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|  |
| Capstone Project Document |

**Vietnamese Medicinal Plants Network**

Report #1 – Project Plan

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| --- | --- | --- |
| **Vietnamese Medicinal Plants Network** | | |
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| **Project code** | VMN | |

**- Hanoi, 01/2016 -**

# SIGNATURE PAGE

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Record of change

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# Introduction

## Purpose

This part is the project management plan of Vietnamese Medicinal Network (VMN). Project – our Capstone Project in FPT University. It is included the project overview, project organization, tools and infrastructures, schedule of this project.

## Definitions and Acronyms

|  |  |  |
| --- | --- | --- |
| Acronym | Definition | Note |
| BA | Business Analyst |  |
| BU | Business Unit |  |
| CC | Infrastructure Configuration Controller |  |
| CM | Configuration Management |  |
| VMN | Vietnamese Medicinal Network |  |
| DEV | Developer |  |
| PIC | Person in charge |  |
| PM | Project Manager |  |
| PTL | Project Technical Leader |  |
| QA | Quality Assurance Officer |  |
| SRS | Software Requirement Specification |  |
| TC | Test Case |  |
| PCB | Process Capability Baseline |  |

Table ‑: Definitions and acronyms

# PROJECT OVERVIEW

## Project Description

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Code** | VMN | **Contract Type** | None |
| **Customer** | FPT University | 2nd Customer | None |
| **Project Level** | Group | Project Rank | None |
| **Application Type** | Website | Project Manager | Nguyen Minh Tien |
| **Project Category** | Development | Business Domain | E-commerce |

Table ‑: Project Description

## Scope and Purpose

### Purpose of Project

Vietnam Traditional Medicine, also known as eastern medicine, is an original treatment from Vietnam instead of China. Vietnam has the diversity and abundance of medicinal plants and traditional uses of medicinal plants, although the lack of search engines which access to information about medicinal plants.

Along with the strong development of science and technology, our group has an idea and aspiration which about create one system that provides information of medicinal plants in Vietnam, allows searching information on medicinal plants under the utility group.

With each system medicinal plants provides a detail: names of medicinal plants, referral information, descriptions, information on distribution, processing, effects, utility and prescription used medicinal plants.

### Scope of Project

Our project scope included:

* Developing user requirement and software requirement specification.
* Developing architecture and detailed design documents.
* Coding and unit test.
* Developing test case and execute system test.
* The developing software will have these following functions.

### The functions of Project

These are the functions of VMN’s project:

#### Member Module

* **Register:** Guest can register an account and login to use features of VMN system.
* **Login/Logout/ Forgot password:** Member can login/logout an account to use or exit system project. If member forgot password, they can reset their password again by email.
* **Search**:
  + **Search by name:** Member can search a medicinal plant at medicinal plant tab, a remedy at remedy tab by name
  + **Search by utility, allocation place, characteristics or multiple conditions (in search advance function):** member can search by utility, allocation place, characteristics or multiple conditions of medicinal plants or remedies and system will display result as a list which suitable with key words.
* **An article:**
  + **Contribute:** Member can create a new article of remedy or medicinal plants with basic info such as: name, utility, place of grow….
  + **Change content:** Member can edit and update their articles but they have to wait of Mod’s approving.
  + **Comment/Rate:** Member can comment/rate an article.
  + **Report:** Member can report an article when it has problem as duplicate, wrong information…to Mod.
  + **Approve new article:** Mod can set status of an article: pending to approved, pending to suspend, approved to suspend, etc.
  + **Approve article content’s change:** Mod has ability to approve article content’s change or article’s author.
  + **Delete:** Mod has ability to delete duplicate or invalid article.
* **Member’s information:**
  + **Change password:** Member can change password to keep security.
  + **Update profile:** Member can edit or update their information as name, address, avatar, ...

#### Admin Module

* **Manage member:**
  + **Search user**: Admin can search with name of user and system will display simple information about that user (name, email, phone number)
  + **Inactive/active user**: admin can set user’s account to inactive or active.
  + **Authorization**

