Name: Aishwarya Subbu

# Roles and responsibilities

1) Business Analyst

Responsible for Reports

- Preliminary and Final Project Plans
- Project Charter
- User Manual (both store and department)
- Contribution Reports
- Final Report
- 2) Web Application Developer

Developing store features that can meet the requirements of user.

3) Representative

Present teams' idea and project during User requirement meetings and UAT

### Deliverables and interaction within the team

- a. Deliverables
  - 1) Store Source Code Web
  - 2) UI Prototype
  - 3) Database Design
  - 4) Reports
- b. Interaction
  - Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
  - 2) Communicated with sub-team allocated to do store functions during web application code for store
  - Communicated with users during UI design walkthrough for store and ADLC clarification in understanding the Functional and Non-Functional Requirements.
  - 4) Communicated with the team in understanding their logic and flow of thoughts for the respective use case function they coded
  - 5) Communicated and co-ordinated with team for submission of individual assigned works related to project deliverables for the consolidation of final project report

### **Major Challenges and Resolution**

Challenges: Challenging to understand the overall flow of events in the Store side Resolution: Achieved common grounds among team members by going through the flow and prototyping the UI.

Challenges: Repetitive Testing was Challenging as there were constant update and change to the code.

Resolution: Additional time was spent to testing after every change made in code.

Challenges: Challenging to understand the code and the logical thinking of others when drawing sequence diagram.

Resolution: Communicate with the respective team member to understand their flow of thoughts.

Challenges: Problem in acquiring the documents done by each team members related to project deliverables for consolidating final project report.

Resolution: Co-ordinated with team for submission of their documents on a common drive to ensure that the documents are up-to-date and there are no duplicates.

#### Quantum

Activities	Number of Hours (Inclusive of team
	discussions)
UI Prototype Designing	4 days (32 hours)
Database and Use Case Discussion	2day (16 hours)
Sequence Diagram	5 days(40 hours)
Code Development(Development, Testing)	4 days(32 hours)
Reports and User Manual	5 days(40 hours)

#### **Experience**

Having an agreed UI prototype at the beginning of the project itself gave the team and me a clear target of what we need to achieve by the end of the project. It was a very enriching experience for someone who does not have work experience like me as the project requirements and phases involved are similar to real-time work environment project

This project provided me with a good platform to learn from other teammates who are stronger in coding and gave me confidence in myself that I can produce a working function. As much as it is important to seek help from team members when stuck in a problem, I learnt that being self-resourceful and finding solutions to our own problem is a very crucial skill to develop. I am contented that through this project experience I managed to cultivate that skill in me. I was also able to enhance my communication skills through doing presentations and written reports which adds value to my strengths. The energy of team was very encouraging, and it was a joyful learning experience for me.

Name: Li Zhengyi

# **Roles and responsibilities**

1) Business Analyst

Weekly Reports and Final Report

2) Android Application Developer

Developing and implementing mobile features that can meet the requirements of user. Analysing issues raised during testing and debug software bugs found during troubleshooting for android

#### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) UI Prototype
  - 3) Android Source Code
  - 4) Weekly Reports
  - 5) Sequence Diagrams
  - 6) Non-functional Requirements
- b) Interaction
  - 1) Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
  - 2) Communicated with the team members allocated to do API part to understand the logic behind it to implement API function call for android part
  - 3) Communicated with sub-team allocated to do android functions during development and testing of android functions

#### **Major Challenges and Resolution**

Challenges: Had difficulty in posting data to server side

Resolution: Use Volley library (introduced by google) for carrying of data from android to

server

Challenges: Had difficulty in retrieving data from a listView and setOnClickListener on the button in the listView

Resolution: Make the listView adapter class inside the activity class and make button.setOnClickListener definition inside the adapter instead of in the activity class

Challenges: Didn't know how to show a date picker and select time starting from current date and end date cannot be before start date

Resolution: Use the DatePickerDialog class to generate date picker calender and set start date's MinDate() method's parameter as "System.currentTimeMillis()-1000" and set end date's MinDate() method's parameter as "startDate's getTmeInMillis()"

# Quantum

Activities	Number of Hours (Inclusive of team
	discussions)
UI Prototype Designing	2 days (16 hours)
Database Design and Use Case Discussion	2 day (16 hours)
Majority of Android Code Development	10 days (80 hours)
&Testing	
Sequence Diagram for Store and	3 days (24 hours)
Non-Functional Requirement	
Reports	3 days (24 hours)

# **Experience**

I learnt that working in a group project means working with people equipped with different strengths. It is important to tap on their strengths and at the same time learn from each other to enhance our skills. Communication is the key and I believe that my team and I shared our ideas and opinions effectively avoiding any misunderstanding that might have occurred. This project demands us to self-learn technologies taught beyond class. Adapting to new technologies and learning quickly is something I have picked up through doing this project.

