

FLY AWAY PLUS

**Project Plan**

Project Code: FAP

Document Code: FAP\_Project Plan\_v1.0\_EN

# **SIGNATURE PAGE**

AUTHOR: Hoàng Nghĩa Đức 21/05/2015

Project Manager

REVIEWERS: Dương Thanh Hải 22/05/2015

Team member

APPROVAL: Nguyễn Văn Sang --/--/2015

Supervisor

Record of change

\*A - Added M - Modified D – Deleted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Effective Date | Changed Item | A,M,D | Change Description | Reason for Change | Rev. Number |
| 21/May/2015 | Create Project Plan | A |  |  | 1.0 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table of Contents

[**DEFINITIONS AND ACRONYMS** 4](#_Toc420201176)

[**1** **PROJECT OVERVIEW** 5](#_Toc420201177)

[1.1 Project Description 5](#_Toc420201178)

[1.2 Scope and Purpose 5](#_Toc420201179)

[1.2.1 Purpose of Project 5](#_Toc420201180)

[1.2.2 Scope of Project 5](#_Toc420201181)

[1.2.3 The functions of Project 5](#_Toc420201182)

[1.3 Assumptions and Constraints 8](#_Toc420201183)

[1.4 Project Objectives 9](#_Toc420201184)

[1.4.1 Standard Objectives 9](#_Toc420201185)

[1.4.2 Specific Objectives 9](#_Toc420201186)

[1.5 Critical Dependencies 10](#_Toc420201187)

[1.6 Project Risk 10](#_Toc420201188)

[2 **PROJECT DEVELOPMENT APPROACH** 11](#_Toc420201189)

[2.1 Project Process 11](#_Toc420201190)

[2.1.1 FPT Software Process Model 11](#_Toc420201191)

[2.1.2 Project Life Cycle 12](#_Toc420201192)

[2.2 Requirement Change Management 13](#_Toc420201193)

[2.3 Quality Management 13](#_Toc420201194)

[2.3.1 Defect Prevention Strategy 13](#_Toc420201195)

[2.3.2 Review Strategy 14](#_Toc420201196)

[2.3.3 Unit Testing Strategy 14](#_Toc420201197)

[2.3.4 Integration Testing 15](#_Toc420201198)

[2.3.5 System Testing 15](#_Toc420201199)

[2.3.6 Estimates of Defects to be detected 15](#_Toc420201200)

[2.3.7 Measurements Program 16](#_Toc420201201)

[3 ESTIMATION 16](#_Toc420201202)

[3.1 Size 16](#_Toc420201203)

[3.2 Effort 16](#_Toc420201204)

[3.3 Schedule 16](#_Toc420201205)

[3.3.1 Project Milestone & Deliverables 16](#_Toc420201206)

[3.3.2 Activity Schedule 18](#_Toc420201207)

[3.4 Resource 19](#_Toc420201208)

[3.5 Infrastructure 19](#_Toc420201209)

[3.6 Training Plan 20](#_Toc420201210)

[3.7 Finance 21](#_Toc420201211)

[4 Project Organization 21](#_Toc420201212)

[4.1 Organization Structure 21](#_Toc420201213)

[4.2 Project Team 21](#_Toc420201214)

[4.3 External Interfaces 0](#_Toc420201215)

[4.3.1 FPT Software Interfaces 0](#_Toc420201216)

[4.3.2 FPT University’s Interfaces 0](#_Toc420201217)

[5 Communication & Reporting 1](#_Toc420201218)

[6 Configuration Management 3](#_Toc420201219)

# **DEFINITIONS AND ACRONYMS**

|  |  |  |
| --- | --- | --- |
| Acronym | Definition | Note |
| BA | Business Analyst |  |
| BU | Business Unit |  |
| CC | Infrastructure Configuration Controller |  |
| CM | Configuration Management |  |
| 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 |  |
| FAP | Fly Away Plus |  |

# **PROJECT OVERVIEW**

## Project Description

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Code** | FAP | **Contract Type** | None |
| **Customer** | FPT University | 2nd Customer | None |
| **Project Level** | Group | Project Rank | None |
| **Application Type** | Website | Project Manager | Hoàng Nghĩa Đức |
| **Project Category** | Development | Business Domain | Travelling |

**Table 1.1.** Project Description

## Scope and Purpose

### Purpose of Project

Nowadays there are many social networks, and many people update every moments of their life on social network to share with friends and keep it as an archive, so they can see things they have on their life on past. All of social networks have been create for the purpose of helping users sharing and connecting to friends.

