

**Capstone Project Report**

**<Votive Market>**

**Report 2 – Project Management Plan**

– Hanoi, August 2019 –

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# I. Record of Changes

|  |  |  |  |
| --- | --- | --- | --- |
| Date | A\* M, D | In charge | Change Description |
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\*A - Added M - Modified D - Deleted

# II. Project Management Plan

## 1. Overview

### 1.1 Scope & Estimation

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **WBS Item** | **Complexity** | **Est. Effort**  **(man-days)** |
| ***1*** | **Project Initiating** |  | ***21*** |
| 1.1 | Prepare Project Ideas | Medium | 9 |
| 1.2 | List up requirements | Medium | 5 |
| 1.3 | Define the scope of the project | Simple | 2 |
| 1.4 | Team meeting | Simple | 5 |
| 1.5 | Create Report 1 (Project Introduction) | Simple | 2 |
| ***2*** | **Project Planning** |  | ***37*** |
| 2.1 | Create Report 2 (Project Introduction) | Simple | 5 |
| 2.2 | Select Tools and techniques | Simple | 2 |
| 2.3 | Technical Training/Self Study | Medium | 25 |
| 2.4 | Team meeting | Simple | 5 |
| ***3*** | **Designing & Document** |  |  |
| 3.1 | Define & analyze requirements | Complex |  |
| 3.2 | List up use case | Medium |  |
| 3.3 | Define & analyze the main business flow | Complex |  |
| 3.4 | Design main screen mockup | Medium |  |
| 3.5 | Design database | Medium |  |
| 3.6 | Create report 3 (System requirement specification) | Medium |  |
| 3.7 | Create report 4 (Software Design Description) | Medium |  |
| ***4*** | **Analyzing & Designing** |  | ***9*** |
| 4.1 | Update list use case | Simple | 2 |
| 4.2 | Update database design | Medium | 2 |
| 4.3 | Design system architecture | Complex | 5 |
| ***5*** | **Code & Implementation** |  |  |
|  | Design home screen | Medium |  |
|  | Design authentication screen | Simple |  |
|  | Design product screen | Medium |  |
|  | Design shopping cart screen | Simple |  |
|  | Design shipping detail screen | Simple |  |
|  | Code sign up, sign in | Simple |  |
|  | Code view product | Medium |  |
|  | Code view add shopping cart | Medium |  |
|  | Code shipping detail | Medium |  |
| ***6*** | **Testing** |  |  |
|  | Create test case | Medium |  |
|  | Test | Simple |  |
|  | Verify test | Simple |  |
|  | Fix bug | Medium |  |

### 1.2 Project Objectives

Objective:

- All team members will follow the task assigned.

- All team members learn new knowledge, new technology.

- Have a beta test before the fishing the implementation phase

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Testing Stage** | **Test Coverage** | **No. of Defects** | **% of Defect** | **Notes** |
| 1 | Reviewing |  |  |  | Technical leader reviews code of  members before creating merging |
| 2 | Unit Test |  |  |  | Developer creates and tests |
| 3 | Integration Test |  |  |  | The tester creates and tests |
| 4 | System Test |  |  |  |  |
| 5 | Acceptance Test |  |  |  |  |

### 

### 1.3 Project Risks

*[List out the details on project risks in the table below]*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Risk Description** | **Impact** | **Possibility** | **Response Plans** |
| 1 | Incorrect estimates break the project plan | High | High | - Create a schedule carefully  - Add backup time (or backup schedule)  - Focus on close targets |
| 2 | Out of scope | Medium | Medium | -Always check the scope in every meeting.  -Notifications immediately when you see the problem.  -Have complete documentation on scopes before implementation. |
| 3 | Poor Productivity | Medium | High | -Create and review deadlines before starting work. |
| 4 | Inadequate Human Resources | Medium | Low | -Register overtime for team members. |
| 5 | Health has serious problems | Medium | Medium | -Reduced work for members who are having health problems.  -Rearranging the schedules of other members to support work. |
| 6 | Technical Difficulties | Medium | Medium | -Choose design patterns appropriate.  -Create architecture design more detail and exactly  -Have a professional in the team |
| 7 | Inadequate Risk Management | High | Medium | -Be prepared to face unexpected risks.  -Hold emergency meetings when there's a big problem. |

## 2. Management Approach

### 2.1 Project Process

### 2.2 Quality Management

- Defect Prevention:

* Once a defect is found, the related person in charge should be notified immediately.
* The defect must be assessed carefully such as "how bad is the defect?", "how long does it take to fix the defect?".
* The deadline for fixing defects must be clearly stated.