#### Mod Module

* Manage Medicinal plant article:
* Search Medicinal plant article:
* **Basic search**: Mod can search by name of a Medicinal plant article and system will display result as a list which suitable with key words.
* **Advance search**: Search with utility, allocation place, description… or multiple conditions: Mod can search by utility, allocation place, description… of medicinal plants or remedies and system will display result as a list which suitable with key words.
* **Approve new Medicinal plants article**: Mod can set status of a Medicinal plant article: pending to approved, pending to suspend, approved to suspend, etc.
* **Approve change Medicinal plant article content**: Mod has ability to approve Medicinal plant article content’s change of author.
* **Add new Medicinal plants article**: Mod also can contribute a new medicinal plants as a member.
* **Change Medicinal plants article content**: Mod can edit and update their Medicinal plants article but he/she does not need to wait for approving.
* **Comment/Rate**: As a member, Mod also can comment/rate an article.
* **Share/ Like** an article through facebook.
* Manage Remedy article:
* Search Remedy article:
* **Basic search**: Mod can search by name of a Remedy article and system will display result as a list which suitable with key words.
* **Advance search**: Search with utility, description, usage… or multiple conditions: Mod can search by utility, description, usage… of medicinal plants or remedies and system will display result as a list which suitable with key words.
* **Approve new Remedy article**: Mod can set status of a Remedy article: pending to approved, pending to suspend, approved to suspend, etc.
* **Approve change Remedy article content**: Mod has ability to approve Remedy article content’s change of author.
* **Add new Remedy article**: Mod also can create a new remedy as a member.
* **Change Remedy article content**: Mod can edit and update their Remedy article but he/she does not need to wait for approving.
* **Comment/Rate**: As a member, Mod also can comment/rate a Remedy article.
* **Share/ Like** an article through facebook.

## Assumptions and Constraints

|  |  |  |
| --- | --- | --- |
| No | Description | Note |
| Assumptions | | |
|  |  |  |
| Constraints | | |
| 1 | This project must be completed and delivered before 22/01/2016 | Schedule |
| 2 | In doing project processing, PM must submit report (include 6 reports) on certain date. | Schedule |
| 3 | Software Requirement Specification Document and Project Plan must be completedwithin **3** dayssince18/01/2016  **Deadline**: 21/01/2016 | Schedule |
| 4 | Design Document (include Architecture Design, Screen Design, Database Design) must be completed within 4 days since 25/01/2016  Deadline:29/01/2016 | Schedule |
| 5 | Integration TestPlan (include test plan and test case…) must be completed within15dayssince22/10/2016  **Deadline**: 29/01/2016 | Schedule |
| 6 | Completed coding activity and have unit test result within 20 days since 05/13/2016  **Deadline**: 25/03/2016 | Schedule |
| 7 | Complete all of document and application before finishingtheprojecton22/04/2016 | Schedule |
| 8 | Project contains 4 members | Resource |

Table ‑: Project Description

## Project Objectives

### Standard Objectives

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metrics | Unit | Committed | Re-committed | Note |
| Start Date |  | 04-01-2016 |  |  |
| End Date |  | 22-04-2016 |  |  |
| Duration | Day | 85 |  |  |
| Team Size | Member | 4 |  |  |
| Billable Effort | Man-hour | 1280 |  |  |
| Calendar effort | Man-hour | 1280 |  |  |
| Effort Usage | % | 100 |  |  |

Table ‑: Standard Objectives 1

|  |  |  |
| --- | --- | --- |
| **Metrics** | **Unit** | **Basic for setting Goals** |
| **Average** |
| Customer Satisfaction | Point | 9.5 |
| Leakage | def/mm | 5 |
| Effort Efficiency | % | 95 |
| Timeliness | % | 100 |

Table ‑: Standard Objectives 2

### Specific Objectives

|  |  |  |  |
| --- | --- | --- | --- |
| **Metrics** | **Unit** | **Basic for setting Goals** | |
| **Plan** | **Actual** |
| Training technology: Laravel, Bootstrap, jQuery, PHP, MySQL, | Man-hour | 60 | 60 |
| Execute group review | Man-hour | 32 | 20 |
| Training requirements, process before coding | Man-hour | 32 | 20 |

Table ‑: Specific Objectives

## Critical Dependencies

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Dependency** | **Expected delivery date** | **Note** |
| 1 | This project must be completed and delivered to FPT University. | 22/04/2016 |  |
| 2 | Project Plan and SRS must be completed and delivered to Supervisor. | 23/01/2016 |  |
| 3 | User manual, Software Package and Installation Guide must be completed and delivered to Supervisor and FPT University. | 17/04/2016 |  |
| 4 | Beside Capstone Project, Team members have to joining in Japanese class and Japanese Fundamental Exam class. | 04/01/2016 |  |

Table ‑: Critical Dependencies

## Project Risk

PM identifies risks in the Risk Management Plan. The document is updated to trigger each milestone, each event also. The document is updated weekly by the PM, Risk Management Plan will be notified to all of the stakeholders affected. Status of risk is reported to supervisor at Project Milestones Report.