Our project – FAP will include some main functions of existing social networks and add some new features such as create room, connect user’s trips as a journey of their life. With the slogan “Share all we have!” we toward on sharing information and experiences between users and spread the joy of travelling together.

### Scope of Project

The scope of this project contains: Requirement Analysis, Design, Coding and Testing (Unit Test, Integration Test, and System Test).

### The functions of Project

These are the functions of FAP’s project:

* **Search**: User and guest can search for places, food and drinks, experiences or friends and FAP will display results match with words user have searched. With searching features, user can easily search information of places they want to go, things they can experience at this places, and finding people who want to go to this place. The very new point and useful of FAP when compare with others is FAP is not only show the results match with words user have search but also show things related. User have the following searching option:
  + *Searching with name of places:* user can search with name of a place and FAP will display information about place(s), things related to this places (post, photos, reviews, suggestion etc…), friends and other users are going to/went to this place(s). FAP will also suggest rooms for user (information about room features are below)
  + *Searching with name of friends, group or another user:* user can search with name of friends, groups or another users (who is not friend with user), FAP will display basic information of user and link to user’s homepage
  + *Searching with name of food, drinks, or activities (skies, swimming, diving…):* user can search with name of food, drinks or activities…and FAP will suggest places to enjoying. FAP will also suggest like-minded people.
  + *Searching by maps:* User can search for a place directly on maps.
* **Registering:** User can register an account and login to use all features of FAP
* **Suggesting:** FAP can suggest places, activities or friends for user (must-go places, trendy activities, friend’s activities etc…)
* **Look around:** User can check-in and look around their position and see suggestion about places, activities, experiences
* **News feed: User can see friends’ sharing**
* **Timeline:** User personal information and all posts will display on user’s timeline
* **Sharing:** User can share their trips, destinations, photos, videos or write review to their personal page, their post will appear on the News Feed.
* **Like/dislike and comment:** User can like/dislike and comment on others’ post
* **Share:**  User can share a post (depend on this post’s privacy)
* **Report:** User can report a post to administrator
* **Connecting:** Registered user can connect with others
  + **Add friends:** User can add other users as friends, friend’s posts will appear on user’s news feed.
  + **Follow other users:** User can see others’ post without become friends with those user
  + **Tagging:** User can tag friends to a post
* **Room:** This is a new useful features of FAP for connecting users. In a room, user can discuss, share information and make a plan for their journey with others
  + **Create a room:** User can create a room with expected number of peoples
  + **Manage room:** User who has created the room as administrator can manage privacy of this room, manage resources and member of room. Admin of a room can set another to admin to share responsibilities.
  + **“Ready to go”:** When every member of room are ready to start a journey, the room will be temporarily closed
  + **Join to others’ rooms:** There are private room and public room, the privacy will be set by administrator of room
    - **Private room:** With this kind of privacy, room cannot be found in search result, user only can join a private room when they are invited by this room’s member.
    - **Public room:** With this kind of privacy, room can be found in search result, all of the users can join this kind of room.
* **Managing account:** User can manage their personal information
  + **Login/Logout**: User can login to use more features of FAP. User can register an account to login or login by using Facebook, Google account.
  + **Changing password/Forgetting password**: User can change new password or require new password if user forgot current password.
* **Managing member**: Admin can review report sent from users. If the report is reasonable, admin can delete post, send warning to user who has reported, admin can also lock/unlock users’ account.

