

**Computer Science Department**

**420-436-VA: System Development**

**Project title: Internship Management System**

**Deliverable #3**

**Date: June 21<sup>st</sup>, 2022**

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**Team name: Red Team**

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## Project Title: Internship Management System

### Work submitted by:

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Date: 21/06/2022

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Signature: *Jianquan Liang*

Date: 21/06/2022

- Our project is not using any ideas or codes from previous courses.

## Organization:

**Vanier College**

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[Phone:](#) [\(514\) 744-7500](tel:(514)744-7500)

## Client contact name:

- **Alex Steinheuser Vilvert:** Entrepreneur, Computer Science Professor & Mentor.
- **Tsifoina Andriamanantena:** Pedagogical Counsellor, Continuing Education, Vanier College.
- **Tannia Ditchburn:** Pedagogical Counsellor, Vanier College.

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## Executive overview

Our project is a web application that is indented to help Vanier College staff and students throughout the internship process. Our application will bring the students, the companies, and the internship coordinator together in one platform, in which each will be able to perform some operations.

We had several meetings with our client from which we determined the needs of our client and hence the scope of our project. During our work on deliverable3 we had two meetings with our client. A meeting was conducted with a mentor in the internship program at Vanier, and another was with a pedagogical counsellor. After collecting the data from the client, we analyzed the data and filtered what is relevant to the scope of our project. Then we prepared for the design steps.

After the data analysis was done, we started with the design process. We created the flowchart which we divided into three main parts: a part for the student, a part for the staff member, and a part for the company. Based on the flowchart, we worked on the design of the main use case diagrams, UML diagrams, from which we created the use case documents covering the use cases and sub-cases in our design. A class diagram for our project was created showing our main classes with their associations, attributes, and methods.

Using scrum method through regular group meetings, data analysis and progressing in the project, we came to a more refined image of our project. Hence, the project plan has been updated during our work in this deliverable, and we updated our work breakdown structure, WBS, and Gantt chart accordingly.

In conclusion, we believe our application would be a good addition to Vanier Internship system. It will facilitate the searching process for the interns, as well as for employers to find matching potential students for their internship openings.

## Summary Description of the client

### Description of the business domain

At the college (cegep)/ university level, in some programs, students are required to do internships around the end of the program to gain some work experience.

The internship consultant, at the college, is the bridge between the company and the student, providing information on the internship company, tracking the student's internship, providing documents that need to be filled out during the internship, and providing the student's academic record. The internship consultant has company information that cooperates with the school, and he/she will be responsible for verifying the authenticity of these information.

Students (interns) prepare a portfolio to present themselves to potential employers. They look for college services to secure their internships. Companies can communicate and partner with colleges to list their internship opportunities or job vacancies. They can learn more about candidate students from their portfolios (projects, transcript, ...etc.) or from their applications.

### Description of the business environment

Our client is Vanier College. Vanier College is one of the most reputable colleges in Montreal. The college is keen on preparing its students to integrate into the job market. A very important way in doing so is helping its students find internships which prepare them for their future careers.

The system that Vanier College uses to manage its internships is a manual system. They use Excel sheets to organize and store data. For instance, a spreadsheet for available internship opportunities, a spreadsheet of eligible students, and another one for students linked to companies they are accepted in. Email is the communication tool used throughout the process.

Students have 6 months upon completion of their courses to find and complete their stage of 9 WEEKS=300 hours, 3 days per week.

Vanier college website provides a web page in which companies can offer their job opportunities as well as internship openings. Vanier students can see a list of job postings; however, they cannot communicate with the employer using their Vanier profile.

The student must have two supervisors (a mentor and an internship coordinator) who follow up his progress via biweekly graded reports.

## **Client Computer Science Skills**

The client for our project is Vanier college personnel involved in the internship process. Our web application will be also used by the college students as well as by companies, that are partnered with the college.

Our client has basic computer skills and is familiar with OMNIVOX and MS Office. The users (companies and college students/interns) vary in their computer skills from basic to advanced.

Our web application is going to be easy to use. Users need basic computer skills and being familiar with using the internet. An online detailed documentation and FAQ will be provided to assist the users.

## Business problem

The system that Vanier College currently uses to manage its internships has some problems. They use a manual system in which Excel sheets are used to organize and store data. For instance, a spreadsheet for available internship opportunities, a spreadsheet for eligible students, and another one for students linked to companies in which they were accepted. In this case, data is entered manually on excel sheets.

The tool of communication used by students, college counselors and mentors, and companies, throughout the process, is personal e-mail and MIO on OMNIVOX platform.

Checking the college website, we find that it provides a web page in which companies can offer their job opportunities as well as internship openings. However, students cannot apply for companies through the college website using their Vanier account.

There is not a platform that brings them all together the students with all their data, the supervisors, and the companies.

Hence, several problems arise in the process:

- It is time consuming to use Excel sheets for storing data (like making lists of students looking for internships).
- It is hard for students to find internships through the college services and to apply for companies through the college website using their Vanier account.
- It is hard for the supervisors to manage the internships for the students, and the internships' offers.
- It is hard for companies that are offering internships to look for candidates from the college students. As they don't have access to prospective students that are looking for internships and their portfolios/projects.

That makes the whole process of applying for an internship harder to manage for the students, the counselors, and the companies. Our project that we are working on is to resolve these issues and to facilitate the process, at Vanier College, for all the three types of users.



## Our solution to the problem

Our application will bring the students, the companies, and the internship coordinator together in one platform, in which each will be able to perform some operations. That is depicted below in figure 1. What each member can do on our web site is mentioned briefly in the following sections.

As for the **student**:

Students can make a profile in which they can add their personal information. They can make a portfolio in which they can upload their resumes, projects, and reference letters, so that they can present themselves. Students will be able to see the internships offered by the companies and apply.

As for the **companies**:

Partnered companies with Vanier, will have an account (login credentials). Responsible people from the companies will be able to add their internship posts (not jobs) including some information about the company, internship details, contact information, etc. Employers will have access to see students' portfolios. If they like a student portfolio they will be able to contact that student.

As for the **staff member**:

A Staff member from Vanier, could be the internship coordinator or the pedagogical counsellor, or both. Staff members will be able to see students' profiles, remove students if need be. They will add companies and will be able to see the company postings. A staff member will be able to modify/remove a post in coordination with the company responsible for it.

Now, with our application, the aforementioned problems will be improved significantly.

- Less time consuming.
- The data will not be centralized on one machine with the use of Database on Vanier's servers, which ensures persistency, integrity, and durability of the data.
- It will be easier for students to present themselves.

- It will be easier for students to find internships and to apply directly through our web application using their portfolios.
- Companies will be able to check students' portfolios and find students/interns matching their requirements.

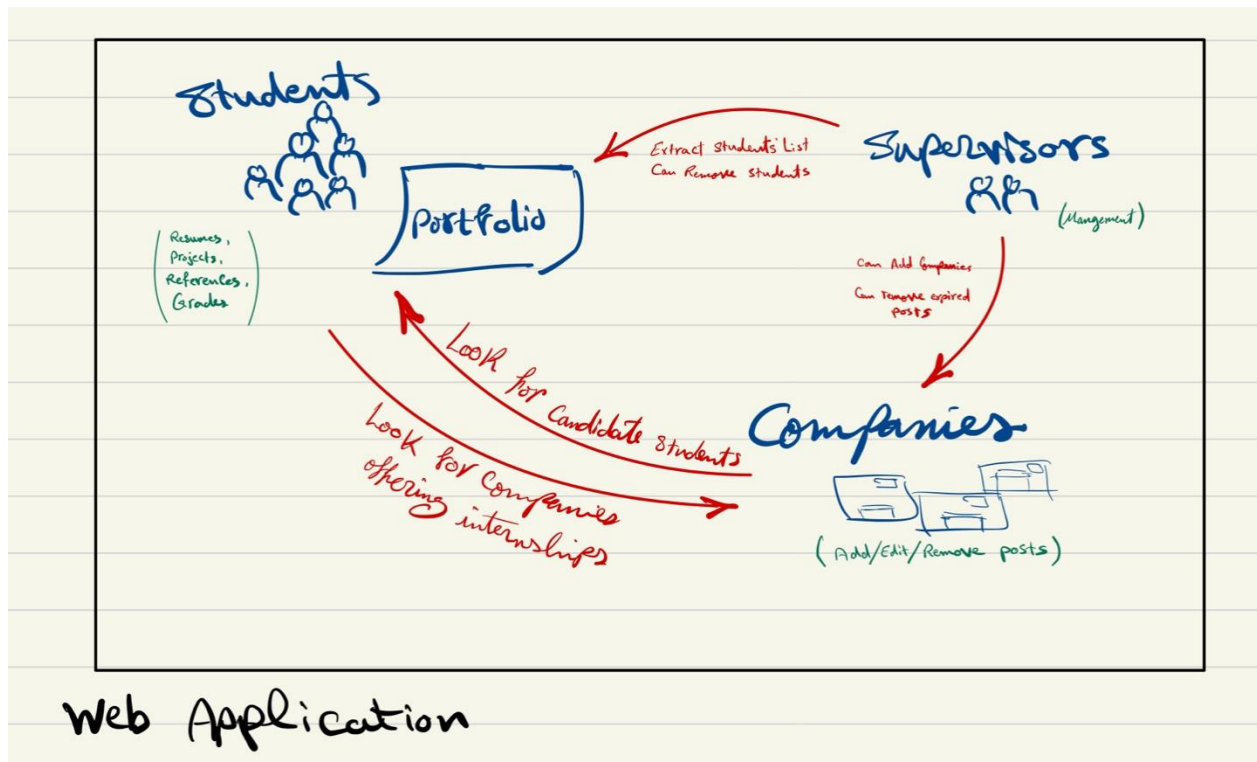


Figure 1: Information Diagram of our solution

## Narrative description of the present information system

After understanding the requirements, we intuitively display the three-party interaction process of the internship system through flowcharts, use case diagrams, and class diagrams. And plan for future expansion of the system.

