CSD3125
Assignment 3

2100948

Tan Ek Hern

1. **Introduction**

   The POD department of SIT would like to have a web-browser based software system named Talent Management System (“TMS” in short) to manage a talent pool of student assistants. The system could have the following functions:

   - Students can register their interests to be considered as student assistants with their preferences and capabilities.
   - Supervisors can submit their requests to look for student assistants by specifying the skills needed.
   - TMS will make automatic recommendations of candidate students towards supervisors’ request by matching the requirements with the students’ capabilities and interests.
   - Supervisors will review and choose the student assistants and issue the offer. The selected student assistants can choose to accept or reject the offer.
   - Upon completion of the project, supervisors will mark the completion of the project and enter the duration of student’s engagement.
   - TMS will provide visualization canvas for supervisors, e.g., status of requests, etc.
   - TMS will provide visualization canvas for students, e.g., tasks undertaken, etc.
   - TMS has a message center containing various notification messages for both supervisors and students.

2. **Requirement Analysis: User Analysis**

   Students:

   Age: 19 – 30+

   Technological Proficiency: Typically adept at using technology and at least fairly proficient in using job search type websites.

   Motivation: Varying degrees of motivation depending on the individual but usually at least moderately motivated.

   Supervisors:

   Age: 35 - 60

   Technological Proficiency: Less adept at using technology as age increases. Older supervisors are typically less proficient at navigating any kind of website.

   Motivation: Varying degrees of motivation depending on the individual but usually at least slightly motivated.

User Personas:

USER CLASS: Student

Linda Chua

University 3rd Year Student

"Delulu is the Solulu"

ABOUT

Linda is a 3rd year university student studying business analytics. As she is in her final year, she has decided to find an internship to gain experience in the working world. She is fairly confident in her skills but remains relatively stressed due to her current existing workload.

INTERESTS

Anime
Talking with friends
Bubble Tea

FEARS

Statistics
Failing a module
Being unable to find a job

IDENTIFIERS

Technically competent
Average motivation and resilience

FRUSTRATIONS

The crushing weight of societal expectations
Broken sleep schedule

STATISTICS

Resiliency: ●●●●○

Respectfulness: ●●●●○

Friendliness: ●●●●○

NEEDS

Clarity of instruction

Ease of navigation and familiarity to other similar sites

USER CLASS: Supervisor

Spot Tan

University Lecturer and Supervisor

"If you have any questions please do not hesitate to ask."

ABOUT

Professor Spot has been a university lecturer and an industry professional for several years now. He was assigned to be a supervisor for student internships recently after the previous supervisor retired.

INTERESTS

Spending time with family
Golf
Exercising

FEARS

Having too much work
Not getting a pay raise
Unruly children

IDENTIFIERS

Technically competent
Average motivation and resilience

FRUSTRATIONS

Having to work overtime
New and unfamiliar interfaces

STATISTICS

Resiliency: ●●●●○

Respectfulness: ●●●○○

Friendliness: ●●●●○

NEEDS

Clarity of instruction

Ease of navigation and familiarity to other similar sites

3. **Requirement Analysis: Task Analysis**
   TMS is effectively two websites at once. One exclusively for use by the students and the other used exclusively by the supervisors. This is because each user has vastly different goals within the same domain.

   Identified Tasks:

   - **Goal**
     Register as a student assistant
   - **User**
     Student
   - **Preconditions**
     Student has logged into the student domain of the site
   - **Subtasks**
     Go to student profile
     Select “Edit Profile”
     Enter course, preferences, and capabilities
     Click save

   - **Goal**
     Create new request
   - **User**
     Supervisor
   - **Preconditions**
     Supervisor has logged into the supervisor domain of the site
   - **Subtasks**
     Go to existing requests
     Select “Create New Request”
     Write request title and description
     Enter request preferences and required skills
     Specify any extra documentation required
     Publish request

   - **Goal**
     Search for jobs
   - **User**
     Student
   - **Preconditions**
     Student has logged into the student domain of the site
   - **Subtasks**
     Go to open requests tab
     Select desired request
     Click “Apply”
     Submit extra required documentation

- **Goal**
  Search for appropriate candidates
- **User**
  Supervisor
- **Preconditions**
  Supervisor has logged into the supervisor domain of the site
- **Subtasks**
  Go to existing requests
  Select request listing
  View list of students who have applied to fill the request
  Click “Accept Student”

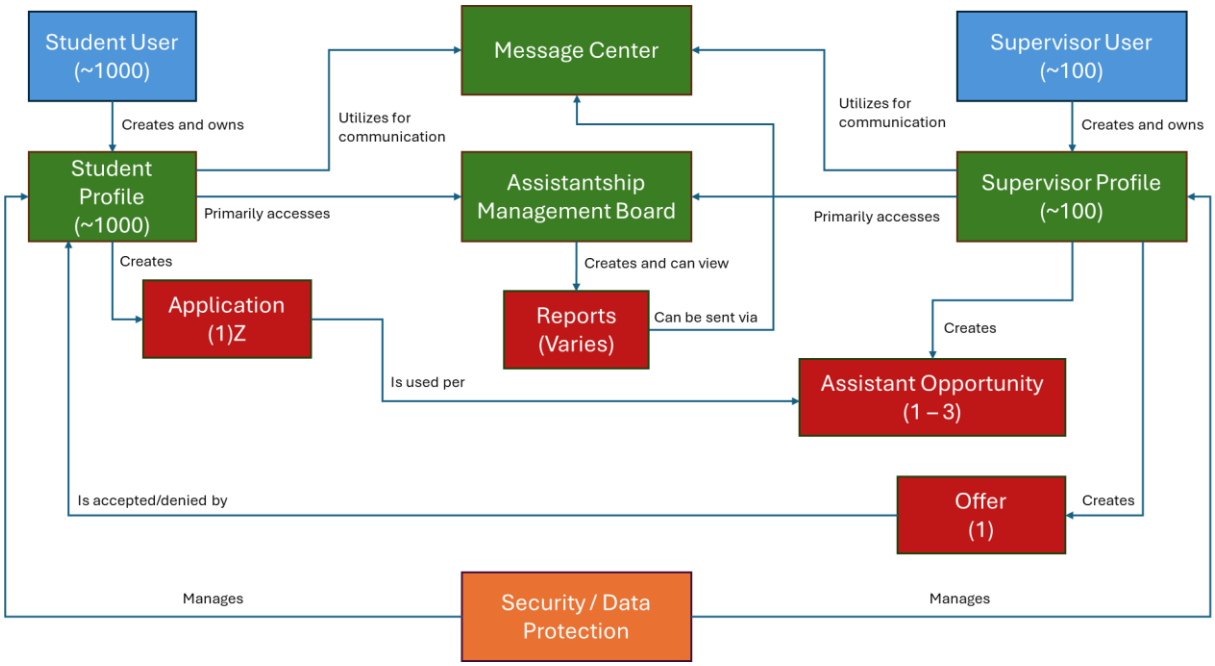
- **Goal**
  Accept job offer
- **User**
  Student
- **Preconditions**
  Student has logged into the student domain of the site
- **Subtasks**
  Go to applied jobs tab
  Select job which has been offered by the supervisor
  Accept (or Reject) the job offer