## Assumptions and Constraints

|  |  |  |
| --- | --- | --- |
| No | Description | Note |
| Assumptions | | |
| 1 | Japaneseteacher will support for the team in reviewing Japanese language of documents and interface of website | Resource |
| 2 | Customer reviewers will get seven days to approve a milestone document. If no comments are received within this time period, it will be considered as approved. | External Interfaces |
| Constraints | | |
| 1 | This project must be completed and delivered before 17/08/2015 | 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 completedwithin20dayssince18/05/2015  **Deadline**: 10/06/2015 | Schedule |
| 4 | Design Document (include Architecture Design, Screen Design, Database Design) must be completed within 15 days since 01/06/2015  Deadline:15/06/2015 | Schedule |
| 5 | Integration TestPlan (include test plan and test case…) must be completed within15dayssince15/06/2015  **Deadline**: 30/06/2015 | Schedule |
| 6 | Completed coding activity and have unit test result within 30 days since 23/06/2015  **Deadline**: 24/07/2015 | Schedule |
| 8 | Deliver report about User manual, software package and installation guide on 5 days since 01/08/2015  **Deadline**: 05/08/2015 | Schedule |
| 9 | Complete all of document and application before finishingtheprojecton17/08/2015 | Schedule |
| 10 | Project contains 6 members | Resource |

## Project Objectives

### Standard Objectives

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metrics | Unit | Committed | Re-committed | Note |
| Start Date |  | 11-05-2015 |  |  |
| End Date |  | 17-08-2015 |  |  |
| Duration | Day | 84 |  |  |
| Team Size | Person | 6 |  |  |
| Billable Effort | Person-day | 504 |  | 1 Person-day = 5 hours |
| Calendar effort | Person-day | 504 |  | 1 Person-day = 5 hours |
| Effort Usage | % | 100 |  | 1 Person-day = 5 hours |

**Table 1.3.** Standard Objectives

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

### Specific Objectives

|  |  |  |  |
| --- | --- | --- | --- |
| **Metrics** | **Unit** | **Basic for setting Goals** | |
| **Plan** | **Actual** |
| Training technology: MVC, Bootstrap, Javascript, jQuery, AJAX | Person-day | 15 | 15 |
| Execute group review | Person-day | 8 | 5 |
| Training requirements, process before coding | Person-day | 8 | 5 |

## Critical Dependencies

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Dependency** | **Expected delivery date** | | **Note** |
| 1 | This project must be completed and delivered to FPT University. | 28/08/2015 |  | |
| 2 | All Team member have Summer holiday from 22/06/2015 | 28/06/2015 |  | |
| 3 | Project Plan and SRS must be completed and delivered to Supervisor. | 10/06/2015 |  | |
| 4 | User manual, Software Package and Installation Guide must be completed and delivered to Supervisor and FPT University. | 10/08/2015 |  | |
| 5 | Beside Capstone Project, Team members have to joining in Japanese class and Japanese Fundamental Exam class. | 24/07/2015 |  | |

## 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 FAP\_Risk Management Plan\_v1.1\_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 1.1.** 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 PM assign |
| 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) |

## 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. | Coding Application match with User Requirement. |

### Review Strategy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Review Item** | **Reviewer** | **Review Type** | **Review Method** | **Completion Criteria** |
| Project Plan  Project Schedule  CM Plan | PM,QA,PTLs, 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, Team Lead, PM, Supervisor | One-person review and Group review | Self-review and use checklist |  |

### 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 and test script | None | - Number of UTC/KLOC: 40 UTC/KLOC  - Number defects/KLOC: 3-4 defects/KLOC  - Statement coverage: 97%  - Branch coverage: 100%  - Path coverage: 100% |

### Integration Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 UTC/KLOC: 30  - Number of defects/KLOC: 2-3 |

### System Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item to be System Tested** | **System Test Type** | **System Test Technique** | **Tool Used** | **Completion Criteria** |
| Test whole system | Black-Box Test |  | None | -Number of UTC/KLOC: 60  -Number of defects/KLOC: 4-6 |

### 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 | 10 | 7% | Referenced to similar project estimations |
| Design review | 15 | 11% | Referenced to similar project estimations |
| Code review | 30 | 22% | Referenced to similar project estimations |
| Unit Test | 50 | 38% | Referenced to similar project estimations |
| Integration Test | 15 | 11% | Referenced to similar project estimations |
| System Test | 10 | 7% | Referenced to similar project estimations |
| User Acceptance Test | 5 | 4% | Referenced to similar project estimations |
| **Total** | **135** | **100%** |  |