The internship system mainly provides help for the college's internship management. The college's internship counselor is the administrator of the entire system, and he will have full authority over the system.

Students who need an internship must first register a student account, fill in their personal information, and submit it to the system. The internship counselor can review these internship students. Intern information will appear in the intern list.

The internship counselor will register the companies that cooperate with the college, and then the company will post the internship position information. Internship advisors have the authority to manage this internship information. However, once the student information and internship position information are ready and sent to the database, the system can be ready to use and offer services.

Students view the list of internship posts, select an internship position, and send an application to the company. After the company has reviewed the student information, the desired student can be selected and contacted privately by the company to confirm the acceptance of their internship application.

In this process, counselors supervise the whole process, which is convenient for students and enterprises to solve problems in a short time.

## Meeting with the client

We met with Tsifoïna, the college's internship counselor, to understand our needs for developing an internship system. We learned from Tsifoïna more about the internship system at Vanier and the problems they may encounter throughout the process. We divided these into two parts, one part is the functions implemented by the first version of our system, focusing on the implementation of the main processes, functional requirements, of the system. The second part contains the non-functional requirements that are to be added in the next versions as upgrades to our system.

1. The internship system is to build a platform that will bring the internship coordinators, intern students and the companies together. Its main functions are:

- a. The internship coordinator manages the entire system and has global control authority over the system.
- b. The internship coordinator registers an account for the cooperative company and manages the internship positions released by the company.
- c. The internship coordinator manages the student account, has the authority to review the student's internship qualifications, and can remove the student's account.
- d. Internship positions posted by company management. View all internship students, select internship students, and contact students that meet their requirements. (Note: The post information must have internship tasks and indicate skill requirements.)
- e. Students manage personal information, resumes, projects, and references. View internship positions and send internship applications to companies.

2. Internship system extension: (implemented in later versions)

- a. The internship coordinator needs to communicate with the company to adjust the time provided by the internship position. Consider adding a time period for the internship offer when entering internship information.
- b. The pedagogical counselor would be able to communicate with partnered companies that used to be active on the system (post offers / contact students) and then became inactive (no postings for a long period of time) automatically through our platform.

c. The internship coordinator lags behind in understanding the internship situation of the intern students and hopes to track the whole process of the intern students through our platform. From sending the job application until the end of the internship.

d. The company wants to add some restrictions on the application of internship positions, so as not to allow a large number of students to apply. (The number of applicants for the position, the skills required for the position are limited, and the preliminary screening of the position application is carried out.)

e. Students applying for internship positions should know if there are some skills they need to learn to be accepted for the internship position.

## **The questionnaire**

One day prior to our meeting, we prepared a list of questions that we discussed during our group meeting to filter out the most relevant to the scope of our project.

Our client, Tsifoina: Vanier pedagogical Counselor started the questionnaire by presenting herself. Then she invited us to also present ourselves.

The team leader, Abram, described briefly the scope of our project and its functional requirements.

## **Questions & Answers**

**Q1.** Who are the people involved in the internship process? What is the role of the counselor in the internship process?

**A1.** We have an internship coordinator but potentially also supervisors who supervise their groups of students throughout the process. They are calling the supervisor on stage to make sure everything is OK, and then wrap it up with the grade. There are three parties: the College, the intern and the supervisor on stage itself. From a liability perspective, we want to make sure that the partners that we are using are viable and that they are good partnerships.

**Q2.** Are Students exclusively supervised by their counselor advisor?

**A2.** The supervisors perform evaluations at the end of the internship, so they have to be reporting to somebody. We are trying to improve the student experience. We'd like to enforce those partnerships and make it almost like an ongoing cycle of partnerships. You get students this year. That goes to these random companies. And then we're adding them to the list, but almost a roster where over time you know that company might expect you know five students from Vanier or 10 students here. Our goal is to establish proper partnerships over time. We were also thinking of potentially an internship office.

**Q3.** What should a student have to be eligible to register?

**A3.** The passing score for all prerequisites is 60% or higher. This is something they do before they even apply for internships. Ideally, we know students who are at that point where they're in Block 5 but need to repeat some courses. They should redo those courses before starting their internship.

**Q4.** We will give access to the counselor (add/remove companies, remove students, have a list of students). Does anyone else need to have access?

You can consider that the internship coordinator is the one that coordinates the internship. So I'm here and I'm in the background. We are improving the process, but it is the internship coordinator who makes sure that the grades are submitted to the students. The documentation for example is a reflection log that needs to be written, so all that needs to be graded and submitted as an additional piece. Now we have so many students to coordinate and we are moving in a direction kind of like they do it in the regular sector which is they have a coordinator but then they have multiple teachers as supervisors. But the teachers are the ones submitting the grades OK, but for your purposes I think it's easier if you consider the internship coordinator that oversee the student. I want to be careful to use the term job board because we don't want to be offering jobs and we must make that distinction. We're going to vet these companies, but in the context of what we have, we don't want students to go on this job board. Find a company that's offering a job, and then go and leave the program. When this happens, they get into a holding pattern of potential failure because the parameters around a job interview are very different from an internship. Or they might find a full-time job and then don't complete their program. It will be just only

internship offers, strictly internships, of course with the vetting process that we potentially could put in place.

**Q5.** How can a student apply to a particular company? By email (HR)? Whom to contact?

**A5.** Currently, the student has to contact and make initial contact with the company so it can be a cold call or an e-mail. Once the discussion is opened and the company says OK, you'll be hired as an intern, the company has to complete an information sheet that outlines the information on the student; the information on the company, and also a list of tasks that the student will be performing in the workplace. Primarily, we want the students to be doing something that is in line with their program. It might seem obvious, but working at the help desk fixing printers isn't aligned with their program at all, so there's a need to make sure it is aligned to their program. In posting an internship offer, a company, for example, would have to outline exactly what they would expect the student to do just like in a normal job posting. The internship coordinator must then approve the internship. At first, the internship coordinator sent a letter of approval to the company thanking them for employing the student. Our concern is, however, that we want something contractual. So what we've changed this year is it's become a contract to say thank you for taking on this student this inter and these are: the tasks you've outlined and the dates over which they'll do their internship. I think when putting this together, it needs to be clear that it's an internship. It's a contractual agreement and it needs to stipulate the tasks that the student will be taking care of.

**Q6.** What info can be shared about the counselor? What info to hide? Privacy to respect?

**A6.** That shouldn't be a problem. The Vanier College representatives should be reachable to some extent. For this, we will use our Vanier e-mail addresses.

**Q7.** What fields do you (as Vanier) need to add a new company?

**A7.** Consider experimenting with some posts you see again on LinkedIn, for instance, but in general:

- the company name

- a brief description of what the company does
- tasks that the students would perform
- requirements in terms of knowledge that the student has to have.

Those are the foundational aspects that should be there from a company's perspective. Through your platform in particular, I do agree if it can be the minimal amount of work beforehand so they can just at least contact the company. That's really interesting, and I would encourage you to do some research, maybe on what the process is like on something like LinkedIn on Indeed you know those are job posts, not internship posts, to get the required information of companies.

**Q6.** You mentioned that sometimes it seems as if the company is being bombarded with applications from students. Therefore, would it make more sense if the company were responsible for selecting the students?

**A6.** The main point that I'm trying to bring up is we don't want to have 50 companies and students starting to kind of send an e-mail and BCC all of the companies. Then it is just a bunch of students doing that. That is what we want to avoid, and I think we have been pretty good with tailoring with the student. Internships help you know the sending of requests or emails, or things like that. It would be useful to have an internal application that would allow students to apply to companies to do their coop following rounds of admissions. So it is like first round these companies and then the students apply, first round is closed. You get a response and then they actually rank the students and so on. It would be like better to give to the admin or the internship coordinator, the privilege to hide or to make visible certain offers accordingly to the time when the eligible students will apply.

**Q7.** What's the average number of supervised students per counselor?

**A7.** I oversee the entire program. If I have 5 cohorts running simultaneously, I oversee the students, but again, I'm stepping back from the internship coordinator who has direct contact with the students.