- **Goal**
  Close project
- **User**
  Supervisor
- **Preconditions**
  Project has been completed by student and Supervisor has logged into the supervisor domain of the site
- **Subtasks**
  Go to ongoing requests
  Select request listing
  Click “Close Project”
  Input feedback for student

- **Goal**
  View Notifications
- **User**
  Student, Supervisor
- **Preconditions**
  User has logged into the student domain of the site

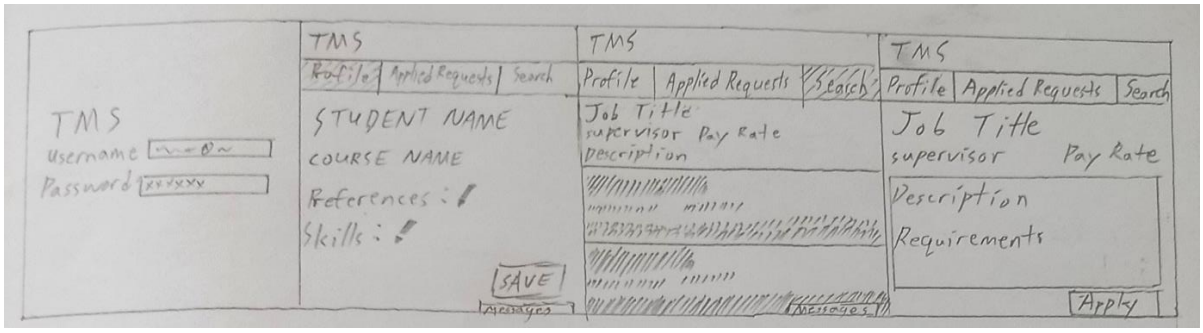
- **Subtasks**
  Click on messages tab at the bottom right of the website
  Select relevant request tab
  View notifications regarding said request
  Type out response message
  Send message

4. **Requirement Analysis: Domain Analysis**
   The domain analysis for TMS is as follows:



The two user classes of TMS are essentially using the site as a middleman to facilitate communication between the two parties.

5. **Storyboards**
   Student Side



Student logs into TMS website

Student fills in preferences and skills

Student searches for requests filtered based on preference and skills

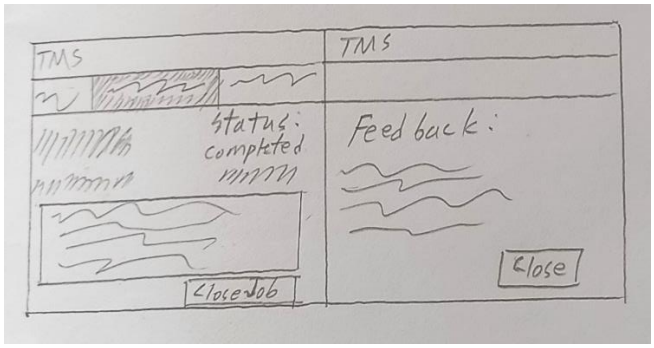
Student reads request description and requirements and applies for the job

Student receives notification that an offer has been received

Student goes to applied jobs tab to view approved job

Student confirms acceptance of job offer

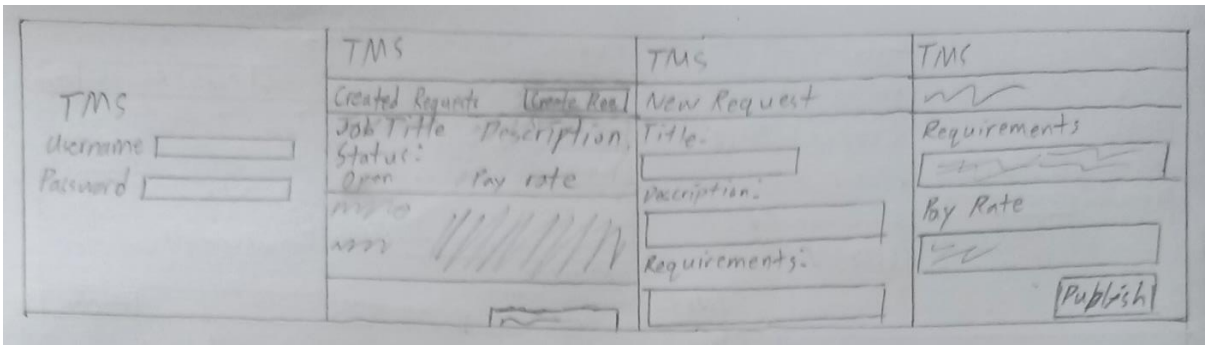
Student works on project in collaboration with supervisor



Upon job completion, the job status is set to completed

Student can read feedback from supervisor before closing the job

Supervisor Side:

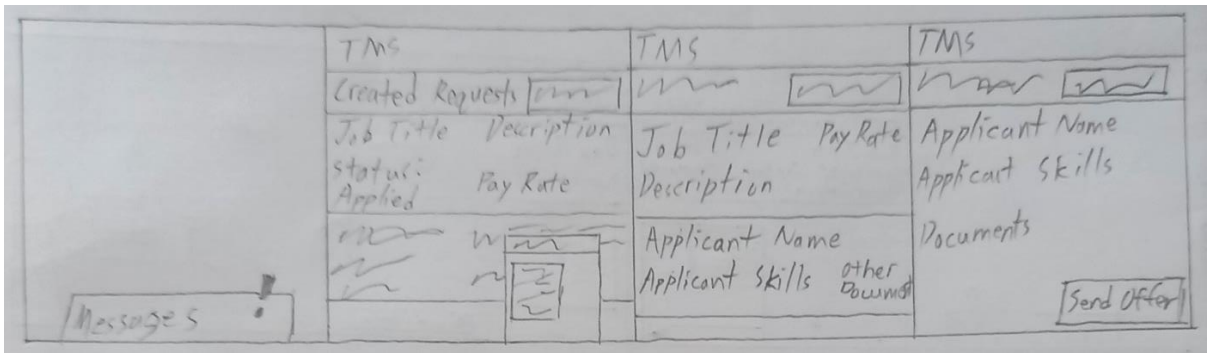


Supervisor logs into TMS

Supervisor clicks on Create Request button to create a new request

Supervisor fills in the job title and details

Once the job details are filled in, the Supervisor clicks Publish

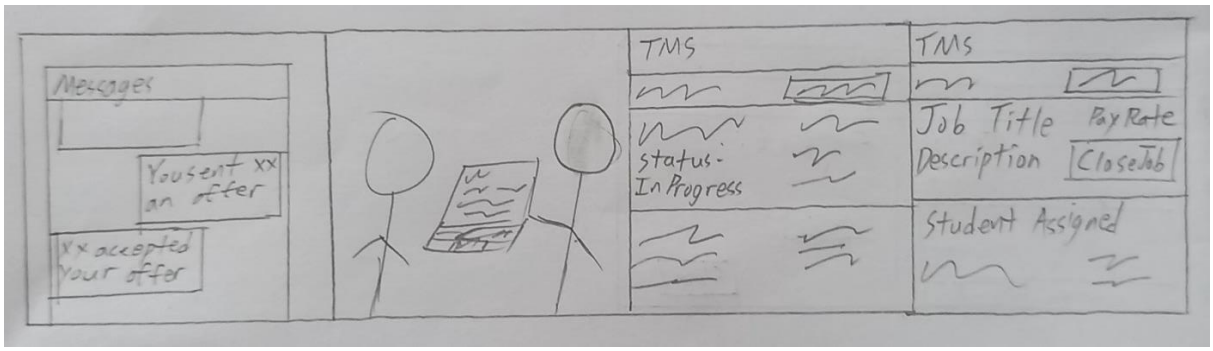


Supervisor receives a notification that a student has applied

Supervisor goes to created requests and opens applied job listing

Supervisor views list of applicants

Supervisor selects student profile and sends offer to chosen student

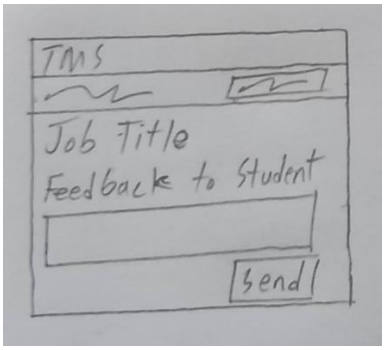


Supervisor receives a notification that the student has accepted the offer

Supervisor works with student to complete the project

Upon project completion, the supervisor will select the job in progress

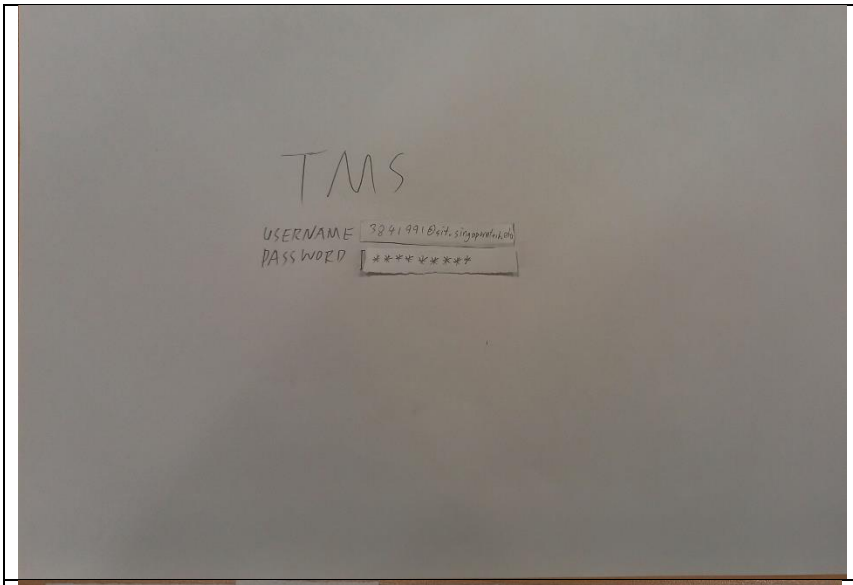
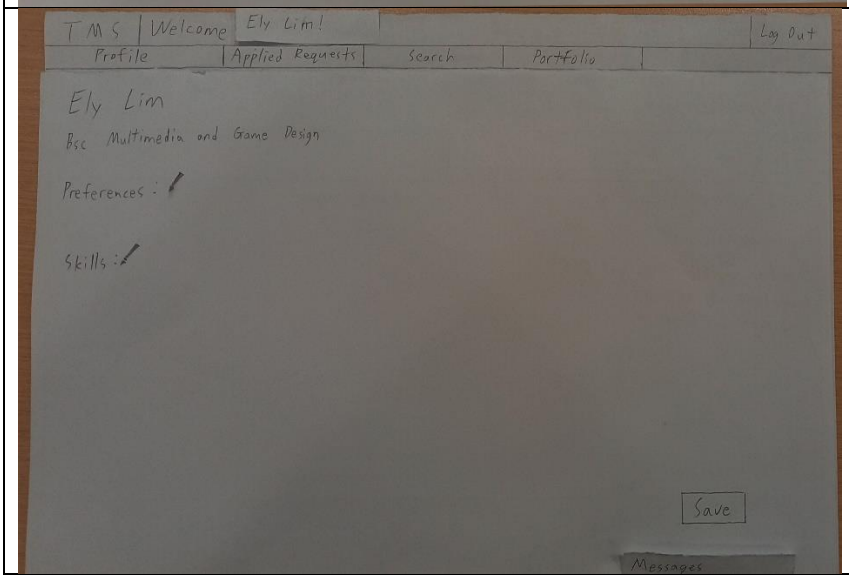
Supervisor closes the job to finish the project

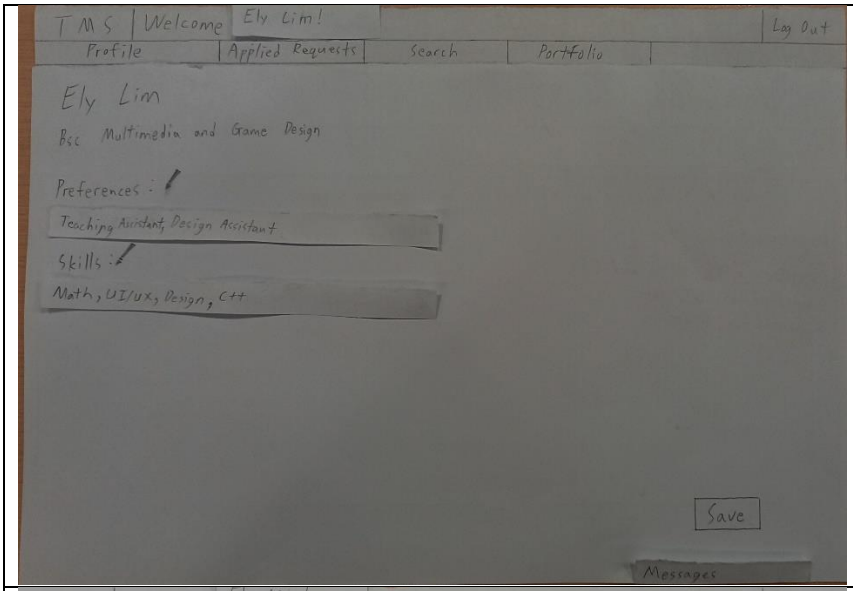
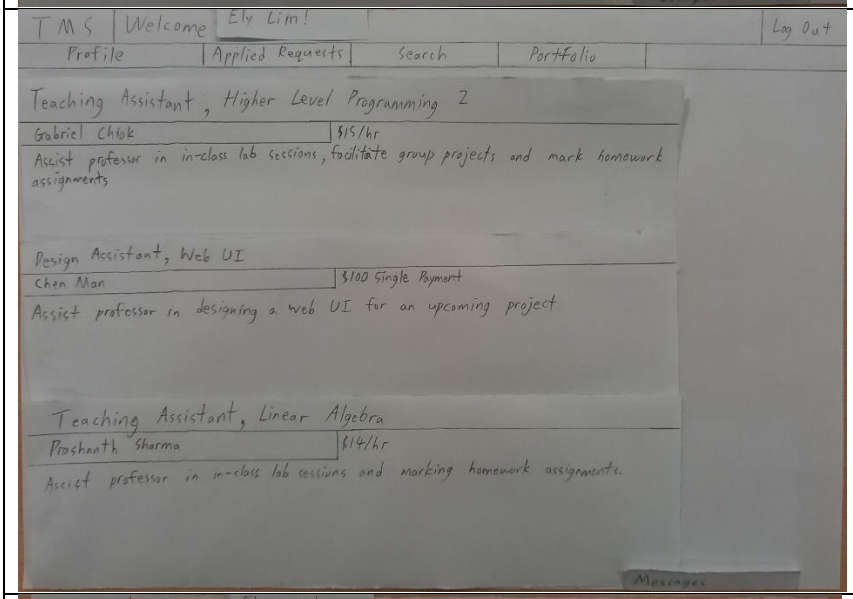
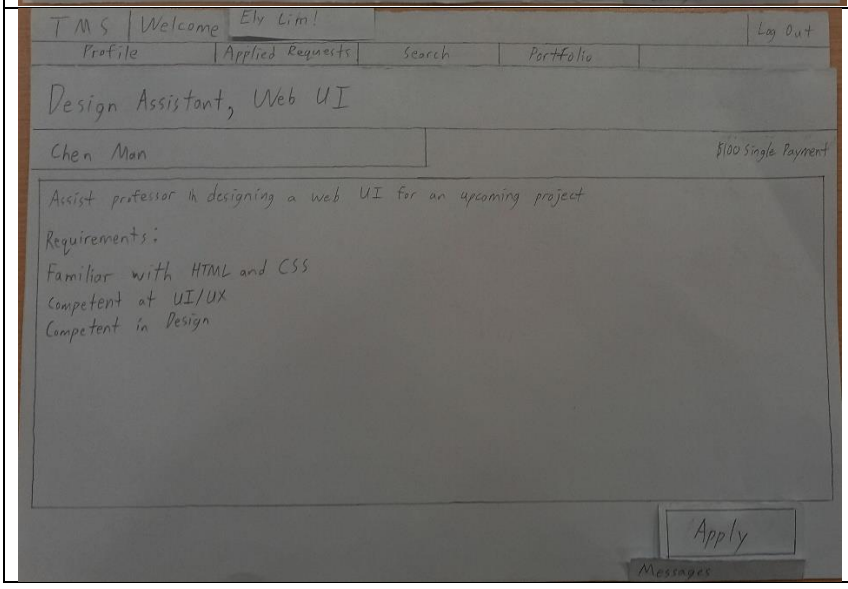


