



MINISTRY OF EDUCATION AND TRAINING

# FPT UNIVERSITY

## Capstone Project Document

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## Enhanced Calendar Management Module

Group 06 – IS	
<b>Group members</b>	Nguyễn Việt Thắng – SE05071(Leader) Trần Đăng Hùng – SE61931 Nguyễn Học Huy – SE62370
<b>Supervisor</b>	Ngô Đăng Hà An
<b>Project Manager</b>	Jason Ngo – Track&Roll Company
<b>Ext. Supervisor</b>	N/A
<b>Project Code</b>	ECMM

# **A. Introduction**

## **1. Project Information**

- Project name: Enhanced Calendar Management Module.
- Project code: ECMM
- Product type: Web application.
- Start Date: Wednesday, October 3<sup>rd</sup>, 2018.
- End Date: Friday, November 30<sup>th</sup>, 2018 (Estimated).

## **2. Introduction**

The “Enhanced Calendar Management Module” is intended to be a visual add-on with functionalities to complement the Track&ROLL existing Leave management modules. For the scope of this project, the emphasis will be 1 x user roles (which is the HR Master) to be using the Enhanced Calendar Management Module (in short “ECMM”).

Once kick started, a weekly progress status updates are expected from the talent students to the Track & Roll management so any clarifications, challenges, and/or alternative recommendations from the talent students can be reviewed promptly.

## **3. Current Situation**

## **4. Problem Definition**

## **5. Proposed Solution**

## **6. Functional requirements**

- View Calendar Year
- View Calendar Month
- View Calendar Day
- View All Event
- Add Event
- Edit Event
- Add Leave Request
- Approve Leave Request

## 7. Roles and Responsibilities

No	Full name	Role	Position	Contact
1	Ngô Đăng Hà An	Supervisor	Supervisor	AnNDH@fpt.edu.vn
2	Jason Ngo – T&R Company	Project Manager	Project Manager	jasonngo@tracknroll.com
2	Nguyen Viet Thang	Developer	Leader	thangnvse05071@fpt.edu.vn
3	Tran Dang Hung	Developer	Member	@fpt.edu.vn
4	Nguyen Hoc Huy	Developer	Member	HuyNHSE62370@fpt.edu.vn

*Table 1. Roles and responsibilities*

## B. Project Management Plan

### 1. Problem Definition

#### 1.1. Name of this Capstone

- Official name: Enhanced Calendar Management Module
- Abbreviation: ECMM

#### 1.2. Problem Abstract

Company want notification to employees about events and meeting of company. Employee want request to leave. To support system company reduce times for it, manage events and leave request faster.

#### 1.3. Project Overview

The purpose of this document is to list out the requirements specification of the stated project in order for the necessary development works to be done by the selected FPT UDB students as their Final Year Project and the developed modules will be under the Property of Track & Roll Sdn Bhd.

One of the main objectives of these are that the talent student can create value and solve the problems of organizations (in this case, Track & Roll Sdn Bhd) where in the process the students can grow in their skill sets and that in the longer term, be a potential employment resources (since they have the advantages of being trained from the beginning).

The skill sets to be shown by the talent student will include but not limited to the usage of Angular, PHP-Laravel and MySQL database for the implementation of the stated project.

#### **1.4. Development Environment**

## **2. Project Organization**

### **1. Software Process Model**

In this project, in order to set up a successful plan on developing software, we choose the Scrum Agile Framework allowing steps by steps. Benefits that Scrum Framework brings to us and reason that we choose are listed below:

- Time-saving: daily meetings to ensure that all the process is on the correct stage, as establish at the beginning of the project.
- Easy to use: it is a suitable model for working in team with small and medium project. For our current project, it is set to medium project.
- Fast response to change or update: The project manager may change the requirements or extend/reduce scope and we can adapt better. Sometimes we might prefer some update to PM to change the task suitable for team.
- Encourage teamwork: roles and tasks are all planned and divided to members also assigned effectively.
- Functional testing is needed and each task finished with the document shown the test case and status code.