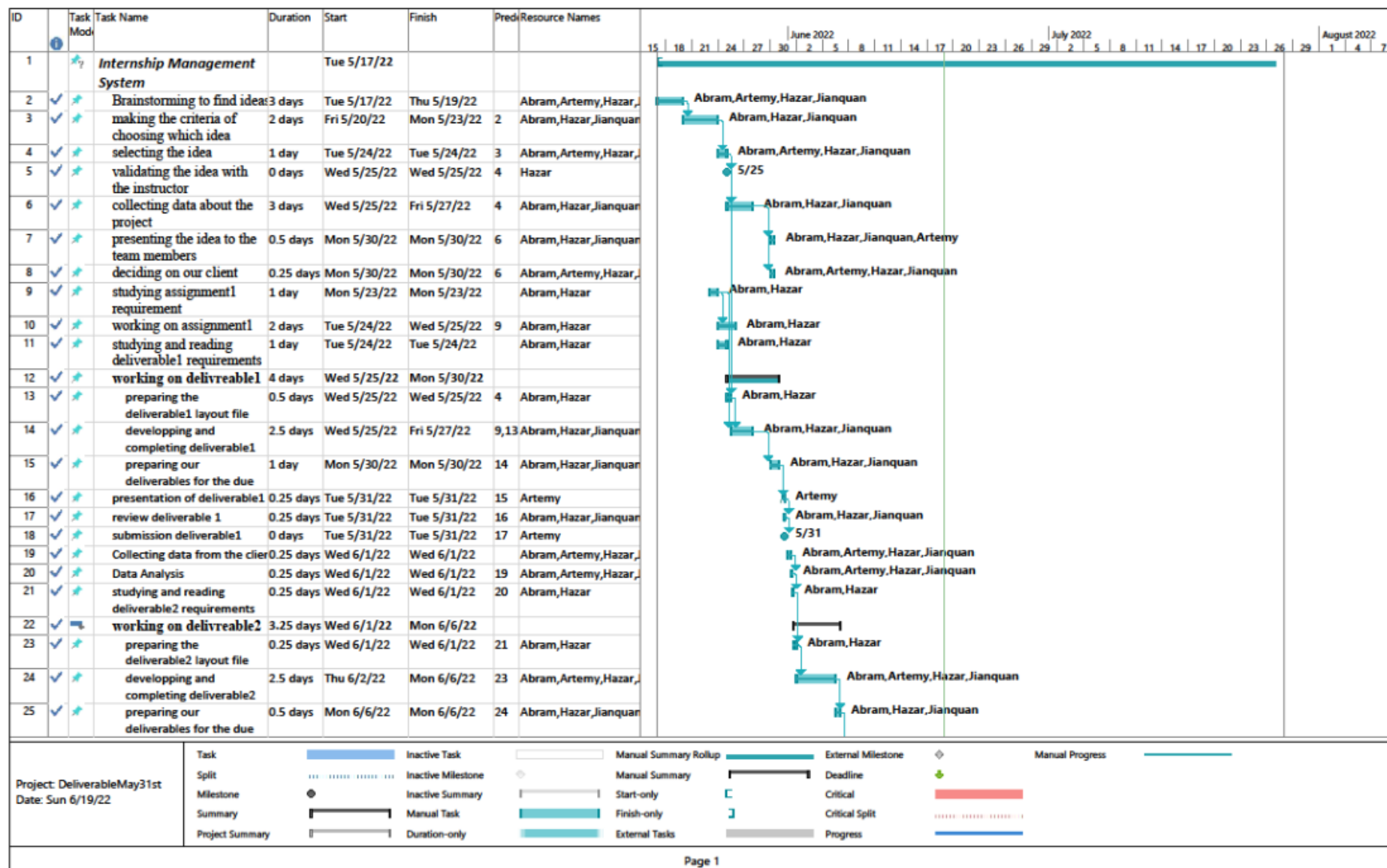


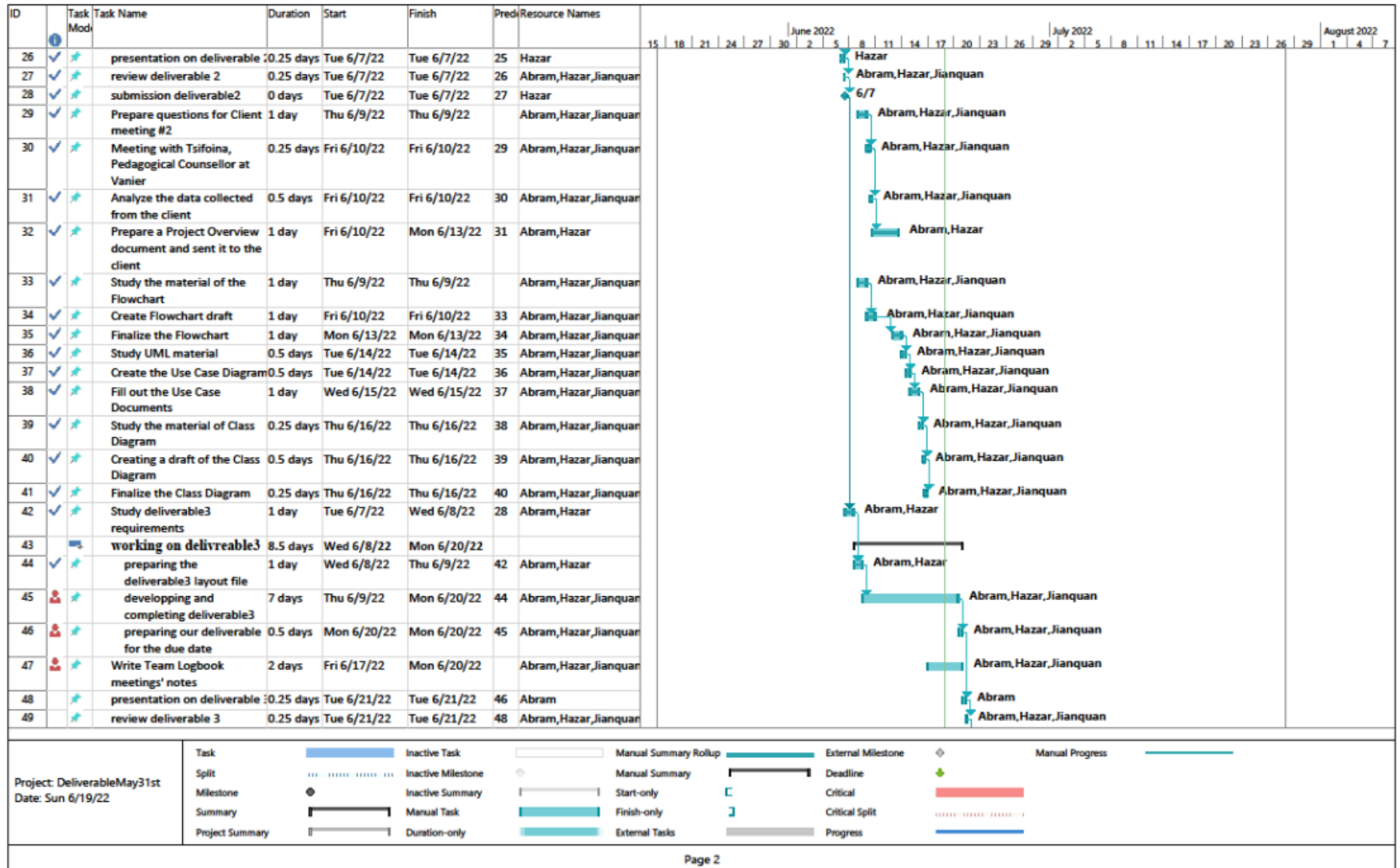
## Areas of responsibility

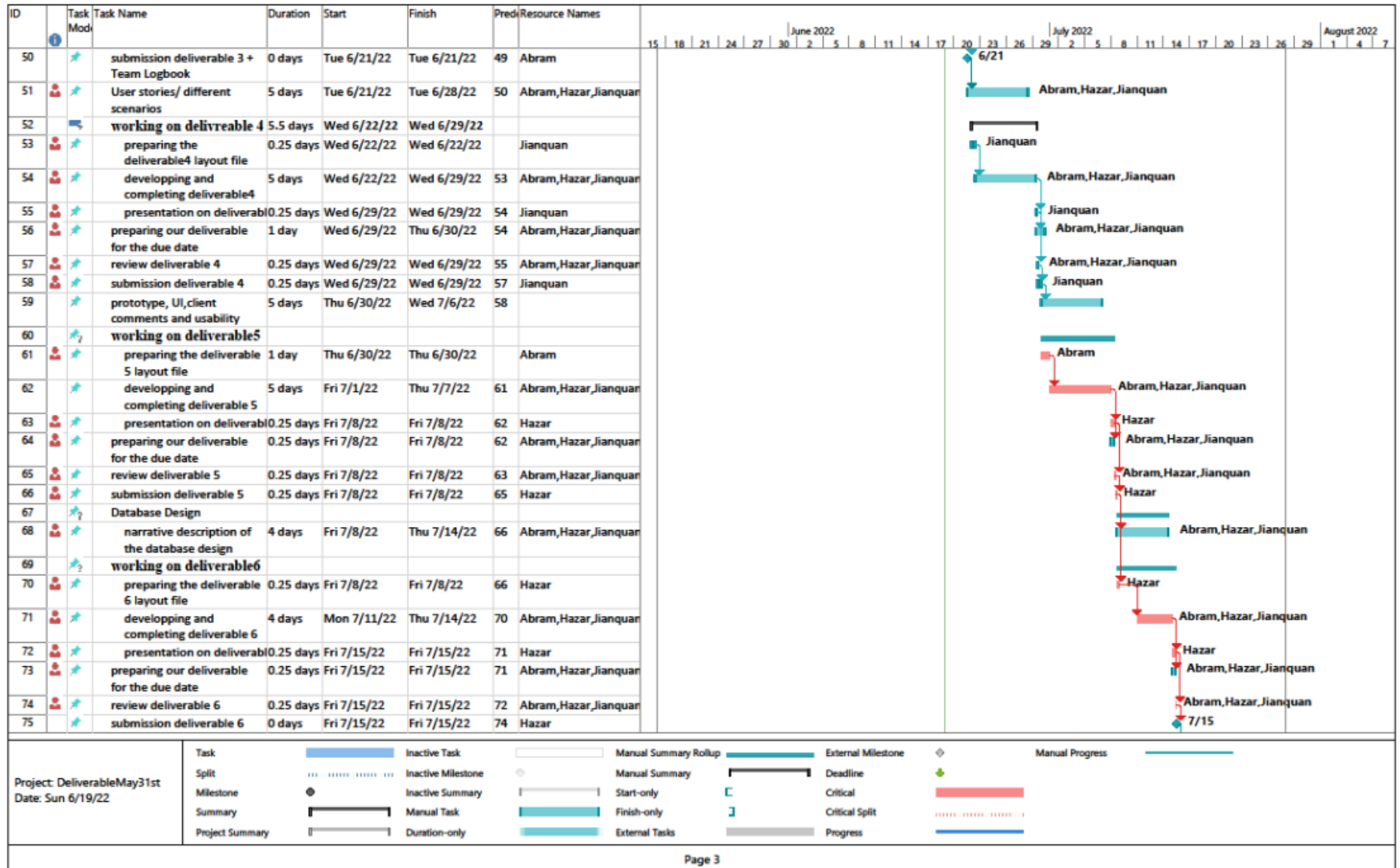
Task	Due Time	Resources	Status
Study deliverable3 requirements	8-Jun-22	Hazar + Abram	done
Format deliverable3 and prepare the layout of the file	9-Jun-22	Abram	done
Format Team Logbook and prepare the layout of the file	9-Jun-22	Hazar	done
Write Team Logbook meetings # 9 to 19	17-Jun-22	All team members	done
Prepare Questions for Client meeting#2	9-Jun-22	All team members	done
Meeting with Tsifoina, Pedagogical Counsellor at Vanier	10-Jun-22	All team members	done
Analyze the data collected from the client	10-Jun-22	All team members	done
Prepare an overview document and send it to our client (As per Tsifoina request)	13-Jun-22	Abram + Hazar	done
Study the material of the Flowchart	10-Jun-22	All team members	done
Draw Diagram, work on a Flowchart draft	12-Jun-22	All team members	done
Finalize the Flowchart	13-Jun-22	All team members	done
Study the UML material	13-Jun-22	All team members	done
create the Use Case Diagrams	14-Jun-22	All team members	done
Fill out the Use Case Documents	15-Jun-22	All team members	done
Study the material of Class Diagram	16-Jun-22	All team members	done
Making a draft for the Class Diagram	16-Jun-22	All team members	done
Finalize the Class Diagram	16-Jun-22	All team members	done
Narrative Description of the present information system	18-Jun-22	Liang	done
Updating WBS/Gantt Chart	17-Jun-22	Hazar + Abram	done
Integrating all the previous tasks in the deliverable3 report file	17-Jun-22	Abram	done
Bibliography and table of contents	18-Jun-22	Hazar + Abram	done
Finalize deliverable3 report	20-Jun-22	Abram	done
Finalize the Team Logbook	20-Jun-22	Hazar	done
Presentation of deliverable3	21-Jun-22	Abram	done
Review deliverable3	21-Jun-22	All team members	done
Submission (Deliverable3 + Team Logbook)	21-Jun-22	Abram	done