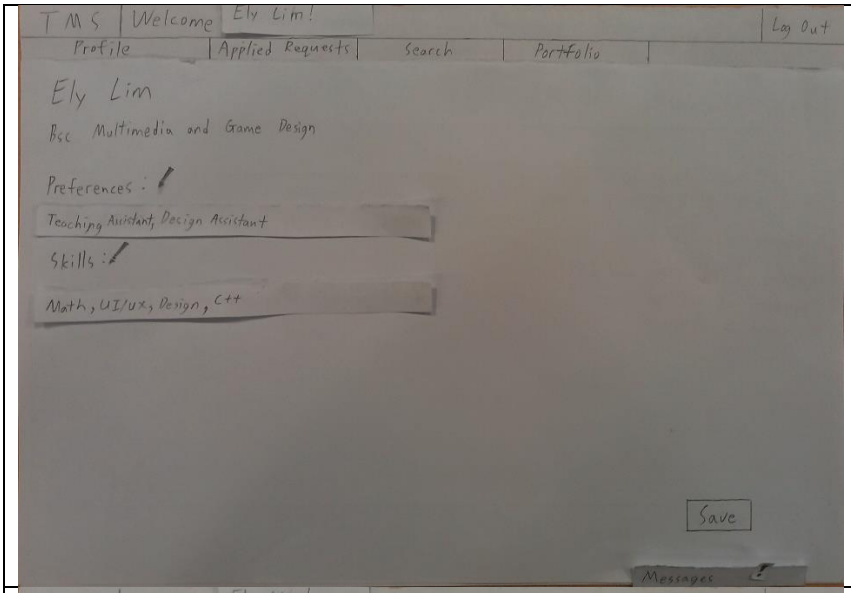
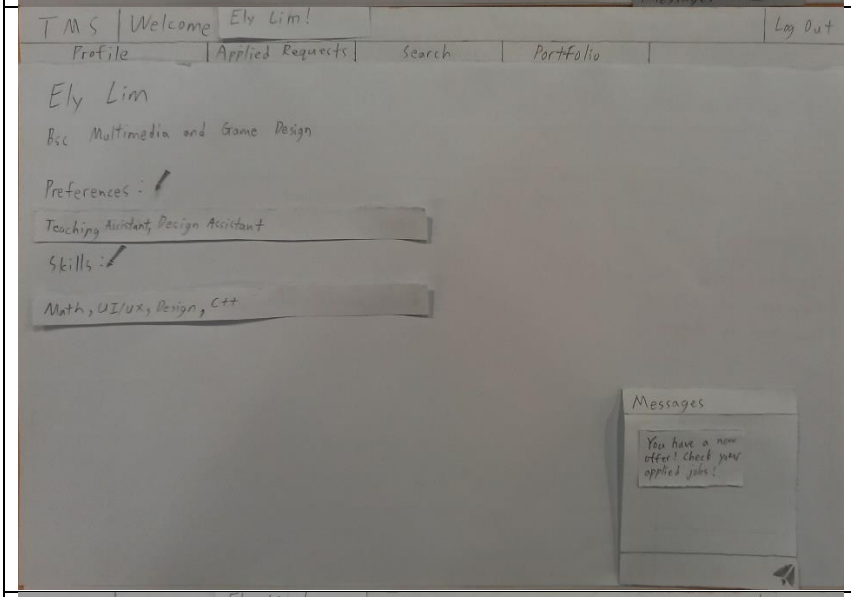
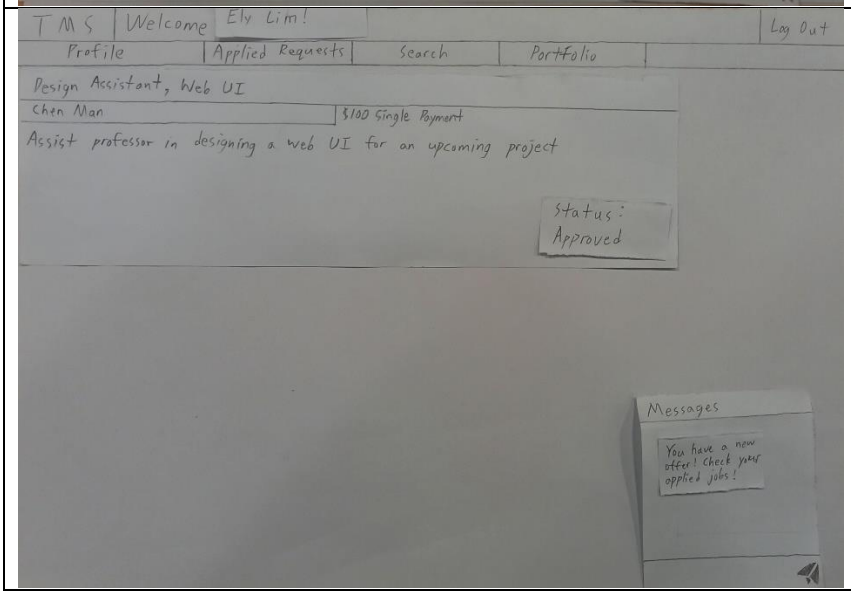
Supervisor issues feedback to the student upon project completion