### Measurements Program

|  |  |  |  |
| --- | --- | --- | --- |
| **Data to be collected** | **Purpose** | **PIC** | **When** |
| Size: No. of KLOC | Achieve target | PM | At the end of stages |
| Effort: No. person-day | 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 |

# 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(person/day) | 72 | 144 | 216 | 72 | **504** |
| Total % budgeted Effort Usage (%) | 100 | 100 | 100 | 100 |  |

## Schedule

### Project Milestone & Deliverables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Stage** | **Committed Delivery date** | **Description of Deliverable** | **Delivery media** |
| Initiation | |  | Requirements agreed, Report 1 reviewed | |
| 1 | Develop project idea | 12-05-2015 | Project goals and scope defined, milestone description defined, resource committed |  |
| 2 | Q&A Management Sheet | 13-05-2015 | Criteria: Documentation reviewed |  |
| 3 | Submit report no.1 final | 24-5-2015 | Completed report no.1 |  |
| 4 | Project Plan | 28-05-2015 | Criteria: Documentation reviewed |  |
| 5 | Submit report no.2 final | 31-05-2015 | Completed report no.2 |  |
| Solution | |  |  | |
| 1 | Screen Prototype | 10-06-2015 | Criteria: Documentation reviewed |  |
| 2 | Architecture Design | 12-6-2015 | Criteria: Documentation reviewed |  |
| 3 | Screen Design | 10-06-2015 | Criteria: Documentation reviewed |  |
| 4 | Class Design | 11-06-2015 | Criteria: Documentation reviewed |  |
| 5 | Detail Data Design | 11-6-2015 | Criteria: Documentation reviewed |  |
| 6 | SRS | 20-06-2015 | Criteria: Documentation reviewed |  |
| 7 | Submit Report no.3 Final | 20-06-2015 | Completed report no.3 |  |
| 8 | Submit Test Plan Final | 23-06-2015 | Criteria: Documentation reviewed |  |
| 9 | Create Unit Test Case | 28-06-2015 | Criteria: Documentation reviewed |  |
| 10 | Submit Report no.4 Final | 30-06-2015 | Completed report no.4 |  |
| Construction | |  | Product developed & tested and released to supervisor, documentation reviewed. | |
| 1 | Review Test Document | 09-07-2015 | Criteria: Documentation reviewed |  |
| 2 | Submit report no.5 Final | 16-07-2015 | Completed report no.5 |  |
| 3 | Complete Coding and Unit Test | 24-07-2015 | Source code  Acceptance criteria: Product unit tested |  |
| 4 | Complete Testing | 31-07-2015 | Completed Test |  |
| 5 | Submit report no.6 Final | 11-08-2015 | Completed report no.6 |  |
| 6 | Submit the last document and CD source code | 21-08-2015 | Final Documents and Source Code |  |
| Termination | |  | Project post-mortem is conducted, Project assets archived and released to supervisor | |
| 1 | Lesson learned | 22-8-2015 | Criteria: Completed |  |
| 2 | Complete Presentation Slide | 28-8-2015 | Criteria: Completed |  |
| 3 | Represent capstone project | 30-08-2015 | Criteria: Completed |  |
| 4 | Project Complete | 30-8-2015 | Criteria: Completed |  |