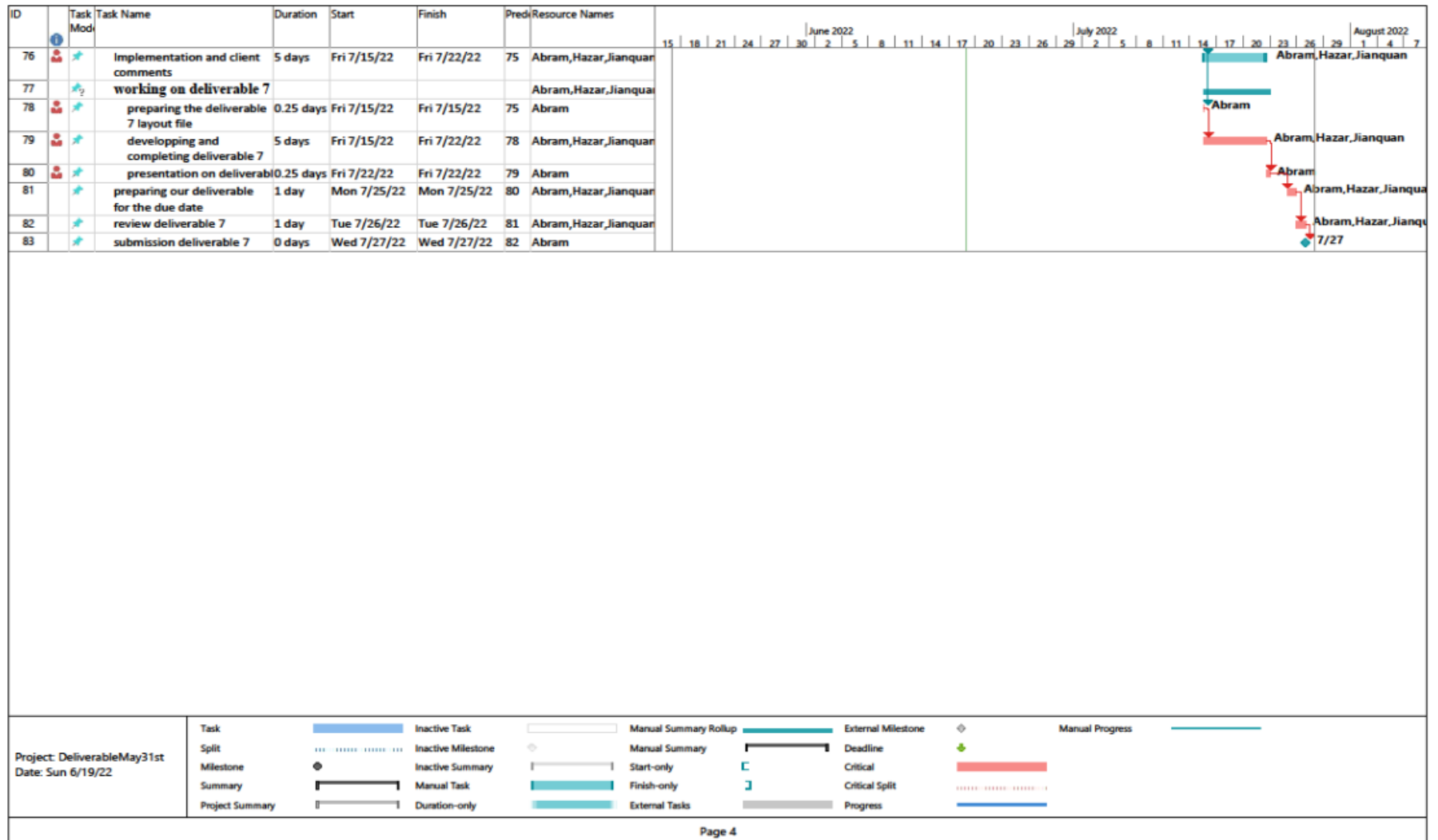
## Project plan

Our project plan is updated according to the progress of the project and the new data collected and analyzed at this stage. In the next pages, the project work breakdown structure (WBS) and Gantt chart are presented.









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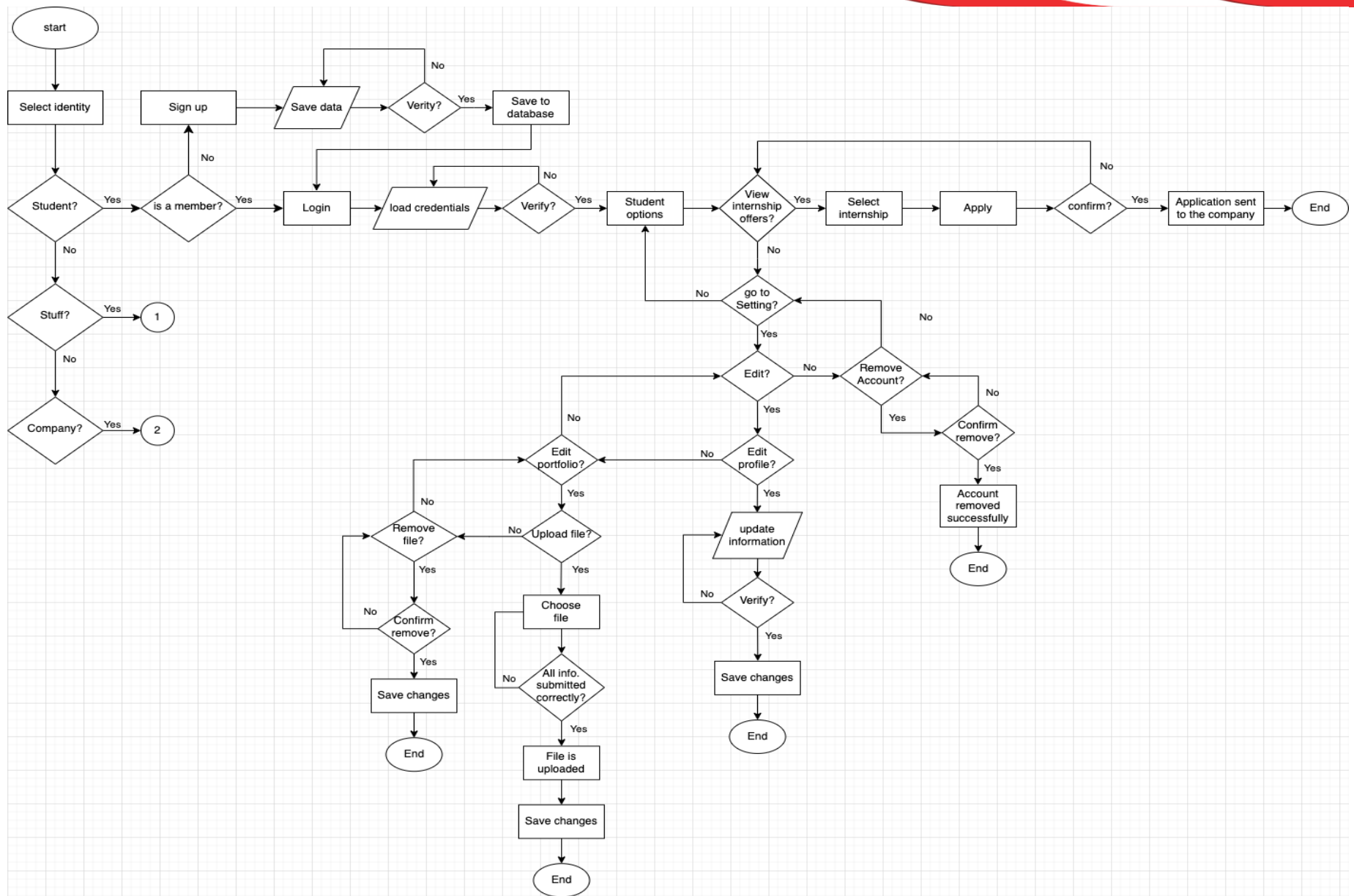
## **Appendices**