Reference to VMN\_Risk Management Plan\_v1.0\_EN.xlsx

# PROJECT DEVELOPMENT APPROACH

## Project Process

Process of this project is performed follow to Software Development Process of FPT Software.

### FPT Software Process Model



Figure ‑: FPT Software process model

The software lifecycle is broken into *cycles*, each cycle working on a new generation of the product. The FPT Software process divides one development cycle in six consecutive *phases*:

1. Initiation phase
2. Definition phase
3. Solution phase
4. Construction phase
5. Transition
6. Termination

### Project Life Cycle

Basing on FPT Software process and real-world project, we decided to divide the project into 4 phases: Initiation, Solution, Construction, and Termination:

* **Initiation Phase:** This is the explanatory phase of the project. Project objective and description is described at this stage. The purpose of this phase is to collect and understand business requirements, detail the project plan and agree upon a high level statement of work. Our primary objectives are complete project identification and project plan. After these are completed, the project is checked against the following criteria:
  + Identify business functions of the system
  + Determining the scope, conditions and limitations of the project
  + List the main functions of the system
  + List one or more suitable architecture for the system
  + Identify project risks
  + Complete Report #1, and Report #2
* **Solution Phase**: In this phase, the architecture of the system is designed. The goal is to translate requirements and specification into a technical solution to produce Technical Design.
  + Our *primary objectives* are completeRequirement Specification, Architecture Design and Database Design.
  + Finally, the plan must be provided (including estimates of cost and time) for the construction phase. The plan must ensure proper and accurate based on experience.
  + Complete Report #3 and Report #4
* **Construction Phase**: This is the longest phase of a project life cycle.
  + In this phase, all functions of the system will be installed. The installation will be divided into small stages, each stage of the installation a few functions. The results of each phase will be the release of the module function can be executed.
  + Construction and improvement of products until the final product is ready to deliver to the user. During this phase, all the components and other features of the application is developed and integrated into the product.
  + This phase emphasizes the resource management and control operations to optimize cost, time and quality.
  + Complete software packages and Report #5, Report #6
* **Termination Phase**: This is the final phase in the life cycle of a project.
  + Their products will be deployed to the client. The feedback received during the transfer process will be recorded and put on the new functional requirements or functionality enhancements in the next version of the product.
  + Phase transfer switch also includes the training system and the new system for the user.

## Requirement Change Management

|  |  |
| --- | --- |
| Who logs the change request? | Any team members |
| Who reviews the change request? | PM or who is assigned by PM |
| Who approves the change request? | PM by default. PTL if:   * Changes to project scope * Changes in delivery plan of project deliverables * Changes to assignment for key roles (PM, PTL) |

Table ‑: Requirement Change Management

## Quality Management

### Defect Prevention Strategy

|  |  |  |
| --- | --- | --- |
| **Item (Process/Product)** | **Strategy** | **Expected Benefits** |
| Requirement missing | List up all of requirement into SRS document. | 10–20% reduction in defect injection rate and about 2% improvement in productivity |
| Careless mistake in Design Document Format/Template wrong | After designing, QA will review Document Format base on checklist review design | Improvement in quality as overall defect removal efficiency will improve; some benefits in productivity as defects will be detected early |
| Use wrong template | Have a meeting to disseminate all template that is used in this project for all member | All member will use right template when do document |
| Coding application does not match with User Requirement. | Develop Team must study about Requirement/Design within 1 weeks since project is assigned.  PM and PTL has responsibility to review task results and explain User Requirement for Develop Team | Coding Application match with User Requirement. |

Table ‑: Defect Prevention Strategy

### Review Strategy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Review Item** | **Reviewer** | **Review Type** | **Review Method** | **Completion Criteria** |
| Project Plan  Project Schedule  CM Plan | PM, QA, Supervisor | Group review  Group review  One-person review | Use checklist and Self-review |  |
| Business analysis and requirements specification document, Use Case catalog | PM, QA, Supervisor | Group review and One-person review | Use checklist |  |
| Design document, object model | Self-review, PM, QA Supervisor | One-person Review | Use checklist |  |
| Stage plans | PM, QA, Supervisor | One-person review | Use checklist |  |
| Complex/first time generated program specs incl. test cases, interactive diagrams |  | Group review |  |  |
| Source code | Self-review, Peer review, PM, Supervisor | One-person review and Group review | Self-review and use checklist |  |