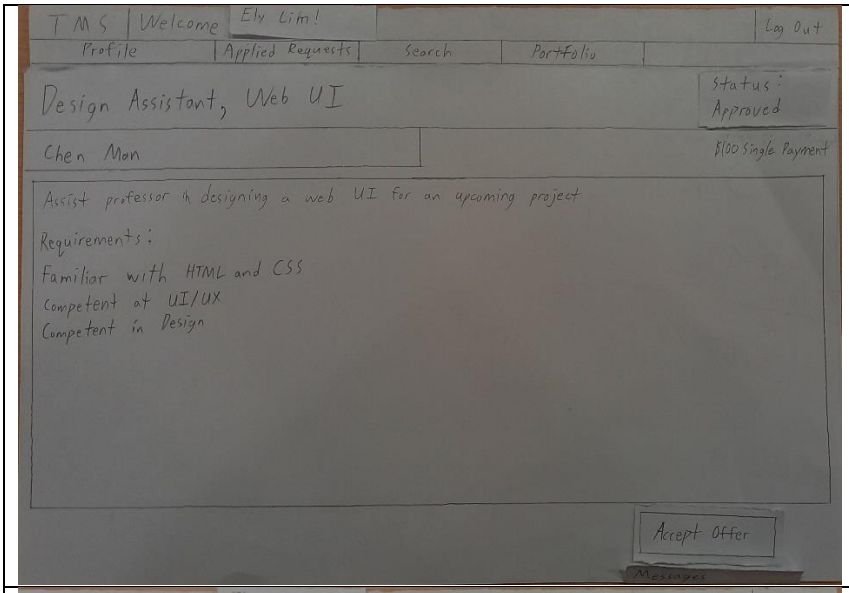
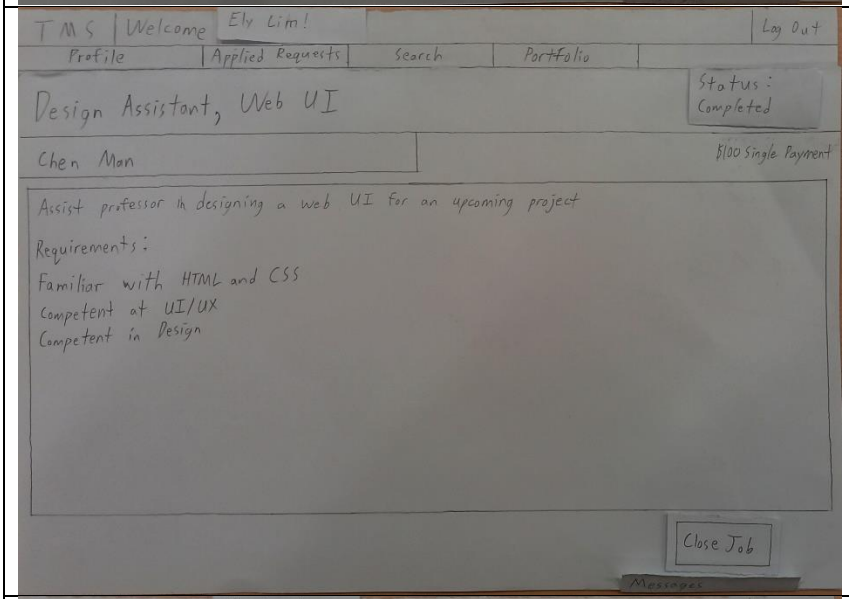
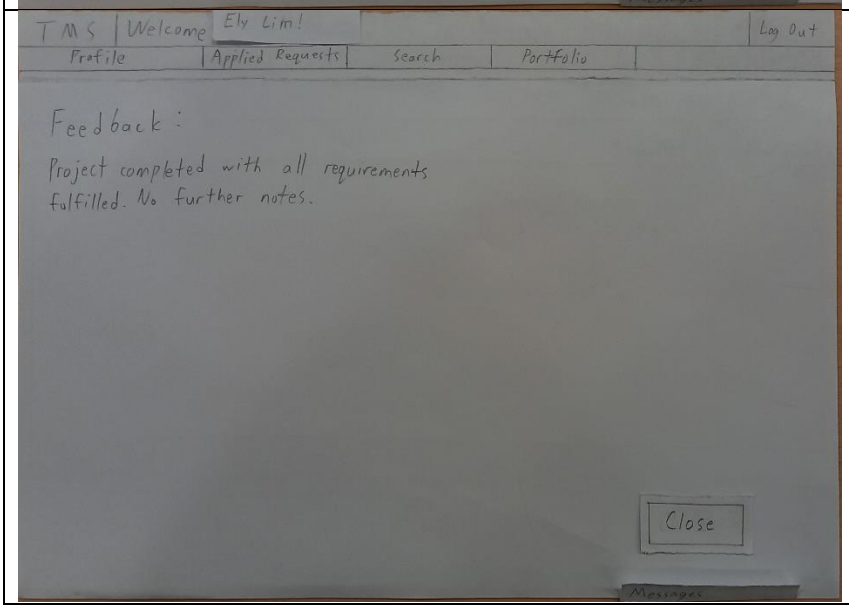
6. Paper Prototypes

Student side:

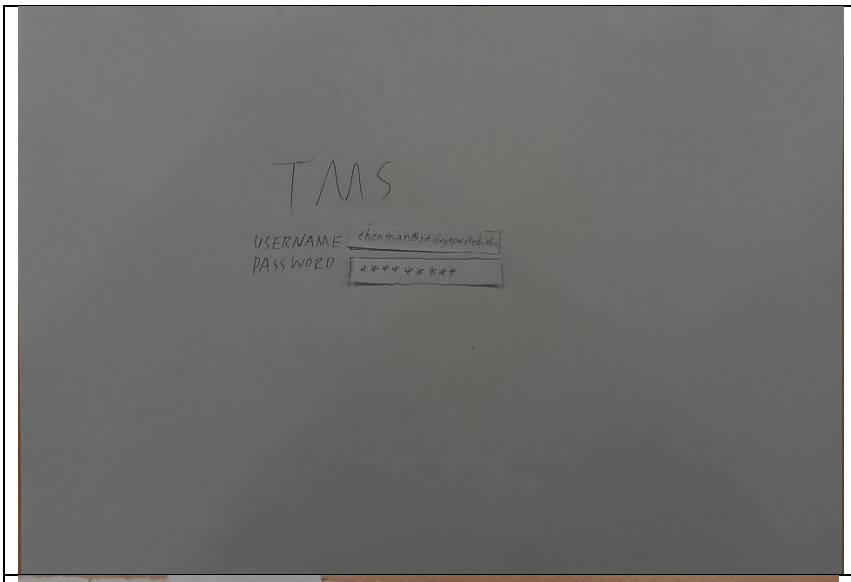
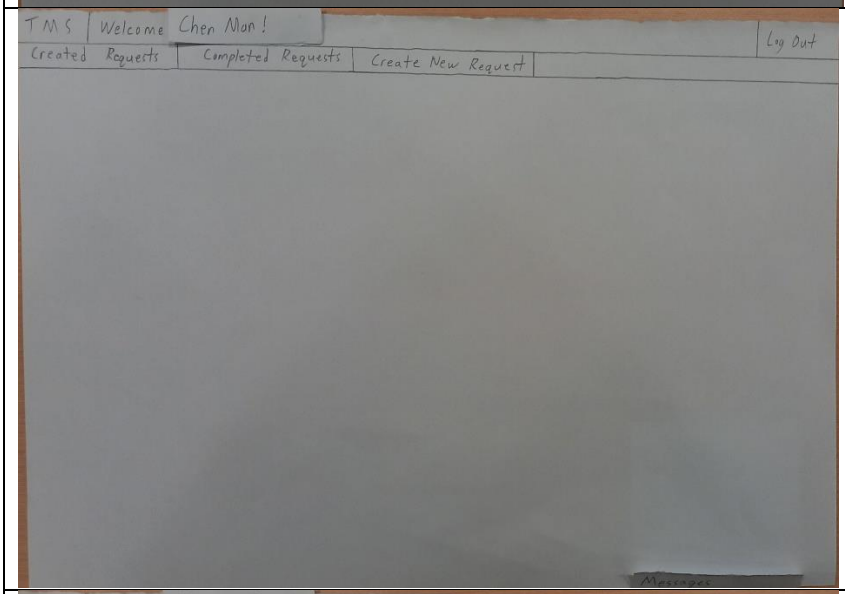
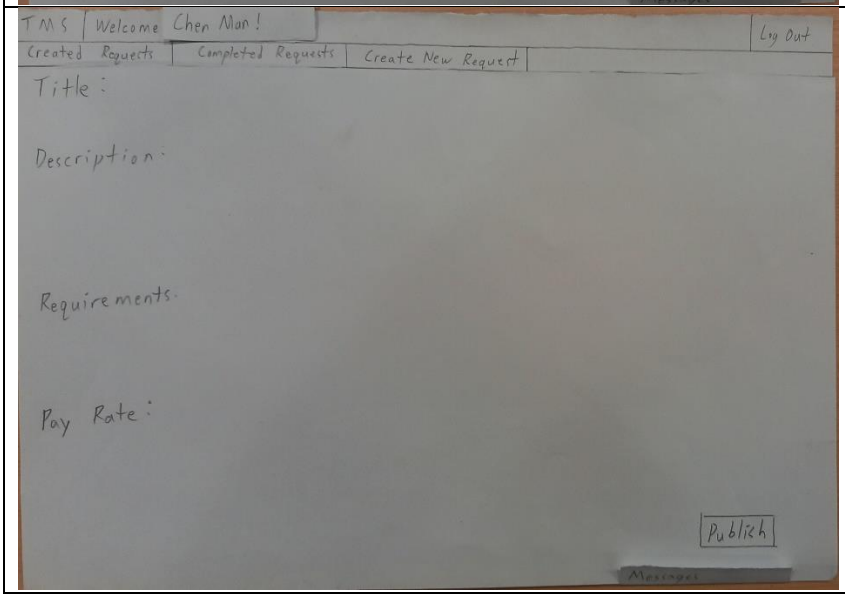
	Universal Login Page for all users
	On first logging in, the student is required to set up their preferences and skills

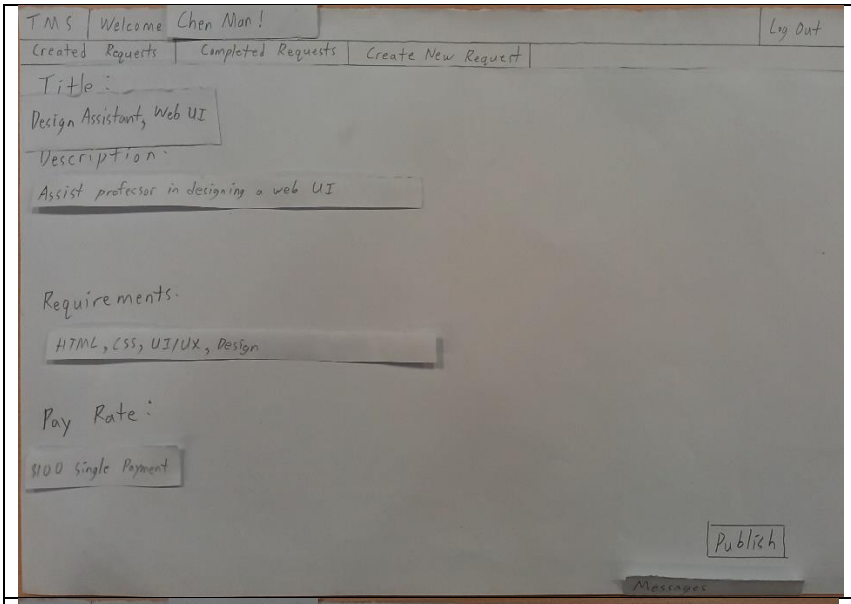
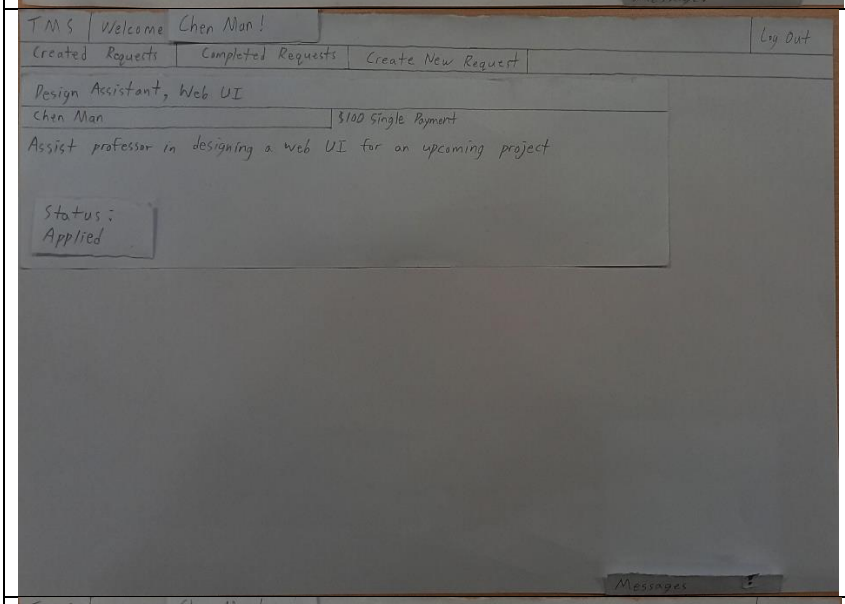
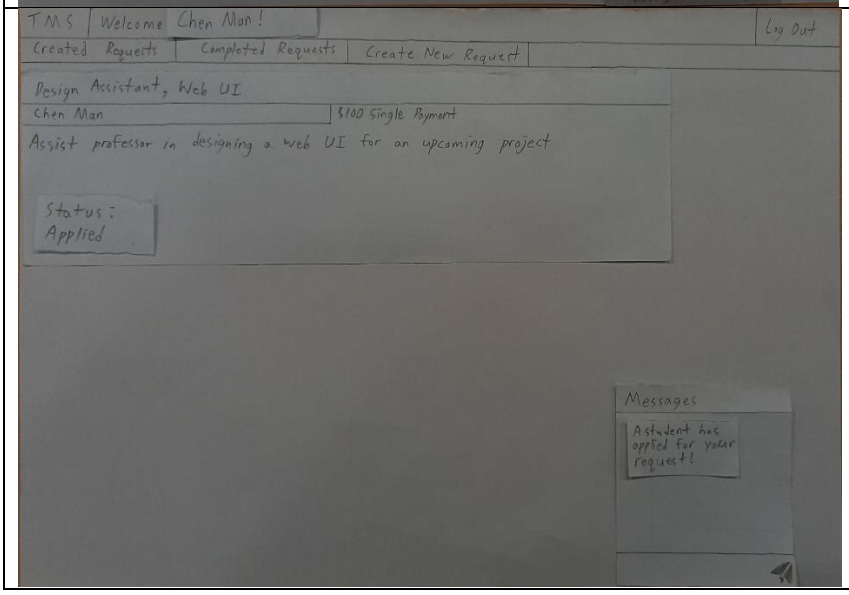
	Once preferences and skills are entered, the student clicks save to save their settings
	Potential request listings will be available based on the student's skills and preferences
	Student selects a listing and views the details before applying