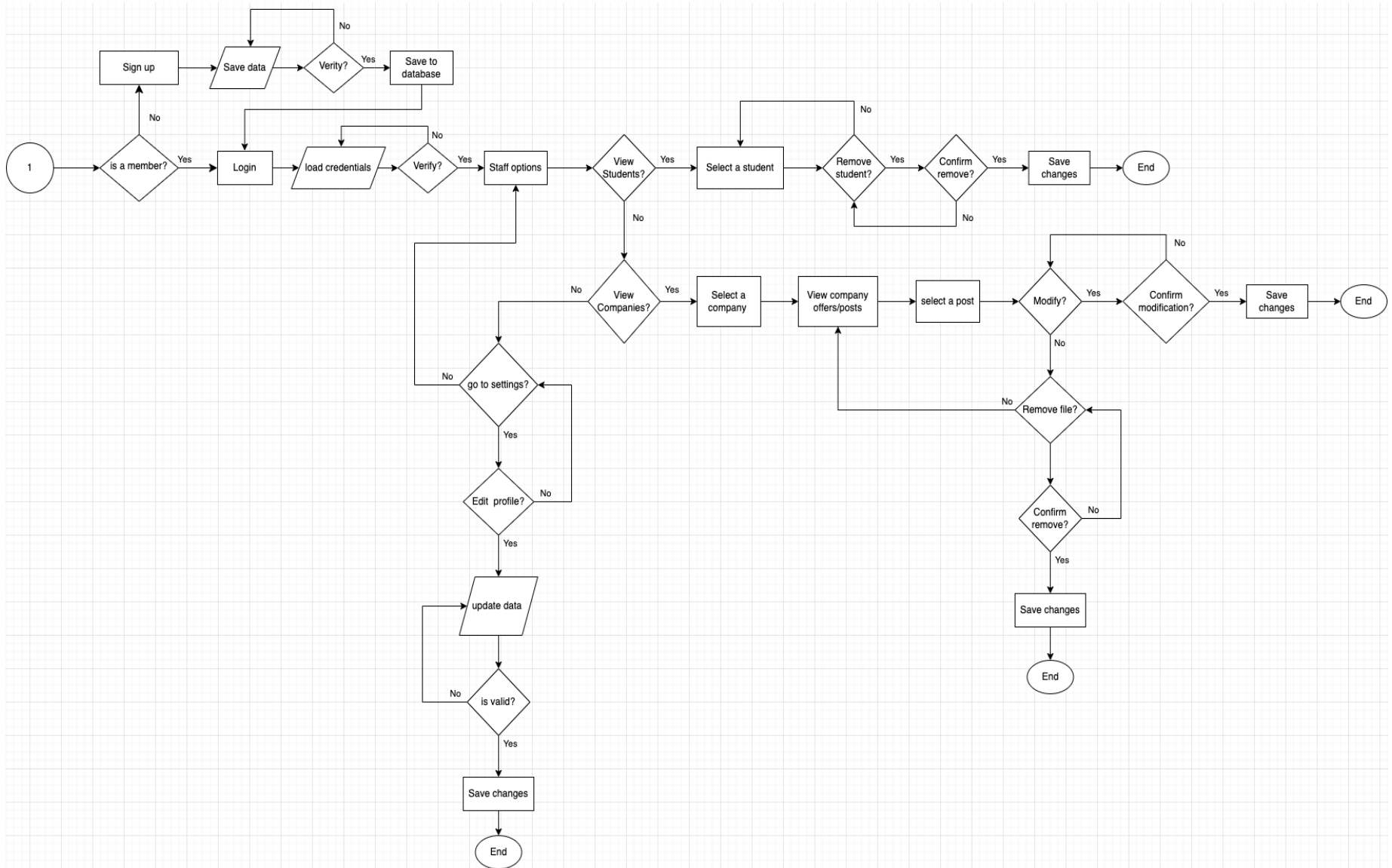
### **Appendix 1 – A system diagram for the entire information system. (Flowchart)**

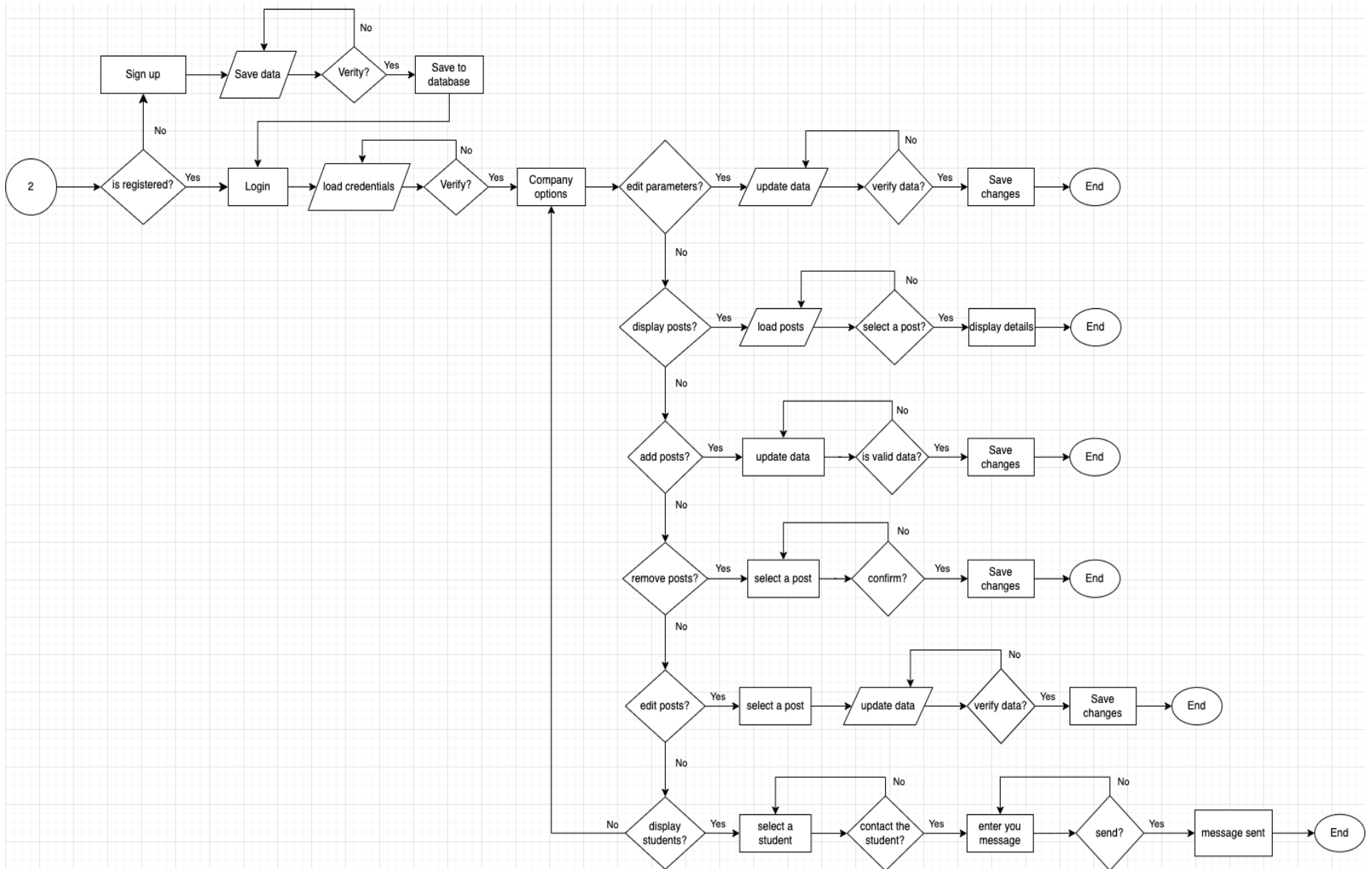
Our FlowChart is divided into three parts:

- Student part
- Staff Member part
- Company part

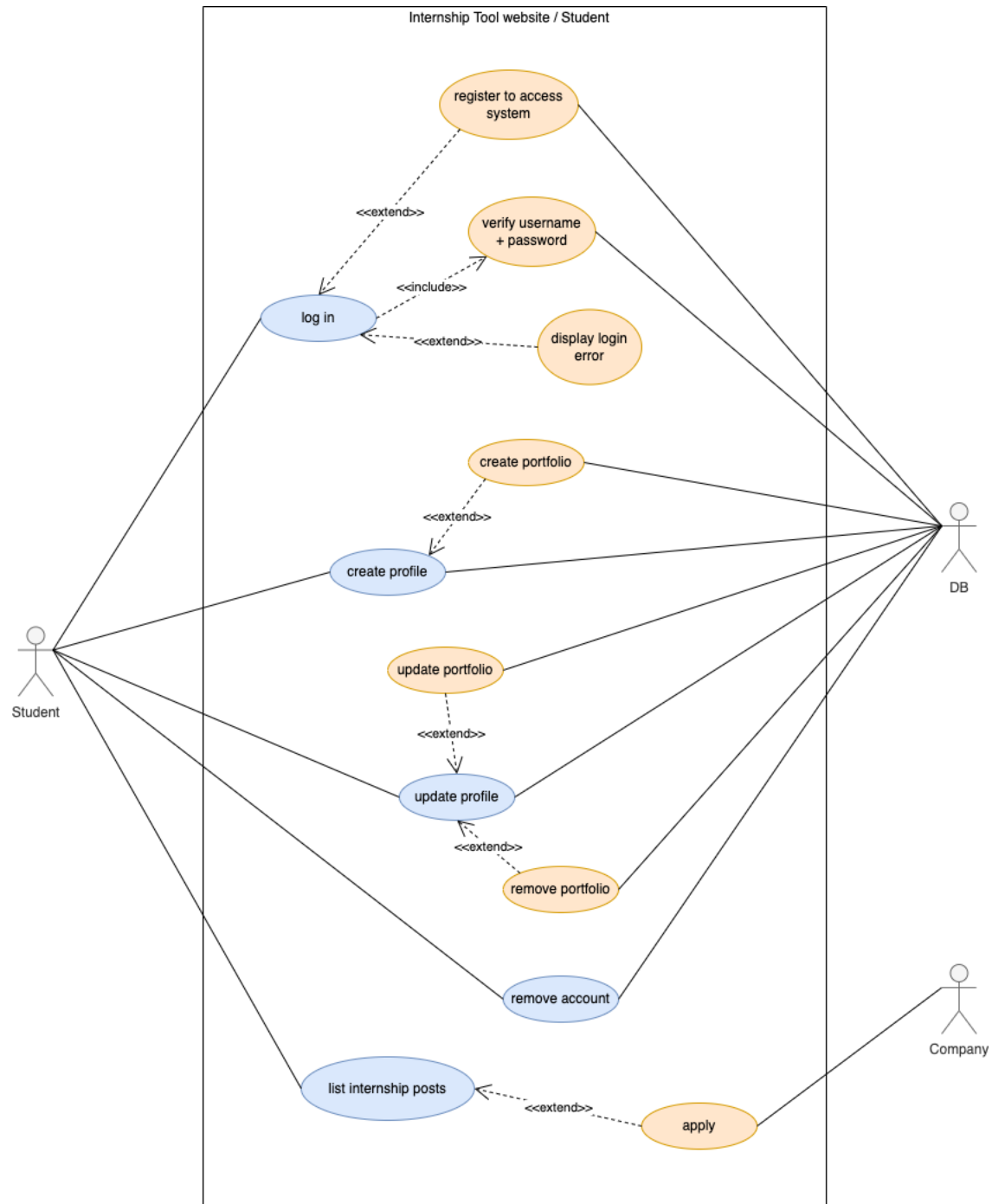


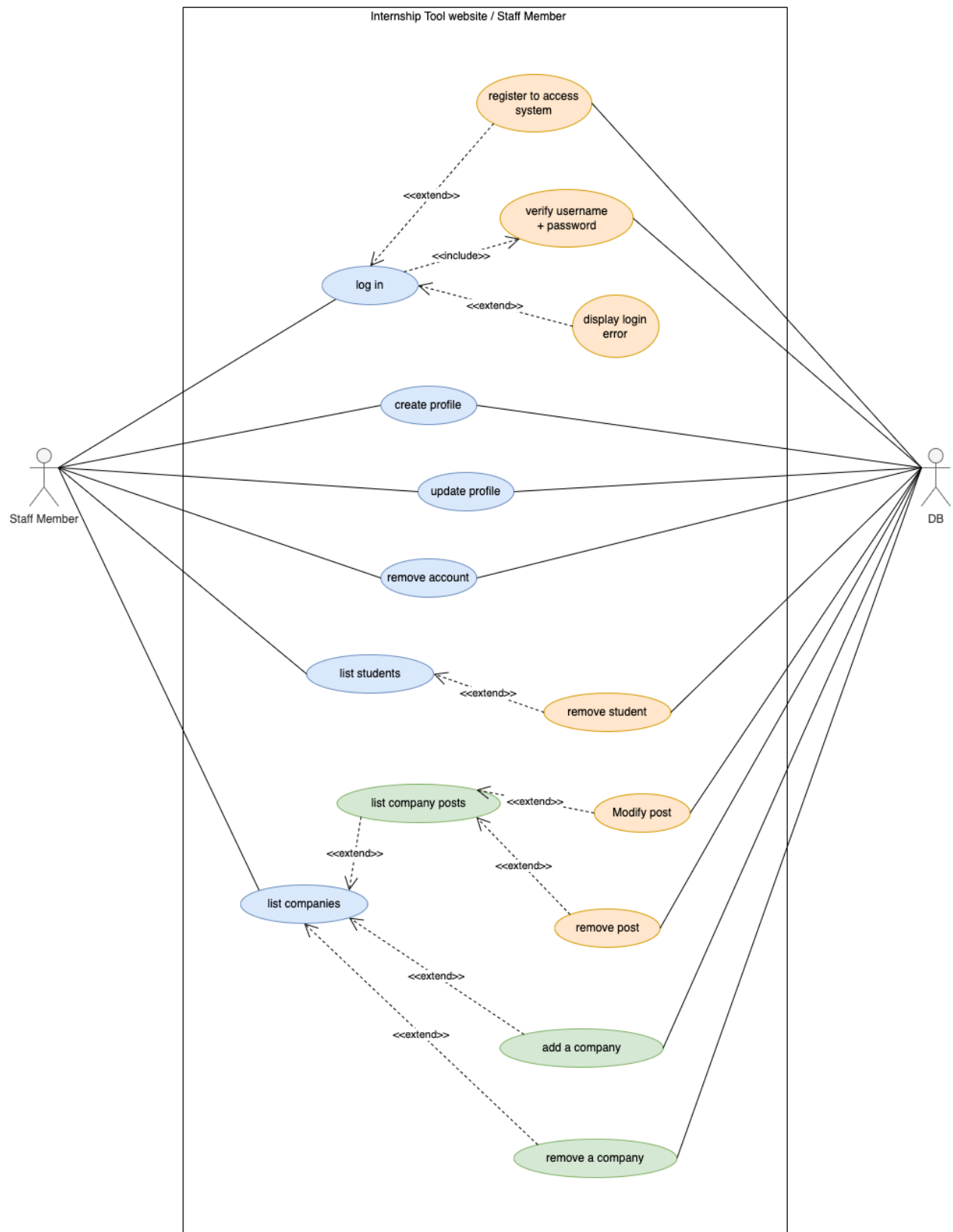


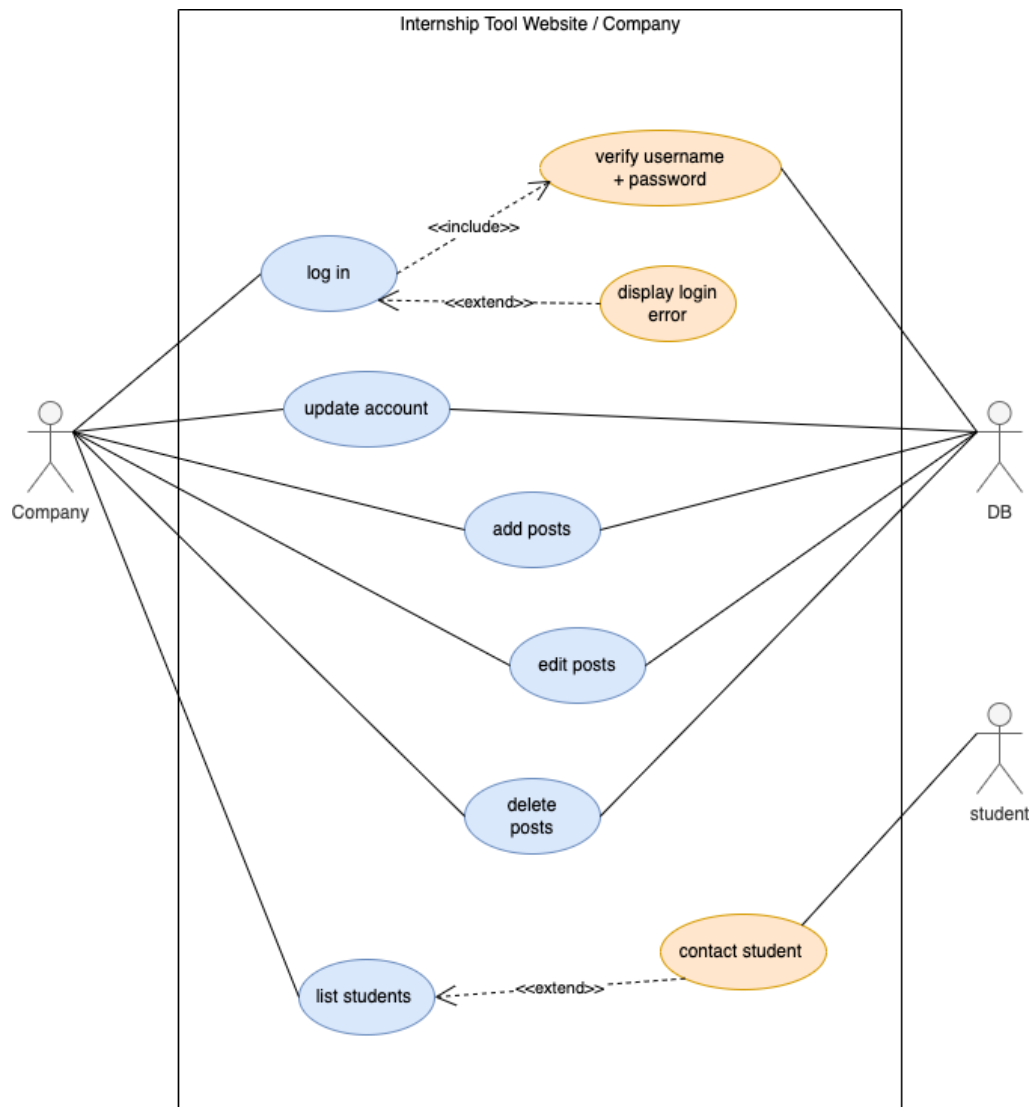




## Appendix 2 – UML diagram







## Appendix 3 - Filled out use case templates of representative use cases found in the system diagram

### Student Use Case documents:

<b>Use Case ID:</b>	<b>UC-Login_Std</b>		
<b>Use Case Name:</b>	Student Log in		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Abram
<b>Date Created:</b>	2022/06/14	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Student (Primary) /Database (Secondary)		
<b>Description:</b>	Students log in by entering their credentials		
<b>Trigger:</b>	Student wants to log in		
<b>Preconditions:</b>	Students must pass all the previous courses (>60%) to be eligible		
<b>Postconditions:</b>	Student will be directed to the student homepage		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user chooses the account type (student, staff, company)</li> <li>2. The user chooses student account</li> <li>3. If not a member, the student chooses to sign up <ol style="list-style-type: none"> <li>3.1 The user enters valid registration information (first name, family name, student ID, Vanier email, a pledge)</li> <li>3.2 The user information is stored in the DB</li> </ol> </li> <li>4. the user is directed to login page</li> <li>5. If a member, the user enters his credentials</li> <li>6. Credentials are authenticated by the system</li> <li>7. The user is logged in and directed to the student homepage</li> </ol>		
<b>Alternative Flow:</b>	<ol style="list-style-type: none"> <li>1. If the username or password is not correct (does not match those stored in the DB), an error message is displayed. Then, repeat steps 4 to 7 in the normal flow</li> <li>2. If the user forgot his password, <ol style="list-style-type: none"> <li>I. He should select 'I forgot my password' option</li> <li>II. He will be directed to a page to enter personal information (name, email, ID, date of birth)</li> <li>III. He will be directed to a page to create a new password</li> <li>IV. The user then can log in with the new password and repeat steps 4 to 7 from the normal flow</li> </ol> </li> </ol>		
<b>Exceptions:</b>	<ol style="list-style-type: none"> <li>1. If student tries to register with a wrong student ID or already used student ID, the registration will fail and an error message describing the error will be displayed</li> <li>2. Student may not be able to log in in case he/she was removed by the staff member (internship coordinator)</li> </ol>		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-MProfile Std</b>		
<b>Use Case Name:</b>	Manage student profile		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Abram
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Student (Primary) / Database (Secondary)		
<b>Description:</b>	The user creates a profile and manages his profile		
<b>Trigger:</b>	The user selects to create a profile or update his profile		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user information will be stored in the database</li> <li>2. The user will be directed to his profile page</li> </ol>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user (student) logs in, if he does not have a profile, then the user selects to create a profile <ol style="list-style-type: none"> <li>I. The user enters his profile information</li> <li>II. The user can upload new file(s) to his portfolio</li> <li>III. All information is stored in the DB</li> <li>IV. The user is directed to the profile page</li> </ol> </li> <li>2. If the user already has a profile, he can choose to update the profile <ol style="list-style-type: none"> <li>I. update new profile info, then submit to DB</li> <li>II. If the user wants to update his portfolio, he can upload the new file(s) to or remove file(s) from his portfolio</li> <li>III. If the user wants to remove his portfolio, he can select to remove portfolio</li> <li>IV. The user is directed to the profile page</li> </ol> </li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	While uploading files to the portfolio, If the file specifications do not match the system criteria, uploading will fail, and an error message will be displayed.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		



<b>Use Case ID:</b>	<b>UC-R-Acc_Std</b>		
<b>Use Case Name:</b>	Remove student account		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Abram
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Student (Primary) / Database (Secondary)		
<b>Description:</b>	The user wants to remove his account		
<b>Trigger:</b>	The user selects to remove his account from the system		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	The user data is removed from the database		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user selects to remove account</li> <li>2. A confirmation message is displayed, the user must enter his password to confirm</li> <li>3. The user data is removed from the database</li> <li>4. The user will be directed to a page displaying that the account is successfully removed</li> </ol>		
<b>Alternative Flow:</b>	The user can reach out to his internship coordinator to remove his/her account.		
<b>Exceptions:</b>	The user enters wrong password while confirming removing the account, an error message is displayed, the user should enter his correct password. Then repeat steps 2 to 4 from the normal flow.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	Not very frequent		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and internet connection		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-apply-internship</b>		
<b>Use Case Name:</b>	Apply for internship(s)		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Abram
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Student (Primary) / company (secondary)		
<b>Description:</b>	Students will be able to display the internship posts and may apply		
<b>Trigger:</b>	The user can select to display the internship posts, select a post, or apply		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ul style="list-style-type: none"> <li>- The user navigates away, or</li> <li>- The user chooses to apply, and a message will be displayed to confirm that the application is sent.</li> </ul>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user selects to list all the company posts</li> <li>2. The user selects a post</li> <li>3. If it meets his needs, the user applies</li> <li>4. a message will be displayed to confirm that the application is sent</li> </ol>		
<b>Alternative Flow:</b>	If the user encounters a problem while applying, then the user should contact the internship coordinator with the internship post code.		
<b>Exceptions:</b>	The user applies after the application deadline, in that case an error message will be displayed.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and internet connection		
<b>Notes and Issues:</b>	No		

## Staff Use Case documents:

<b>Use Case ID:</b>	<b>UC-Login_Staff</b>		
<b>Use Case Name:</b>	Staff Log in		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/14	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) /Database (Secondary)		
<b>Description:</b>	Staff members log in by entering their credentials		
<b>Trigger:</b>	Staff member wants to log in		
<b>Preconditions:</b>	The user must be an internship coordinator or a pedagogical counsellor		