Table ‑: Review Strategy

### Unit Testing Strategy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item to be Unit Tested** | **Unit Test Type** | **Unit Test Technique** | **Tool Used** | **Unit Test Completion Criteria** |
| Source Code | White-Box Test | Using unit test case | None | - Statement coverage: 100%  - Branch coverage: 100%  - Path coverage: 100% |

Table ‑: Unit Testing Strategy

### Integration Testing Strategy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item to be Integration Tested** | **Integration Test Type** | **Integration Test Technique** | **Tool Used** | **Completion Criteria** |
| Do test by flow of functions and items which have concern each other | Black-Box Test |  | Checklist, Boundary | - Number of TC/functions: 10TC/function  - Number of defects/function: 1-2 defects/function |

Table ‑: Integration Testing Strategy

### System Testing Strategy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item to be System Tested** | **System Test Type** | **System Test Technique** | **Tool Used** | **Completion Criteria** |
| Test whole system | Black-Box Test |  | None | - Number of TC/functions: 20 TC/function  - Number of defects/function: 1-2 defects/function |

Table ‑: System Testing Strategy

### Estimates of Defects to be detected

|  |  |  |  |
| --- | --- | --- | --- |
| **Review/Testing Stage** | **Targeted No. of Defects to be detected** | **% of Defects to be detected** | **Basic for Estimation** |
| Requirements review | 20 | 14% | Referenced to similar project estimations |
| Design review | 15 | 10% | Referenced to similar project estimations |
| Code review | 30 | 20% | Referenced to similar project estimations |
| Unit Test | 20 | 14% | Referenced to similar project estimations |
| Integration Test | 5 | 3% | Referenced to similar project estimations |
| System Test | 35 | 25% | Referenced to similar project estimations |
| User Acceptance Test | 20 | 14% | Referenced to similar project estimations |
| Total | 145 | 100% |  |

Table ‑: Estimates of Defects

### Measurements Program

|  |  |  |  |
| --- | --- | --- | --- |
| **Data to be collected** | **Purpose** | **PIC** | **When** |
| Size: No. of KLOC | Achieve target | PM | At the end of stages |
| Effort: No. Man-hour | Monitor and controlling team member to keep plan. | Team members | Daily |
| Quality: No. defects detected | Managing product’s quality. | Reviewer  Tester | Right after the review/test |
| Schedule | Monitor and controlling software developing processing keep plan. | PM | Weekly and at the end of stages |

Table ‑: Measurements Program

# ESTIMATION

## Size

This project is performed and must complete all requirements from teacher and FPT University. So size of our project is in Capstone Project limit.

## Effort

The Effort estimation is documented in the table below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Initiation | Solution | Construction | Termination | Total |
| Effort(Man-hour) | 224 | 368 | 512 | 288 | **1280** |
| Total % budgeted Effort Usage (%) | 100 | 100 | 100 | 100 |  |

Table ‑: Effort Estimation

## Schedule

### Project Milestone & Deliverables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Stage** | **Committed Delivery date** | **Description of Deliverable** | **Delivery media** |
| Initiation | |  | Requirements agreed, Report 1 reviewed | |
| 1 | Develop project idea | 07-01-2016 | Project goals and scope defined, milestone description defined, resource committed | Commit Git |
| 2 | Q&A Management Sheet | 19-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 4 | Project Plan | 15-01-2016 | Criteria: Documentation reviewed | Commit Git |
| Solution | |  |  | |
| 1 | Screen Prototype | 19-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 2 | Architecture Design | 26-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 3 | Screen Design | 28-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 4 | Class Design | 29-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 5 | Detail Data Design | 27-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 6 | SRS | 21-01-2016 | Criteria: Documentation reviewed | Commit Git |
| 8 | Submit Test Plan Final | 19-02-2016 | Criteria: Documentation reviewed | Commit Git |
| Construction | |  | Product developed & tested and released to supervisor, documentation reviewed. | |
| 1 | Complete Test Case | 04-03-2016 | Criteria: Documentation reviewed | Commit Git |
| 2 | Complete Coding and Unit Test | 25-03-2016 | Source code  Acceptance criteria: Product unit tested | Commit Git |
| 4 | Complete Testing | 31-03-2016 | Completed Test | Commit Git |
| Termination | |  | Project post-mortem is conducted, Project assets archived and released to supervisor | |
| 1 | Lesson learned | 07-04-2016 | Criteria: Completed | Commit Git |
| 2 | Complete Presentation Slide | 13-04-2016 | Criteria: Completed | Commit Git |
| 3 | Represent capstone project | 27-04-2016 | Criteria: Completed | Commit Git |
| 4 | Project Complete | 29-04-2016 | Criteria: Completed | Commit Git |