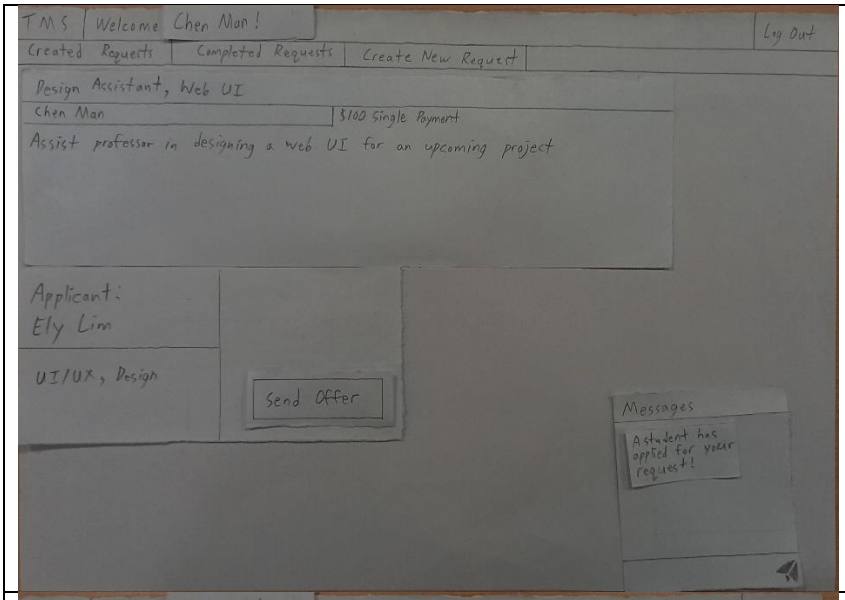
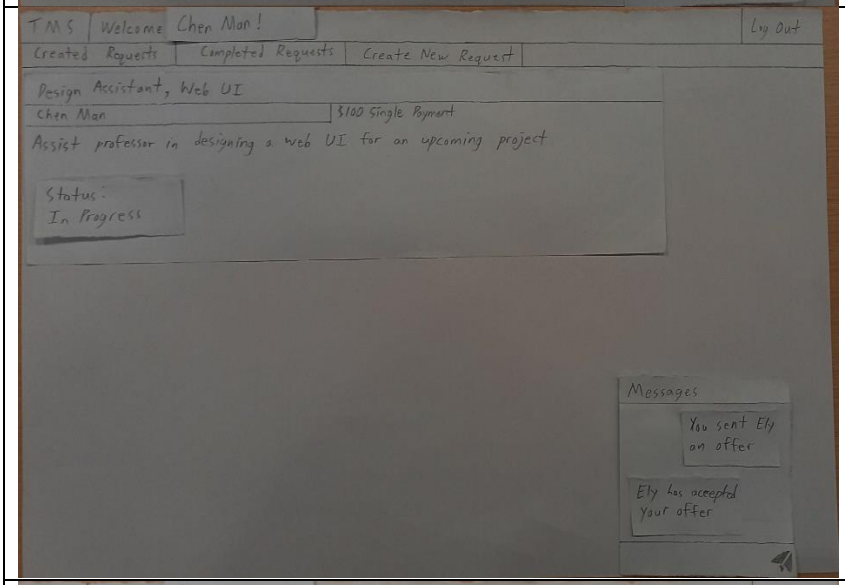
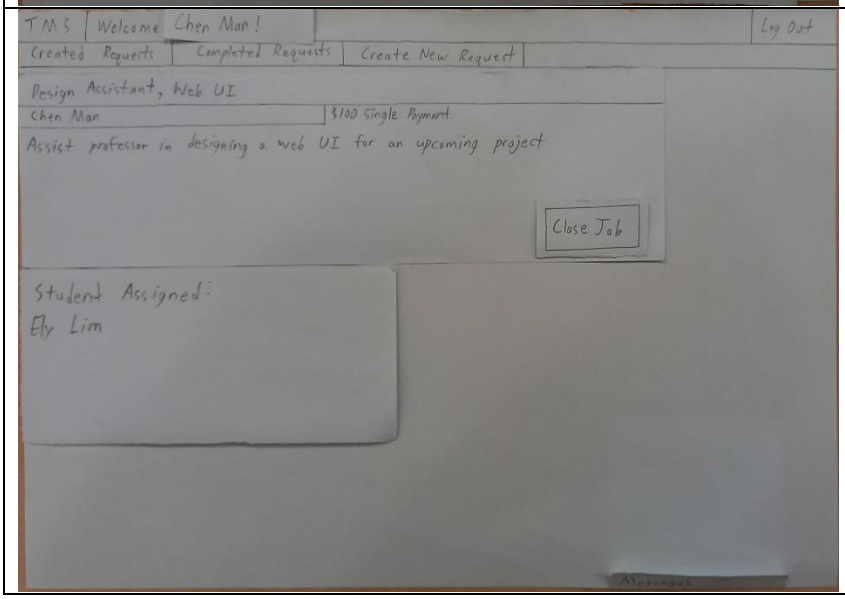
	Student receives a notification via the messaging system
	Clicking on the message bar opens up the tab to allow the student to view messages
	Listing which student has applied to will be updated to “Approved” when the supervisor sends an offer.