<b>Postconditions:</b>	The user will be directed to the staff homepage		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user chooses the account type (student, staff, company)</li> <li>2. The user chooses staff account</li> <li>3. If not a member, the user chooses to sign up <ol style="list-style-type: none"> <li>I. The user enters valid registration information (first name, family name, staff ID, Vanier email)</li> <li>II. The user information is stored in the database</li> </ol> </li> <li>4. the user is directed to login page</li> <li>5. If a member, the user enters his credentials</li> <li>6. Credentials are authenticated by the system</li> <li>7. The user is logged in and directed to the staff homepage</li> </ol>		
<b>Alternative Flow:</b>	<ol style="list-style-type: none"> <li>1. If the username or password is not correct (does not match those stored in the DB), an error message is displayed. Then, repeat steps 4 to 7 in the normal flow.</li> <li>2. If the user forgot his password, <ol style="list-style-type: none"> <li>I. He should select 'I forgot my password' option</li> <li>II. He will be directed to a page to enter personal information (name, email, ID, date of birth)</li> <li>III. He will be directed to a page to create a new password</li> <li>IV. The user then can log in with the new password and repeat steps 4 to 7 from the normal flow</li> </ol> </li> </ol>		
<b>Exceptions:</b>	If the user tries to register with a wrong staff ID or already used one, the registration will fail and an error message describing the error will be displayed.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-M-Profile_Staff</b>		
<b>Use Case Name:</b>	Manage staff profile		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) / Database (Secondary)		
<b>Description:</b>	The user creates a profile and manages his profile		
<b>Trigger:</b>	The user selects to create a profile or update his profile		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user information will be stored in the database</li> <li>2. The user will be directed to his profile page</li> </ol>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user (staff member) logs in, if he does not have a profile, then the user selects to create a profile <ol style="list-style-type: none"> <li>I. The user enters his profile information</li> <li>II. All information is stored in the DB</li> <li>III. The user is directed to the profile page</li> </ol> </li> <li>2. If the user already has a profile, he can choose to update the profile <ol style="list-style-type: none"> <li>I. update new profile info, then submit to DB</li> <li>II. The user is directed to the profile page</li> </ol> </li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	None		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-R-Acc_Staff</b>		
<b>Use Case Name:</b>	Remove staff account		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) / Database (Secondary)		
<b>Description:</b>	The user wants to remove his account		
<b>Trigger:</b>	The user selects to remove his account from the system		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	The user data is removed from the database		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user selects to remove account</li> <li>2. A confirmation message is displayed, the user must enter his password to confirm</li> <li>3. The user data is removed from the database</li> <li>4. The user will be directed to a page displaying that the account is successfully removed</li> </ol>		
<b>Alternative Flow:</b>	If there are any problems encountered while removing the account, the user should contact IT support.		
<b>Exceptions:</b>	The user enters wrong password while confirming removing the account, an error message is displayed, the user should enter his correct password. Then repeat steps 2 to 4 from the normal flow.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	Not very frequent		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and internet connection		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-R-std</b>		
<b>Use Case Name:</b>	Remove a student		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) / Database (Secondary)		
<b>Description:</b>	The user wants to remove a student account		
<b>Trigger:</b>	The user selects to remove a student account from the system		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	The student account is removed from the database		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user selects to display the list of all students</li> <li>2. The user selects a student to be removed</li> <li>3. A confirmation message is displayed</li> <li>4. The student account is removed from the database</li> <li>5. The user will be directed to a page displaying that the student account is successfully removed</li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	None		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	Not very frequent		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and internet connection		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-M-Staff_Comp</b>		
<b>Use Case Name:</b>	Manage companies Staff		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) / Database (Secondary)		
<b>Description:</b>	The staff member displays the list of the partnered companies and can choose to update or remove a company.		
<b>Trigger:</b>	The user displays the list of the companies and can add a new company or remove an existing company.		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. In case of adding a company, the company will be stored in the database</li> <li>2. In case of removing a company, the company will be removed from the database</li> <li>3. Then, the user is directed to the page of the list of companies</li> </ol>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user (staff member) logs in</li> <li>2. The user displays the list of the partnered companies</li> <li>3. The user may select a company and then chooses to update the company information</li> <li>4. a confirmation message will be displayed</li> <li>5. The user may select a company and then chooses to remove it</li> <li>6. a confirmation message will be displayed</li> <li>7. the user is directed to the page of the list of companies</li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	None		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-M-Staff_internship</b>		
<b>Use Case Name:</b>	Manage Internship by staff		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Hazar
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Staff (Primary) / Database (Secondary)		
<b>Description:</b>	Staff member can list, add, or remove internship posts		
<b>Trigger:</b>	The user displays the list of internship offers and can choose to update or remove an offer.		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. In case of editing an internship offer, the changes will be stored in the database</li> <li>2. In case of removing an internship offer, it will be removed from the database</li> <li>3. Then, the user is directed to the page of the internship posts</li> </ol>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user (staff member) logs in</li> <li>2. The user displays the list of internship offers</li> <li>3. The user may select a post and then chooses to update the post information</li> <li>4. a confirmation message will be displayed</li> <li>5. The user may select a post and then chooses to remove it</li> <li>6. a confirmation message will be displayed</li> <li>7. Then, the user is directed to the page of the internship posts</li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	None		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		



