

Myanmar Software Engineer Contest 2020

Team Name: Charmers Tech

Date: 1/11/2020

Version: Second Version

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### 1. Project Overview

"Product Item Module" project is an outsourcing project which intends to solve the human resource problem of Active-A company. This web application allows users to insert new product items, search product items, delete products and edit product information if users have appropriate permission.

## 2. Project Organization

This describes the way in which the development team is organized, the people involved and their roles and responsibilities in the team. Team name is "Charmers Tech" which are grouped by five members.

No	Name	Role	Responsibilities
1.	Kaung Myat Soe	Team Leader	Backend, Documentation
2.	Tint Tint Tun	Team Member	Frontend, Documentation
3.	Nann Phue Phue Pwint Wai	Team Member	Frontend, Documentation
4.	Hlaing Yamin Thu	Team Member	Tester, Documentation
5.	Wunna Moe	Team Member	Tester, Documentation

**Table 1: Project Organization** 

# 3. Project Scope

Project Name	"Product Item Module"
In Scope	Users can operate CRUD of Product Items via laptop or desktop.
Out of Scope	This web application is a part of Stock controller system and CRUD of product item. So, we assumed that users use this web app via laptop or desktop. So, our project has some limitation for mobile phones.
Deliverable	Throughout the project, our team must deliver the first version of documentation, deployment note and final version of documentation.
Timeline	27/10/2020: Submit First Version of Documentation 1/11/2020: Present update version of documents and prototype of UI and API 7/11/2020: Submit Deployment Note and UAT 9/11/2020: Submit Final Version of Documentation and code development

**Table 2: Project Scope** 

# 4. Project Schedule

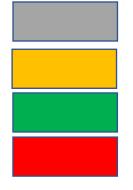
No	Task	Start Date	End Date
1.	Set Up System Requirements	24/10/2020	25/10/2020
2.	Assign Tasks to all members	25/10/2020	25/10/2020
3.	Prepare First Version of Documentation	26/10/2020	27/10/2020
4.	Submit First Version of Documentation	27/10/2020	27/10/2020
5.	Start User Interface Design and Backend	27/10/2020	29/10/2020
6.	Working on UI Design, Backend, Presentation, Testing and Updating the documentation	30/10/2020	31/10/2020
7.	Make Presentation	1/11/2020	1/11/2020
8.	Continuously, Working on UI Design, Backend, Testing and Updating the documentation	2/11/2020	6/11/2020
9.	Submit Deployment Note, UAT document and Project Demo	7/11/2020	7/11/2020
10.	Submit Final Version of Documentation	8/11/2020	9/11/2020

**Table 2: Project Schedule** 

## 5. Milestones and Monitoring

	Date	Documentation	Backend	Frontend	Testing	Remark
Milestone 1 For First	25/10/2020	Start	Start	Start	Start	
Version of Project Plan	26/10/2020	Working on it	Working on it	Start	Start	
	27/10/2020	Done	Working on it	Stuck	Start	First version of docx
Milestone 2 For Presentation	28/10/2020	Working on it	Working on it	Working on it	Working on it	
and Demo	29/10/2020	Working on it	Working on it	Working on it	Working on it	
	30/10/2020	Stuck	Working on it	Working on it	Working on it	
	31/10/2020	Done	Done	Done	Working on it	API & UI Dashboard
Milestone 3 For	1/11/2020					
Deployment Note, and	2/11/2020					
Final Version of Project	3/11/2020					
orroject	4/11/2020					
	5/11/2020					
	6/11/2020					
	7/11/2020					
	8/11/2020					
	9/11/2020					

**Table 3: Milestones and Monitoring** 



- **\*** Represent a preparing condition of project
- **\*** Represent a working condition of project
- **\*** Represent a finishing condition of project
- **\*** Represent a trying condition of project

## 3. Development Plan

The hardware and software required for the development and deployment of the system includes:

Hardware Requirement		PC and Internet Access
<b>Software Requirements</b>	Operating System	Window OS
	Application	Sublime Text 3.2.2,
		Xampp (v 3.2.4),
		Post Man, GitHub
	Web Server	Apache 2.4.46
	Browser	Chrome, Edge
Using Language	Frontend	HTML5, CSS,
		Bootstrap4
	Backend	PHP 7.4.10
	Database	MySql 15.1

**Table 4: Project Scope** 

## 6. Risk Plan

No	Category	Identify Risks	Risk Level	Mitigate Strategy
1.	Technology Risk	Unknown Technology such as API	High	Prepare prototype and tested
		Difficulties in deployment process	High	More detail on deployment note (step by step)
2.	Organization Risk	Misunderstanding with client regarding project requirements and expectations	High	Update client more frequently along the way with project progress
		Adjust the time with team members for meetings	High	Set a specific meeting date and time in advance
3.	Project Management Risk	Unexpected loss of valuable information and forget to save modified some files	High	Use GitHub to share valuable information within members and to use as a backup file
		The final project may be delayed	High	Learn more for each responsibility and help with each member

**Table 5: Identify Risks and Mitigate Strategy** 

### 7. Test Plan

### 7.1 Overview of Test Plan

Test plan is vital to the system. It makes a logical assumption that if all parts of the system are correct, the goal will be successfully achieved. "**Product Item Modules**" is tested by using **unit testing**. A series of testing are performed for the proposed system before the system is ready for user acceptance testing. Nothing is complete without testing, as it is a vital success of the system.

#### 7.2 Test Cases

Describes the test cases that will be employed to test CRUD of product item module.

Test Case	Description	<b>Expected Result</b>	Pass/Fail	Actual Result
1.	Click on "View Detail"	Make sure "View" Page should appear	Pass	"View Product" Page appear
1.	Click on "Add Product"	Make sure "Add Product" Page should appear	Pass	"Add Product" Page appear
2.	Click on "Edit Product"	Make sure "Edit Product" Page should appear	Pass	"Edit Product" Page appear
3.	Click "Delete Product"	Make sure "Confirmation box" appear	Pass	"Confirmation Box" appear

**Table 6: Sample Test Cases of CRUD** 

#### 7.4 Test Data

This web application will use following test data validations:

### **Data Type**

Application uses Varchar type for character, int for numeric, Double for price and Date for date type. Character never inputted in numeric field as amount, no never accept character if any person input wrongly.

### Length

When application define a max length, then it never accepts more data. For example, if it defines numeric length is 5, then it stores either equal to length or less than length. If user gives more character than required then it never accept.

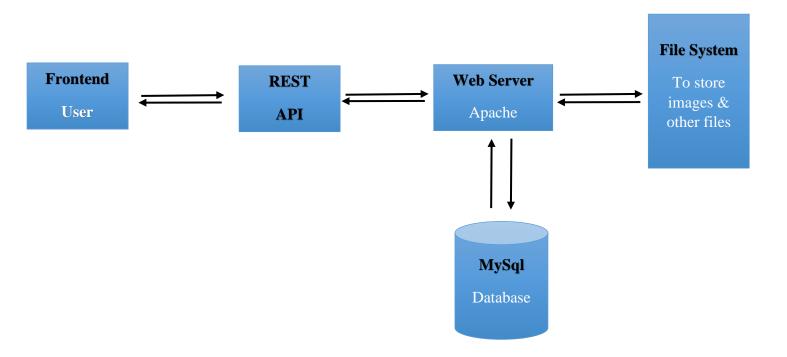
#### **Blank Filed**

If the data needed field is blank then it displays alert message box.

#### **Format**

The predefine format is used not change daily to daily. For example, format of date DD/MM/YYYY is used in all date type field. If user inserts another format then it never accepts.

# 8. High Level Design



# 9. Layering Architecture