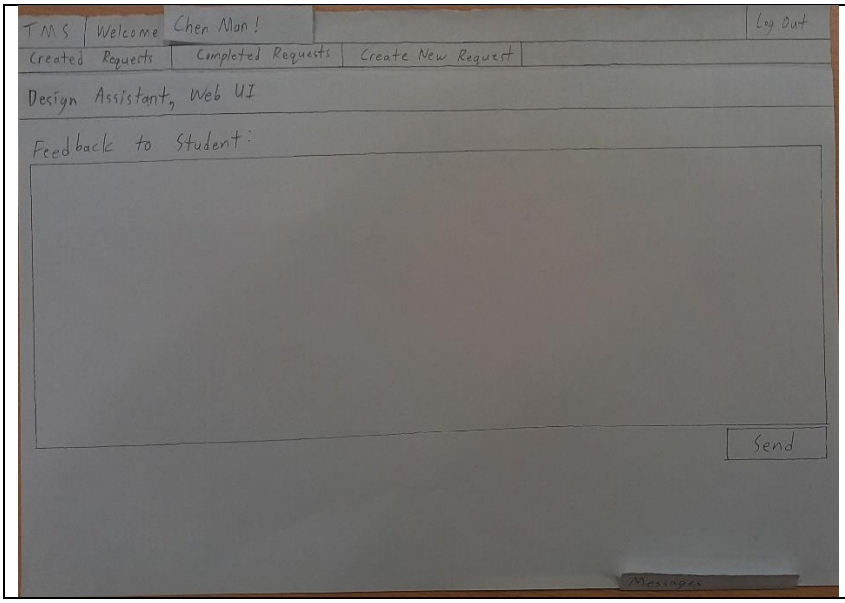
	Student can choose to accept the offer to start the job
	When job has been completed, the job listing will be updated
	Student will receive feedback for their completed job, after which their completed job will be added to their portfolio

Supervisor Side:

	Universal login page for all users
	Supervisor initially starts with no requests created
	Supervisor creates a new request by clicking on “Create New Request” button

	Supervisor fills in the request details including requirements and expected job scope before publishing the job
	When a student applies to the job, the supervisor receives a notification via the messaging system
	The published job listing status is also updated from “Open” to “Applied”

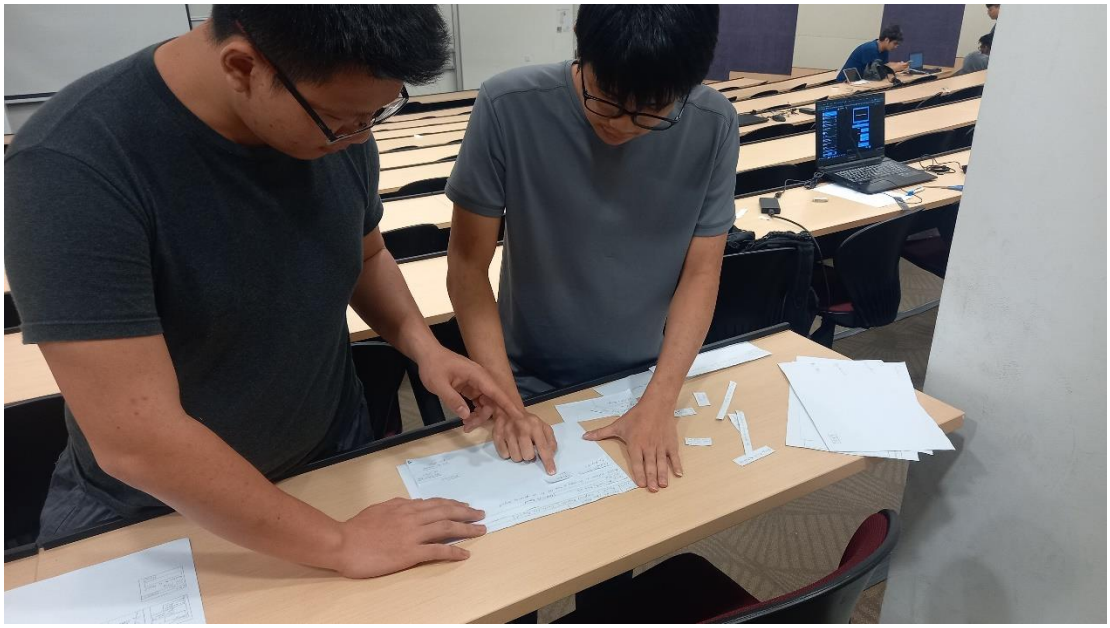
	Opening the request listing shows the list of students who have applied to fulfil the request. The supervisor can decide which student they want to sent the offer to.
	Once the offer has been accepted, the supervisor will be notified via messaging system once more. The job listing will be updated to “In Progress”
	Once the work has been done to a satisfactory degree, the supervisor can open the request listing and select the “Close Job” button to conclude the work

	The supervisor may input feedback for the student as a summary of their work experience.

7. **Prototype Testing**

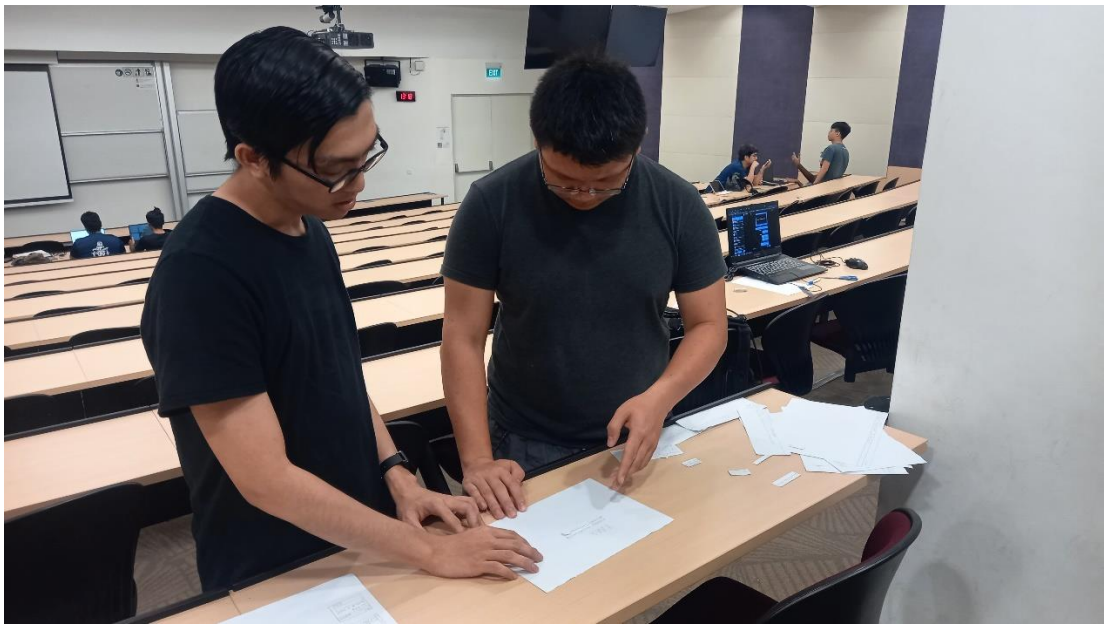
   Student side testing:

   Classmates testing the student side of TMS noted that the simple and minimal layout of the site made navigation fairly simple and intuitive.



   Some feedback that was noted was that students should have an option to cancel their application and reject a job offer in case of any unforeseen circumstances. Testers also noted that being able to distinguish between system messages and messages sent by their respective supervisors would be beneficial.

Supervisor Side:
Classmates testing the supervisor side of TMS also felt that the layout of the site was easy to navigate and intuitive.



Feedback of note was that the supervisor would need separate message tabs for the multiple students that they might potentially be overseeing. The ability to close a request listing before any student applied for it was also highlighted as a feature that would be good to have.

8. Conclusion

Adjustments from the current paper prototypes are as follows:
Allow students to cancel their application or reject an offer with a valid reason given.
Allow supervisors to cancel their published requests
Create a more robust messaging system that allows both users to better distinguish between different channels. (Refer to facebook messenger or Instagram messenger for design changes)