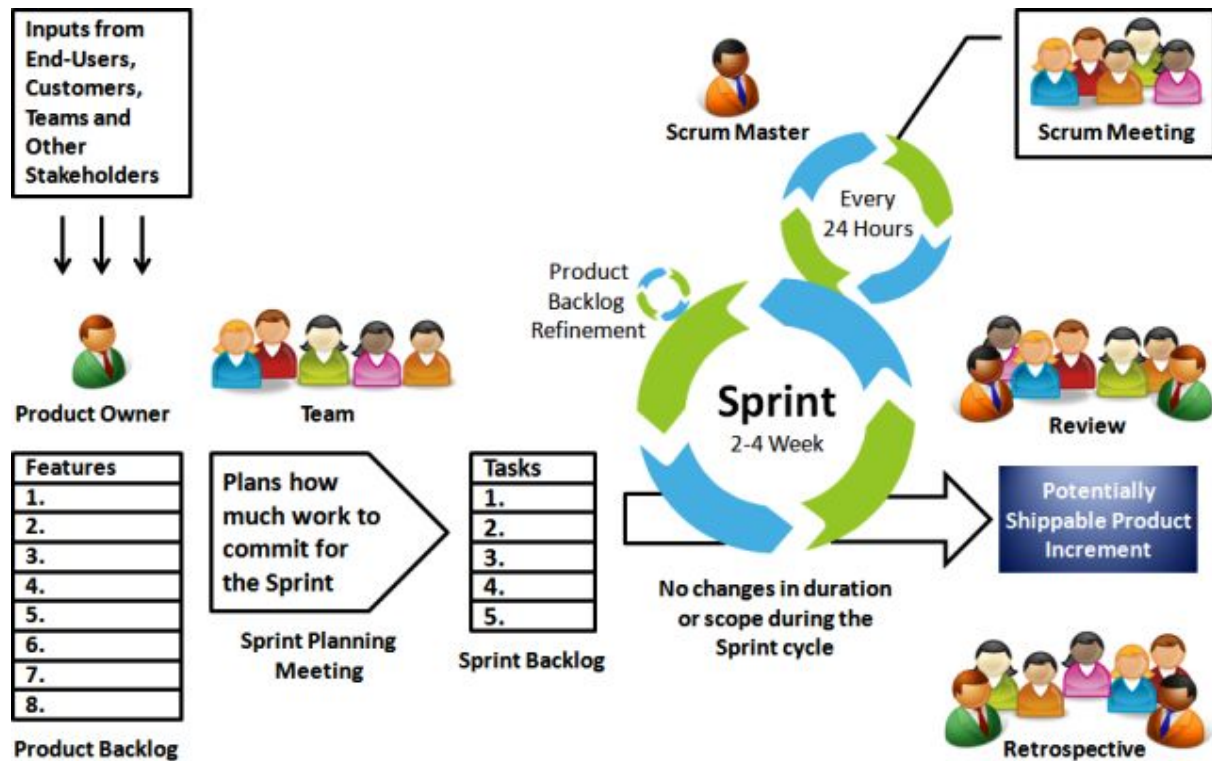


Figure 1. Scrum framework

## 2. Roles and Responsibilities

No .	Full name	Role in Group	Responsibilities
1	Ngô Đăng Hà An	Supervisor	<ul style="list-style-type: none"> <li>Receive the report and send feedback on the process of work</li> <li></li> </ul>
2	Jason Ngo	Project Manager	<ul style="list-style-type: none"> <li>Give questions for the problem unclear and specified the solution.</li> <li>Approved or Given feedback on the updated solution that team recommend</li> </ul>
2.	Nguyen Viet Thang	Team Leader, BA, Developer, Tester	<ul style="list-style-type: none"> <li>Manage process</li> <li>Clarify requirements</li> <li>Design GUI</li> <li>Code</li> <li>Write document and report</li> <li>Test</li> </ul>
3.	Tran Dang Hung	Team member,	<ul style="list-style-type: none"> <li>Clarify requirements</li> <li>Design GUI</li> <li>Code</li> </ul>

