	Any username length that is too long (50+ characters)
Password	HackersAreBad	Short passwords: 123 No passwords	Characters that are not English: パースワルド	Passwords that are extremely long (30+ characters)



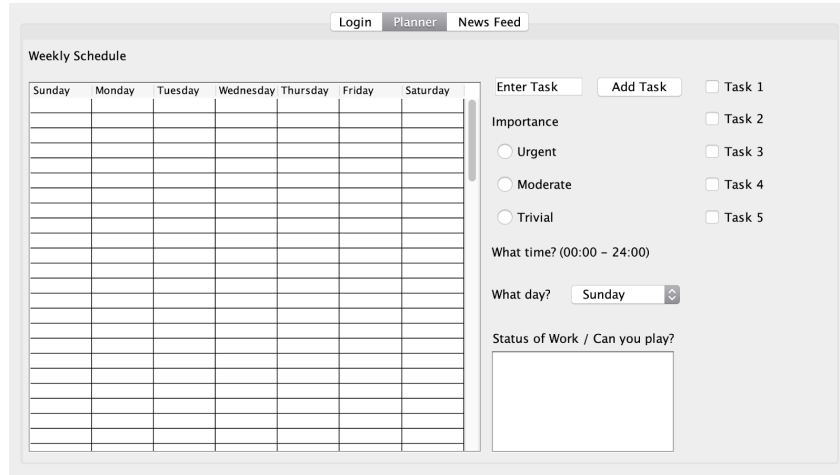


Figure 11: Final Prototype Planner Page

Input	Normal	Border	Abnormal	Extreme
Enter Task	Do Homework	Short Tasks: DHW  No task inputted	Characters that are not English: タースク	Any task inputted that is too long (20+ characters)
Task Number	Task = Task 3	No task number selected	No task number selected	No task number selected
Importance	Importance = Trivial	No importance selected	No importance selected	No importance selected



*Figure 12: Final Prototype News Feed Page*

<b>Input</b>	<b>Normal</b>	<b>Border</b>	<b>Abnormal</b>	<b>Extreme</b>
Twitter account	Twitter account information	Invalid Twitter account	Invalid Twitter account	Invalid Twitter account
League of Legends account	League of Legends account information	Invalid League of Legends account information	Invalid League of Legends account information	Invalid League of Legends account information

**Word Count: 96**