## Company Use Case documents:

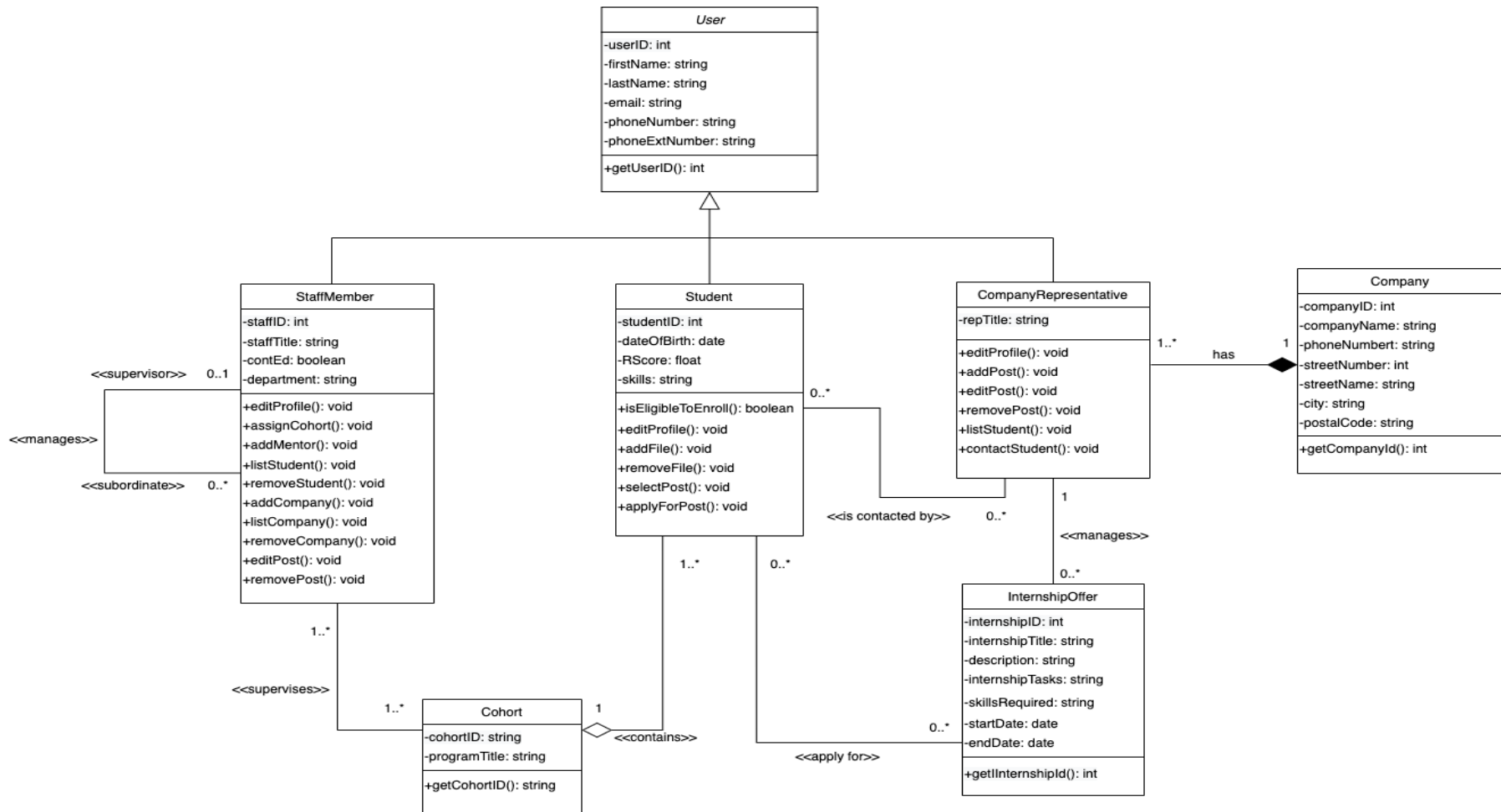
<b>Use Case ID:</b>	<b>UC-Login-Company</b>		
<b>Use Case Name:</b>	Company Log in		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Liang
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Company (Primary) / Database (Secondary)		
<b>Description:</b>	The users log in by entering their credentials		
<b>Trigger:</b>	The user wants to log in		
<b>Preconditions:</b>	The user has been registered by the school internship counsellor		
<b>Postconditions:</b>	The user will be directed to the company homepage		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user chooses the account type (student, staff, company)</li> <li>2. The user chooses company account</li> <li>3. If a member, the user enters his credentials</li> <li>4. Credentials are authenticated by the system</li> <li>5. The user is logged in and directed to the company homepage</li> </ol>		
<b>Alternative Flow:</b>	<ol style="list-style-type: none"> <li>1. If the username or password is not correct (does not match those stored in the DB), an error message is displayed. Then, email the school internship counsellor.</li> <li>2. If the user forgot his password, <ol style="list-style-type: none"> <li>I. He should select 'I forgot my password' option</li> <li>II. He will be directed to a page to enter personal information (company name, email, ID)</li> <li>III. He will be directed to a page to create a new password</li> <li>IV. The user then can log in with the new password and repeat steps 3 to 5 from the normal flow</li> </ol> </li> </ol>		
<b>Exceptions:</b>	Credentials are not authenticated by the system; an error message is displayed.		
<b>Includes:</b>	N/ A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N /A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-UCompany_acc</b>		
<b>Use Case Name:</b>	Update Company account		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Liang
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Company (Primary) / Database (Secondary)		
<b>Description:</b>	The company representative updates the company information		
<b>Trigger:</b>	The user updates the company information		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The updated company information is stored in the database</li> <li>2. The user will be directed to the company profile page</li> </ol>		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user (the company representative) logs in</li> <li>2. Selects to update the company information</li> <li>3. enters his company information</li> <li>4. All information is stored in the DB</li> <li>5. The user is directed to the account page of the company</li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	None		
<b>Includes:</b>	N/A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-MPost_Company</b>		
<b>Use Case Name:</b>	Manage Posts		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Liang
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Company (Primary) / Database (Secondary)		
<b>Description:</b>	The company representative add posts and manages his posts		
<b>Trigger:</b>	The user wants to add, edit, or remove a post(s)		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	<ul style="list-style-type: none"> <li>- In case of adding a post, it will be stored in the database</li> <li>- In case of editing a post, data will be updated in the database</li> <li>- In case of removing a post, it will be removed from the database</li> </ul>		
<b>Normal Flow:</b>	<p>The user logs in</p> <p>In case the user wants to add a post:</p> <ol style="list-style-type: none"> <li>1. The user selects to add a post               <ol style="list-style-type: none"> <li>1.1 The user enters the post information</li> <li>1.2 All information is stored in the DB</li> <li>1.3 The user is directed to the internship posts page</li> </ol> </li> </ol> <p>In case the user wants to update/remove a post:</p> <ol style="list-style-type: none"> <li>2. The user selects to update a post or remove a post               <ol style="list-style-type: none"> <li>2.1 The user updates the post information, then he submits to the database</li> <li>2.2 If the user wants to remove the post, he can select remove post, then it is removed from the database</li> <li>2.3 The user is directed to the internship posts page</li> </ol> </li> </ol>		
<b>Alternative Flow:</b>	None		
<b>Exceptions:</b>	While updating a post, if the post information does not match the system criteria, the update will fail, and an error message will be displayed.		
<b>Includes:</b>	N/A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and is connected to the internet		
<b>Notes and Issues:</b>	No		

<b>Use Case ID:</b>	<b>UC-select-std_Company</b>		
<b>Use Case Name:</b>	Select students		
<b>Created By:</b>	Red Team	<b>Last Updated By:</b>	Liang
<b>Date Created:</b>	2022/06/15	<b>Last Revision Date:</b>	2022/06/20
<b>Actors:</b>	Company (Primary) / Student (Secondary)		
<b>Description:</b>	The company representative can display a list of students, select, and may contact students		
<b>Trigger:</b>	The user can select and/or contact students.		
<b>Preconditions:</b>	The user must be logged in		
<b>Postconditions:</b>	The user will be prompted to the selected student's profile page. In case the user selects the option to contact the student, a message field will be opened to send a message to the student.		
<b>Normal Flow:</b>	<ol style="list-style-type: none"> <li>1. The user selects to list all the student's profiles.</li> <li>2. The user selects a student</li> <li>3. If it meets his needs, the user writes a message to the student</li> <li>4. A sent confirmation message will be displayed</li> </ol>		
<b>Alternative Flow:</b>	If the user encounters a problem to contact a student, then the user should contact the internship coordinator.		
<b>Exceptions:</b>	N/A		
<b>Includes:</b>	N/A		
<b>Frequency of Use:</b>	On demand		
<b>Special Requirements:</b>	N/A		
<b>Assumptions:</b>	The user has a computer and internet connection		
<b>Notes and Issues:</b>	No		

## Appendix 4 – A Class diagram for the entire existing information system



## **Appendix 5 – Copies of forms and other documents used by client**

Our client, represented by Tsifoïna, mentioned that they will not provide us with data of real students and partnered companies for the time being until we present a functional prototype. We are going to work with dummy information and make a mockup type prototype.