Name: Win Kyi Phyu Kyaw

## Roles and responsibilities

1) Web Application Developer for Store

Developing and implementing Store features that can meet the requirements of user

2) Web Application Integrator

Designing database, piecing and organizing everyone's code together and conduct continuous testing

3) API Developer

Developed API code to merge web and android application parts

4) Machine Learning

Use python language to create stock trend analysis and designing data training model to implementing in web

#### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) UI Prototype
  - 3) Store Source Code Web
  - 4) API Code
- b) Interaction
  - 1) Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
  - 2) Communicated with the team members allocated to do Android part to explain the API part on how to call API
  - 3) Communicated with sub-team allocated to do store parts to understand their codes and integrate the web part for store

#### **Major Challenges and Resolution**

Challenges: Updating the remaining quantity details function in stock card details Resolution: Use SQL query to extract data from the database and display in the User Interface (UI)

Challenges: Duplication of data when creating disbursement form

Resolution: Use status function in controller to prevent duplication of data

Challenges: Constant change in database causing exceptions when try to run the application (e.g. type mismatch exception)

Resolution: constantly update the newly changed database in drive and communicate with team to achieve a common understanding.

Challenges: Integrating codes developed from all team members due to different style of

coding

Resolution: Communicate with team members to understand their code

### Quantum

Activities	Number of Hours(Inclusive of team
	discussions)
UI Prototype Designing	2 days (16 hours)
Database Design and Use Case Discussion	2 day (16 hours)
Web Code Development & Testing	10 days (80 hours)
Web Code Integration	2 days (16 hours)
Building Store API	2 days (16 hours)

## **Experience**

Through this project I was able to learn many new technologies and coding styles and pattern. API implementation was something very new for me and learning and implementing it was very satisfying. Staying positive and focused was very crucial especially when the project deadline was nearing. I felt that communication with team members and helping each other is a crucial part of group projects and voicing out our opinions and ideas at earlier stages will help the team avoid conflicts later on in the project. This project gave the confidence that I am able to learn quickly and has encouraged me to try to learn new technologies.

Name: Khaing Su Myat Noe

## Roles and responsibilities

1) Web Application Developer for Store

Developing and implementing Store features that can meet the requirements of user continuous testing

2) API Developer

Developed API code to merge web and android application parts

3) Machine Learning

Use python language to create stock trend analysis and designing data training model to implementing in web

### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) UI Prototype
  - 3) Store Source code Web
  - 4) API Code
  - 5) Python Code
- b) Interaction
  - 1) Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
  - 2) Explained written code to integrator of the store part
  - 3) Communicated with the team members allocated to do Android part to explain the API part on how to call API

## **Major Challenges and Resolution**

Challenges: Establishing connection between IIS server and Python server. Resolution: Build API in Python using FLASK. Install waitress, fixed server name

Challenges: NaN values in dataset after categorizing data.

Resolution: Clean the data and fil the missing values.

Challenges: Create Disbursement is hard to handle to be system auto generated.

Resolution: A button for user action to create disbursement lists.

Challenges: Updating the database attributes and data types frequently during code implementation period.

Resolution: Each member has to write their changes made in the google sheet. Upload the latest versions of the databases before combing the codes

# Quantum

Activities	Number of Hours(Inclusive of team
	discussions)
UI Prototype Designing	2 days (16 hours)
Database Design and Use Case Discussion	2 day (16 hours)
Web Code Development	10 days (80 hours)
Testing and Debugging	2 days (16 hours)
Building Store API and Machine Learning	2 days (16 hours)

### **Experience**

This project was a great learning experience. Learning from each other's code and learning to read other people code was very enriching. This course provided me with the opportunity to explore new technologies and study them in a short span of time giving me the confidence that I am a fast learner. Keeping a self-set deadline is important to avoid last minute panic and rush. This allows us to be on task. Having a good understanding and communication between team members is very necessary to understand each other's code and achieve a common ground. I also feel that my ability to stay calm and supportive to team members when there is a problem, was greatly appreciated by the team and boosted the team's moral.

Name: Yee Mon Aung

# Roles and responsibilities

1) Web Application Developer for Department

Developing and implementing department features that can meet the requirements of user

2) Android Application Developer

### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) UI Prototype
  - 3) Department Source Code-Web
  - 4) Sequence Diagram
  - 5) Test Plans
- b) Interaction
  - 1) Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
  - 2) Explained written code to integrator of the department part

## **Major Challenges and Resolution**

Challenges: Posting of data form User Interface to Server

Resolution: Use jQuery and Ajax for posting of data is JSON format

Challenges: Obtaining UI design similar to what was provided in the prototype

Resolution: Use Java Script and Bootstrap and jQuery for validation

Challenges: Storing of passwords in encrypted format for privacy purpose Resolution: Hashed password using cryptography library and save in database