Table ‑: Project Milestone and Deliverables

### Activity Schedule

The detail project schedule is available in file VMN\_ProjectSchedule\_v1.0\_EN.mpp. The Project Schedule is weekly updated by the Project Manager.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Activity** | **Start date** | **End date** | **Responsible** |
| Defect Prevention | | | | |
| 1 | Training coding convention | 22-02-2016 | 24-02-2016 | Nguyen Minh Tien |
| 2 | Training for Q&A and tester to use checklist | 25-02-2016 | 27-02-2016 | Tran Binh Khanh – Hoang Thi Quynh |
| **Quality Control** | | | | |
| 1 | Group review requirement | 25-01-2016 | 26-01-2016 | Team |
| 2 | Group review design | 07-02-2016 | 09-02-2016 | Tran Binh Khanh |
| 3 | Group review coding | 22-03-2016 | 24-03-2016 | Nguyen Minh Tien |
| Project Tracking | | | | |
| 1 | Solution: Milestone review meeting | 27-02-2016 | 28-02-2016 | Nguyen Minh Tien |
| 2 | Construction: Milestone review meeting | 06-04-2016 | 08-04-2016 | Nguyen Minh Tien |
| 3 | Transition: Milestone review meeting | 14-04-2016 | 15-04-2016 | Nguyen Minh Tien |
| Configuration Management | | | | |
| 1 | Baseline code | 17-02-2016 | 20-02-2016 | Nguyen Minh Tien |
| 2 | Base line test report, test case and test plan | 22-02-2016 | 29-02-2016 | Hoang Thi Quynh |
| Q&A | | | | |
| 1 | Q&A Sheet | 18-01-2016 | 19-01-2016 | Tran Binh Khanh |

Table ‑: Activity Schedule

## Resource

Specified as in the section 5.2. [Project Team](#_Project_team)

## Infrastructure

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Description** | **Expected Availability by** | **Note** |
| Development Environment | | | |
| Operating System | Ubuntu 14.04 LTS |  |  |
| Browser | Chrome (40 or above), Firefox (30 or above) |  |  |
| Development language | PHP, Javascript |  |  |
| Technology | | | |
| Development language | PHP, Javascript |  |  |
| Database | MySql 5.6 |  |  |
| Hardware Requirement | | | |
| Hardware Configuration | 2GB workspaces on server |  |  |
| Equipment & Tools | | | |
| Source Version Control | Git | Definition stage |  |
| Task Tracking | Trello ( https://trello.com) | Initiation stage |  |
| SRS | Microsoft Office Word 2013, Microsoft Office Excel 2013, Microsoft Office Visio 2013 | Initiation stage |  |

Table ‑: Infrastructure

## Training Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Training Area** | **Participants** | **Duration** | **Waiver Criteria** |
| **Technical** | | | |
| PHP | Dang NH, Khanh TB | 1 week | Mandatory |
| Javascript | KhanhTB, DangNH | 1 week | Mandatory |
| Bootstrap | DangNH – KhanhTB - QuynhHT | 1 week |  |
| **Process** | | | |
| Quality system |  | 3 hours | If already trained |
| Configuration management |  | 2 hours | If already trained for CC. For others, on-the-job training |
| Group review |  | 2 hours | If already trained |
| Defect prevention |  | 2 hours | Mandatory |

Table ‑: Training Plan

## Finance

Because this project is non-business, it is a Capstone Project at FPT University. So we do not estimate about finance.

# PROJECT ORGANIZATION

## Organization Structure

Figure ‑: Organization Structure

## Project Team

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Role** | **Responsibility** | **Full name** | **Effort (%)** | **Start date** | **End date** |
| PM | Have overall responsibility of the project:  - Project planning and scheduling  - Task assignment and tracking processing  - Review documents  - Reporting to supervisor | TienNM | 50 | 04-01-2016 | 25-04-2016 |
| PTL | PTL is responsible for the technical project execution | TienNM | 50 | 04-01-2016 | 25-04-2016 |
| Programmer #1 | - Study technique (PHP, Javascript)  - Coding functions and modules of system.  - Peer-review source code of others members | KhanhTB, DangNH | 50 | 04-01-2016 | 25-04-2016 |
| Programmer #2 | - Support coding functions and modules of system. | QuynhHT | 20 | 04-01-2016 | 22-04-2016 |
| Test Leader | - Create test plan, test case, test report, quality report  - Execute test. | QuynhHT | 80 | 04-01-2016 | 25-04-2016 |
| Tester | - Support creating test plan, test case, test report, quality report  Execute test. | KhanhTB | 20 | 04-01-2016 | 25-04-2016 |
| Design  Lead | - Create screen design, prototype  - Review design of others member | DangNH | 50 | 04-01-2016 | 25-04-2016 |
| Designer #1 | - Support creating screen design | KhanhTB | 30 | 04-01-2016 | 25-04-2016 |