		Developer, Tester	<ul style="list-style-type: none"> <li>• Write document and report</li> <li>• Create test plan</li> <li>• Test</li> </ul>
4	Nguyen Hoc Huy	Team member, Developer, Tester	<ul style="list-style-type: none"> <li>• Plan Scrum implementations</li> <li>• Design database</li> <li>• Write document and report</li> <li>• Code</li> <li>• Test</li> </ul>

*Table 1. Roles and responsibilities details*

### 3. Tools and Techniques

Tool/Technique	Name/Version
Front-end	HTML5, CSS3, Bootstrap, Angular
Back-end	PHP, Laravel Framework Framework
Design Pattern	Requests and Repository Pattern (Laravel Framework)
Managing Database	XAMPP Server with MySQL
Task Management	Trello (and require meetup in lab)
Source Control	Sourcetree (server github.com) / Github
Modeling Tool	StarUML v2.8.1
Web Browser	Google Chrome

### 3. Project Management Plan

#### 3.1. Product Backlog

Story ID	Features	Task ID	Task description	Sprint
1	Create Product Backlog	1.1	Create product backlog	1

2	Create Introduction document	2.1	Create introduction document	1
		2.2	Review introduction document	1
3	Learning Technology	3.1	Learning PHP, Angular Framework	1
4	Create UI mockups	4.1	Calendar year view	2
		4.2	Calendar month view	2
		4.3	Calendar day view	2
		4.4	Add event UI	2
		4.5	Add leave request UI	2
		4.6	Manger leave request UI	2
5	Create Software Project Management Plan	5.1	Problem definition	2
		5.2	Project organization	2
		5.3	Project management plan	2
		5.4	Coding convention	2
6	Create Software Requirement Specifications	6.1	User requirement specification	3
		6.2	External interface requirement	3
		6.3	Use case diagram	2
		6.4	Software system attributes	3
		6.5	Database diagram	3
7	Create Software Design Description	7.1	Design overview	4, 5
		7.2	System architecture design	4, 5
		7.3	Component diagram	4, 5
		7.4	Detailed description of components	4, 5
		7.5	Sequence diagram	4, 5
		7.6	User interface design	2
		7.7	Database design	4
		7.8	Coding	5 đến 11
8	Create Software Test Documentation	8.1	Test Plan	12
		8.2	Test Cases	12
		8.3	Checklists	12
9	Software User's Manual	9.1	Installation Guide	13
		9.2	User's Guide	13

## 3.2. Deliverables

No	Deliverable	Delivery date	Delivery location	Note
1	Introduction Document, Task list	22/05/2018	Supervisor's office	Report No.1
2	Software Project Management Plan	29/5/2018	Supervisor's office	Report No.2
3	Software Requirements Specification	11/06/2018	Supervisor's office	Report No.3
4	Software Design Description	05/07/2018	Supervisor's office	Report No.4
5	Software Test Documentation Guide Implementation (Coding)	30/07/2018	Supervisor's office	Report No.5
6	Software User's Manual	14/08/2018	Supervisor's office	Report No.6

## 4. Coding Convention

### ◆ Naming conventions:

- Use pascal case for class names and method names.
- Use camel case for method arguments and local variables.
- Do not use underscore in identifiers. Except: prefix private static variables with an underscore.
- Use noun or noun phrases to name a class.
- Prefix interfaces with letter 'I'.

### ◆ Layout conventions:

- Tabs must be set exactly 4 spaces.
- Avoid lines longer than 80 characters.
- Vertically align curly brackets.
- Write only one statement per line.
- Write only one declaration per line.
- Add one blank line between method definitions and property definitions.

### ◆ Declaration:

- Use implicit type 'var' for local variable declarations. Except: primitive types (int, string, double, etc.) use predefined names.
- Organize namespaces with a clearly defined structure.



❖ **Commenting conventions:**

- Place comment on a separate line.
- Begin comment text with an uppercase letter and end with a period.
- Add one space between comment delimiter (//) and comment text.

**C. a**

**D. a**

**E. a**

**F. a**

**G. a**

**H.**