#### Quantum

Activities	Number of Hours (Inclusive of team
	discussions)
Database Design and Use Case Discussion	2 day (16 hours)
Web Code Development & Testing	7 days (56 hours)
Assist Building Department API and	3 days (24 hours)
Integrating with Android	
Produced Test Plans for Final Report	2 days (16 hours)
Department Sequence Diagrams for Final	4 days (32 hours)
Report	

# **Experience**

Working on this project allowed me to go out of my comfort zone and explore new technologies. Implementing new functions by searching for solutions on my own gave me a sense of accomplishment. I felt that the sharing and helping nature among my team members enhanced my learning and motivated me to perform better. I was determined to make a significant contribution to my team. Although initially I was slow in coding, I picked up my pace once I got familiar with the coding environment and was able to produce working code that was incorporated into the department part. I learnt a lot from this project, and I hope to bring the skills I learnt here to my future workplace.

Name: Sriram Manda

## **Roles and responsibilities**

1) Web Application Developer for Department

Developing and implementing department features that can meet the requirements of user

2) Web Application Integrator for Department

Designing database, piecing and organizing code submitted by sub-team allocated to do department

3) Overall integrator for Web, API and Android

Combine the whole team's code together and conduct continuous testing

4) Implemented security features (role-based authentication for all actors)

#### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) Department Source Code
  - 3) API Code
  - 4) Overall Source Code
- b) Interaction
- 1) Discussed and analysed with all the team members during creation and finalising of the UI prototype and Database Design
- 2) Communicated with sub-team allocated to do department parts to understand their codes and integrate the web part for department
- 3) Communicated with the whole team to understand the team members code to do the final integration for both web and android parts.
- 4) Communicated with users during UI design walkthrough for store

# **Major Challenges and Resolution**

Challenges: Posting of data form User Interface to Server

Resolution: Use jQuery and Ajax for posting of data is JSON format

Challenges: Obtaining UI design similar to what was provided in the prototype

Resolution: Use Java Script and Bootstrap and jQuery for validation

Challenges: Posting/Getting data from the server

Resolution: Use Volley library (introduced by google) for carrying of data from android to

server

Challenges: Integrating codes developed from all team members due to different style of

coding

Resolution: Communicate with team members to understand their code

#### Quantum

Activities	Number of Hours (Inclusive of team
	discussions)
Database Design and Use Case Discussion	2 day (16 hours)
Web Code Development &Testing	10 days (80 hours)
Building department API and Integrating	2 days (16 hours)
with Android	
Web Code Integration – department	2 days (16 hours)
Overall Code Integration – department	2 days (16 hours)

# **Experience**

Working in this project allowed me to understand my strengths in coding. I understood that Integrating earlier is very necessary as bugs occurred due to late integration are very difficult to solve. I enjoyed the process of discussing and solving errors in both mine and my team members' code as it gave both my team members and me an opportunity to learn something new and gain satisfaction through solving that bug. I also learnt that not all team members will be able to code fast and thus it is important to step in to provide guidance and remind them of their allocated deadline to speed up the work.

Name: Yan Hmue Aung

# Roles and responsibilities

1) Web Application and Python Developer for Department

Developing and implementing department features that can meet the requirements of user

2) Project Management

Splitting and assigning work to members and ensuring they are following the stipulated deadlines

#### Deliverables and interaction within the team

- a) Deliverables
  - 1) Database Design
  - 2) Department Source Code
  - 3) Class Diagram and State chart Diagram
  - 4) Project Scheduling
  - 5) Test Plans
- b) Interaction
  - 1) Discussed and analysed with all the team members during creation and finalising of Database Design
  - 2) Explained written code to integrator of the department part

### **Major Challenges and Resolution**

Challenges: Connecting the python server and Visual Studio

Resolution: need to install some packages in Visual Studio like scheduler package

Challenges: Obtaining UI design similar to what was provided in the prototype

Resolution: Use Java Script and Bootstrap and jQuery for validation

Challenges: Planned Timeline and Actual Plan is a lot hard to meet Resolution: Reduced some features and add an extra work time

#### Quantum

Activities	Number of Hours (Inclusive of team
	discussions)
Database Design and Use Case Discussion	2 day (16 hours)
Web Code Development & Testing	6 days (40 hours)
State Chart and Class Diagrams	3 days (16 hours)
Produced Test Plans for Final Report	2 days (16 hours)
Project Scheduling	2 days (16 hours)

# Experience

Planning the project duration and preparing project schedule allowed me to understand the complexity and time required for each phase of the project. Checking on each other and keeping the spirit of the team alive is important for a good project outcome. Accepting each other's weakness and learning from each other is important to progress. Although drawing class and state diagrams were challenging for me, I realised that looking for our own solutions and not giving up will help in finishing the assigned task.