Table ‑: Project Team description

The detail of Human resource budget allocation over the whole project life is in the below table:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Role** | **Name** | **W1-**  **Jan** | **W2-**  **Jan** | **W3-**  **Jan** | **W4-**  **Jan** | **W1-**  **Feb** | **W2-**  **Feb** | **W1-**  **Mar** | **W2-**  **Mar** | **W3-**  **Mar** | **W4-**  **Mar** | **W1-**  **Apr** | **W2-**  **Apr** | **W3-**  **Apr** | **W4-**  **Apr** | **Total (mh)** |
| PM/PTL | Nguyen Minh Tien | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 320 |
| Dev | Nguyen Hai Dang | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 320 |
| Dev | Tran Binh Khanh | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 320 |
| Test Leader/Dev | Hoang Thi Quynh | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 320 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1280 |

Table ‑: Human Resource Budget Allocation

## External Interfaces

### FPT University’s Interfaces

Table ‑: FPT University’s Interface

|  |  |  |  |
| --- | --- | --- | --- |
| **Department** | **Contact Person**  **(name-position)** | **Contact address**  **(email, telephone)** | **Responsibility** |
| Supervisor | Nguyen Van Sang | [SangNV@fpt.edu.vn](mailto:SangNV@fpt.edu.vn) | - Review and accept documents during project  - Review and accept products of the project.  - Resolve escalated issues and receive project reports. |
| Training Department |  | [acad.hn@fpt.edu.vn](mailto:acad.hn@fpt.edu.vn) | Management course of student |

# COMMUNICATION & REPORTING

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Communication Type** | **Method/Tool** | **When** | **Information** | **Participants/ Responsible** |
| Project Task Tracking | | | | |
| Task scheduling | MS Project Professional 2013 | At the beginning of every stage, and weekly  Refinement and rescheduling as necessary |  | PM |
| Task assignment | MS Project Professional 2013 | Weekly |  | PTL |
| Task status reporting | Face to face | Daily |  | Project Team members |
| **Project Meeting** | | | | |
| Kick-off Meeting | Face to face | Initiation stage | Project introduction; Project plan review; Risk identification; stakeholders identify. | PM, Project Team Members |
| Project Progress Review Meetings | Face to face | Weekly and on event | Communicate project status  Communicate and resolve any open issue, risks, and changes  Discuss any suggested improvement | PM, Project Team Members |
| Milestone Meetings | Face to face | 5 days after the completion of stages: Definition, Solution & Construction | Project objective review, evaluate project performance (quality, schedule, effort), Causal analysis, update project plan for next stage | PM, Project Team Members, QA, Supervisor |
| **Supervisor Communication and Reporting:** | | | | |
| **Communication with Supervisor** | | | | |
| Transfer/Sharing of project documentation/information | Git | When available | All project documentation and information | PM, Project Team Members, QA |
| Project Report | Agreed FPT Software and FU standard format | 5pm Monday, Weekly | Project status report, Issue requiring clarifications, escalation, if any | PM |
| Project Meetings with supervisor | Face to face | 5h15 Thursday or Friday Weekly | As above | PM |
| Requirement gathering/clarification | Face to face meeting | During requirement analysis phase | As in Q&A list | PM |
| Review Project Plan & Project schedule | By attend project meeting | Significant changes to WO, PP and Project schedule (scope, objectives Organization, HR, major milestone, deliverables ) |  | PM |
| Project Progress Review | By email and/or via Operation meeting at Group/Division level | Weekly | Project status report, Issue requiring clarifications, escalation, if any | PM |
| Project Milestone Review | By email and via project milestone review meeting | End of every stage | Project objective review, evaluate project performance (quality, schedule, effort), Causal analysis, update project plan for next stage | PM |

Table ‑: Communication and Reporting Plan

# CONFIGURATION MANAGEMENT

The detail configuration management is available in file:**VMN\_CMPlan\_v1.0\_EN.docx**.