



# **CAPSTONE PROJECT REPORT**

## **Report 2 – Project Management Plan**

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# I. Project Management Plan

## 1. Overview

### 1.1. WBS & Estimation

Reference to [Mumbi Sprint Backlog](#)

### 1.2. Project Objectives

- Timeliness: 70%
- Allocated Effort:  $4 \text{ (members)} * 12 \text{ (sprints)} * 7 \text{ (days/sprint)} = 336 \text{ man-days}$
- Estimated total cost:
- Quality:
  - Be able to run in a real environment.
  - Users can learn to use the system within 3-5 days.
- Saving time in reviewing and distributing subscriptions.

### 1.3. Project Risks

#	Risk description	Impact	Possibility	Response plan
1	Members disagreed their own opinion with each other, leading to controversy	Because of conflicts and misunderstanding, progress is delayed.	Medium	Asking mentor to resolve it or vote
2	Lacking of technical knowledge on specific areas of the product	High	Low	Researching and getting advice from the supervisor

*Table 4 - Project risks*

## 2. Management Approach

### 2.1. Project Process

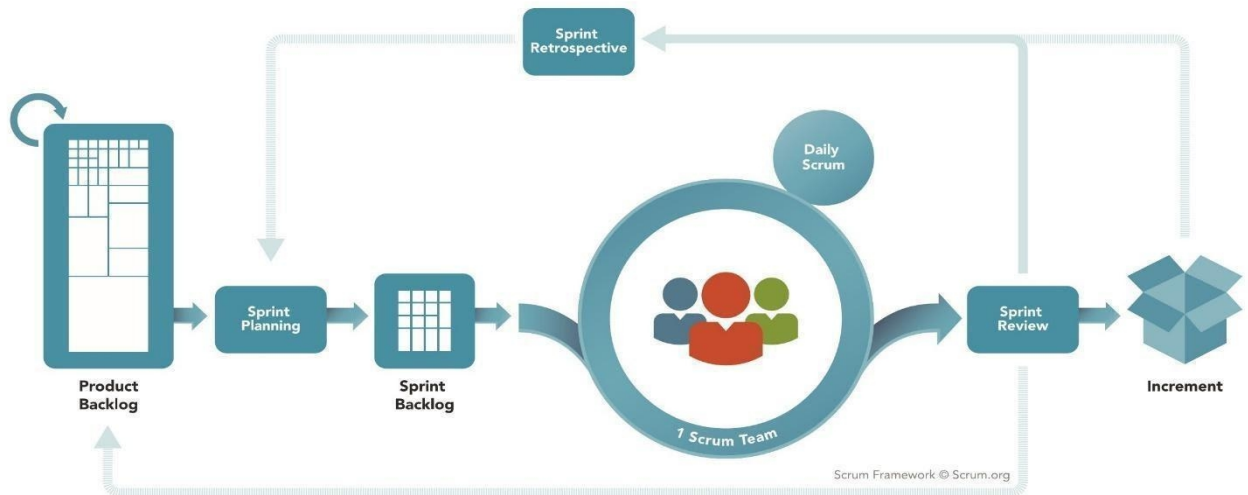


Figure 1 - <Reference> Scrum Framework

Reference: <https://www.scrum.org/resources/what-is-scrum>

Mumbi is developed using the Scrum model which is an agile framework for developing, delivering and maintaining products. Our team chooses this model for the following reasons:

- Scrum is designed for small and medium-sized projects, which is ideal for our four-person team.
- Each feature is assigned to two members, one is responsible for Front End, the other is in charge of Back End. This means that every person has to complete all the steps: designing, coding, implementing and testing, while still concentrating on their strengths. This allows us to work independently yet being able to collaborate and assist one another in every step of the process.
- For this project, each sprint spans 10 days and the duration of our product backlog is 11 sprints.

## 2.2. Quality Management

To maximize the project quality, our team will apply the following tactics to improve the project quality:

- User acceptance tests as we develop more features.
- Cross-review each other's code.

## 2.3. Training Plan

Training Area	Participants	When, Duration	Waiver Criteria
<b>C# &amp; .Net core</b>	All team member	20 man-days	Mandatory
<b>VueJs</b>	All team member	20 man-days	Mandatory
<b>Firebase</b>	All team member	4 man-days	Mandatory
<b>Git, Github</b>	All team member	2 man-days	Mandatory
<b>Flutter</b>	All team member	20 man-days	Mandatory

Table 5 - Training Plan

### 3. Project Communication

#### 3.1. Communication Plan

Communication Item	Who/target	Purpose	When, Frequency	Type, Tool, Method(s)
Computer	Team member	Internal communication	Always	Google meet
Phone	Supervisor	Upper Communication	Always	No
In-Person	Team members & Supervisor	Get everyone on the same page	Daily 2 times/week	Face to face
In-Person	Team members & End-user	Confirm process	Weekly	Face to face

Table 6 - Communication Plan

#### 3.2. External Interface

Function	Contact Person (name, position)	Contact address (email, telephone)	Responsibility
End-User	Vũ Thị Thùy Dương	<a href="mailto:duongvtt9@fe.edu.vn">duongvtt9@fe.edu.vn</a>	<ul style="list-style-type: none"> <li>- Provide document template</li> <li>- Give instruction to project team</li> <li>- Review deliverables</li> <li>- Supervise project status</li> </ul>

			<ul style="list-style-type: none"> <li>- Specify user requirement</li> <li>- Control the development process</li> <li>- Give out technique and business analysis support</li> <li>- Analyze business rules</li> <li>- Review the document and review project</li> </ul>
End-User	More than 25 users		- Using and feedback.

Table 7 – External Interface

## 4. Configuration Management

### 4.1. Tools & Infrastructures

Tools & Infrastructures	Names
Programming languages	C#, Dart
Framework	VueJS 2.6, .Net Core 2.2, Entity Framework, Flutter
DBMS	SQL Server
IDEs/Editors	Visual Studio Code, IntelliJ
UML tools	StarUML, Draw.io
Version Control	Git
Deployment server	Amazon Web Service
Project management tool	Trello

Table 8 – Tools & Infrastructures

### 4.2. Document Management

The project documents will be managed using Google Drive:

[https://drive.google.com/drive/folders/1DjlnHjuP8RjWHeyc4Zfa\\_1qxY0G-tZZd?usp=sharing](https://drive.google.com/drive/folders/1DjlnHjuP8RjWHeyc4Zfa_1qxY0G-tZZd?usp=sharing)

### 4.3. Source Code Management

The project source code will be managed: <https://drive.google.com/drive/folders/17qh683r3qlisoBvCvjtLFABuv3x0kvw?usp=sharing>