- Reviewing:

* The person in charge must be honest and show no favor over any member.
* If something goes wrong, that person must notify the person who takes responsibility for that defect.
* The defect must be logged on Bug Tracking software with details such as priority.
* The person who takes responsibility for the found defects must take action accordingly.

- Integration Testing:

* The person in charge must prepare test cases carefully and accurately. The test cases must match well with the system and architecture design.
* The defect must be logged on Bug Tracking software with details such as priority.
* The person who takes responsibility for the found defects must take action accordingly.
* Internal modules within the system work smoothly.

- Project management

### All tasks and issues are created in Github and Trello for members to follow and execute. The more tasks completed and the fewer bugs that exist, the better the quality of the project is guaranteed

### 2.3 Training Plan

*[You need to plan the training activities in case any of your team member lack of knowledge/skills to handle the project works]*

|  |  |  |  |
| --- | --- | --- | --- |
| Training Area | Participants | When, Duration | Waiver Criteria |
| .NET | All team members | 2 weeks | Mandatory |
| JavaScript & ReactJS | All team members | 1 weeks | Mandatory |
| Bootstrap | All team members | 5 days | Mandatory |
| MySql | All team members | 1 weeks | Mandatory |
| Git, Github | All team members | 1 day | Mandatory |

## 3. Project Deliverables

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Deliverable** | **Due Date** | **Notes** |
| 1 | Project Idea | 13/05/2022 |  |
| 2 | Report 1 – Project Introduction | 18/05/2022 | Product Background  Existing Systems  Business Opportunity  Product Vision  Project Scope & Limitations |
| 3 | Report 2 – Project Management Plan | 01/06/2022 | WBS  Project Process  Plan and Schedule  Project Organization  Project Communication  Configuration Management |
| 4 | Report 3 – SRS | 01/06/2022 | Business Rules  Use Case Diagram & Use Case  Description  Functional Requirements  Non-Functional Requirements |
| 5 | Report 4 – Software Design | 08/06/2022 | System Architecture  Architecture Design  Database design |
| 6 | Code |  | Detailed Design  Code & Unit test  Integration & System test cases |
| 7 | Code |  | Detailed Design  Code & Unit test  Integration & System test cases |
| 8 | Report 5 – Test Document |  | Detailed Design  Code & Unit test  Integration & System test cases |
| 9 | Report 6 – Software User Guides |  | Deliverable Package  Installation Guides  User Manual |
| 10 | Code & Final report |  |  |

## 4. Responsibility Assignments

*D~Do; R~Review; S~Support; I~Informed; <blank>- Omitted*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Responsibility** | **QuangVMHE130838** | **NhatDVSE05798** | **TuanBAHE130562** | **NghiepVVHE130373** | **DuyNSHE130132** |
| Project Planning & Tracking | S | R | R | D | R |
| Prepare Project Introduction Document | D | S | R | S | I |
| Prepare SRS Document (Overview Part) | D | D | S | S | R |
| Prepare SRS Document (User Requirements) | R | R | D | S | R |
| … |  |  |  |  |  |

## 5. Project Communications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Communication Item** | **Who/ Target** | **Purpose** | **When, Frequency** | **Type, Tool, Method(s)** |
| Daily Meeting | Team Members | Problem reporting and planning Problem-solving support. | 19h, every day | Quang’s Room |
| Weekly Meeting | Supervisor team members | Review members’ work in a week, report progress, and give problems to be solved. | Every Wednesday | University |
| Unscheduled Meeting | Team Members | When a serious problem occurs, it needs to be solved immediately |  | Google Meet |

## 6. Configuration Management

### 6.1 Document Management

We manage Document in Drive

### 6.2 Source Code Management

We manage Source Code in GitHub

### 6.3 Tools & Infrastructures

|  |  |
| --- | --- |
| **Category** | **Tools / Infrastructure** |
| **Technology** | .NET |
| **Database** | MySQL |
| **IDEs/Editors** | Visual studio |
| **Diagramming** | DrawIO |
| **Documentation** | Ms Office, Google Docs/Sheets/Slides |
| **Version Control** | GitHub (Source Codes), Google Drive (Documents) |
| **Deployment server** |  |
| **Project management** | GitHub (Tasks, Defects) |