### Activity Schedule

The detail project schedule is available in file FAP\_ProjectSchedule.mpp. The Project Schedule is weekly updated by the Project Manager.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Activity** | **Start date** | **End date** | **Responsible** | **End date** |
| Defect Prevention | | | | | |
| 1 | Training coding convention C#, Javascript | 25-5-2015 | 26-5-2015 | Duong Thanh Hai |  |
| 2 | Training for Q&A and tester to use checklist | 19-5-2015 | 26-5-2015 | Le Minh Thuy |  |
| **Quality Control** | | | | | |
| 1 | Group review requirement | 26-5-2015 | 26-5-2015 | Hoang Nghia Duc |  |
| 2 | Group review design | 27-6-2015 | 27-6-2015 | Hoang Nghia Duc |  |
| 3 | Group review coding | 8-8-2015 | 8-8-2015 | Hoang Nghia Duc |  |
| Project Tracking | | | | | |
| 1 | Solution: Milestone review meeting | 27-6-2015 | 27-6-2015 | Hoang Nghia Duc |  |
| 2 | Construction: Milestone review meeting | 8-8-2015 | 8-8-2015 | Hoang Nghia Duc |  |
| 3 | Transition: Milestone review meeting | 15-8-2015 | 15-8-2015 | Hoang Nghia Duc |  |
| Configuration Management | | | | | |
| 1 | Baseline code | 6-6-2015 | 6-6-2015 | Duong Thanh Hai |  |
| 2 | Base line test report, test case and test plan | 8-8-2015 | 8-8-2015 | Le Minh Thuy |  |
| Q&A | | | | | |
| 1 | Final Inspection: Report 1 | 23-05-2015 |  | Phan Tien Luc |  |
| 2 | Final Inspection: Report 2 | 02-06-2015 |  | Phan Tien Luc |  |
| 3 | Final Inspection: Report 3 | 12-6-2015 |  | Phan Tien Luc |  |
| 4 | Final Inspection: Report 4 | 30-6-2015 |  | Phan Tien Luc |  |
| 5 | Final Inspection: Report 5 | 18-7-2015 |  | Phan Tien Luc |  |
| 6 | Final Inspection: Report 6 | 15-8-2015 |  | Phan Tien Luc |  |

## Resource

Specified as in the section 4.2. [Project Team](#_Project_team)

## Infrastructure

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Description** | **Expected Availability by** | **Note** |
| Development Environment | | | |
| Operating System | Window 8.1 (32 bit, 64 bit) |  |  |
| Browser | Chrome, Firefox (all version) |  |  |
| Development language | .NET C# |  |  |
| Technology | | | |
| Development language | .NET C#, MVC Model |  |  |
| Database | SQL Server 2012 |  |  |
| Hardware Requirement | | | |
| Hardware Configuration | 2GB workspaces on server |  |  |
| Equipment & Tools | | | |
| Source Version Control | TortoiseGit | Definition stage |  |
| Task Tracking | MS Project Professional 2013 | Initiation stage |  |
| SRS | Microsoft Office Word, Microsoft Office Excel, Microsoft Office Visio | Initiation stage |  |

## Training Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Training Area** | **Participants** | **Duration** | **Waiver Criteria** |
| **Technical** | | | |
| .NET MVC5 | HoangNM, ThuyLM | 1 week | Mandatory |
| Javascript, jQuery, AJAX | HoangNM, ThuyLM | 1 week | Mandatory |
| Bootstrap | HoangNM | 1 day |  |
| **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 |

## 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

## 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 | Hoang Nghia Duc | 100 | 12-5-2015 | 30-8-2015 |
| PTL | PTL is responsible for the technical project execution | Duong Thanh Hai | 100 | 12-5-2015 | 30-8-2015 |
| Dev #1 | Coder | Nguyen Minh Hoang | 100 | 12-5-2015 | 30-8-2015 |
| Dev #2 | Coder | Phan Tien Luc | 100 | 12-5-2015 | 30-8-2015 |
| Test Leader | - Create test plan, test case, test report, quality report  - Execute test. | Le Minh Thuy | 100 | 12-5-2015 | 30-8-2015 |
| Tester #1 | - Support creating test plan, test case, test report, quality report  Execute test. | Tran Manh Hieu | 100 | 12-5-2015 | 30-8-2015 |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Role | Name | W2-  May | W3-  May | W4-  May | W1-  Jun | W2-  Jun | W3-  Jun | W4-  Jun | W1-  Jul | W2-  Jul | W3-  Jul | W4-  Jul | W1-  Aug | W2-  Aug | W3-  Aug | Total (pd) |
| PM | Hoang Nghia Duc | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| PTL | Duong Thanh Hai | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| Dev | Nguyen Minh Hoang | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| Dev | Phan Tien Luc | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| TestLeader | Le Minh Thuy | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| Tester | Tran Manh Hieu | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 84 |
| **Total** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **504** |

## External Interfaces

|  |  |  |  |
| --- | --- | --- | --- |
| **Department** | **Contact Person**  **(name-position)** | **Contact address**  **(email, telephone)** | **Responsibility** |
| Teacher | Pham Ngoc Ha | [HaPN@fsoft.com.vn](mailto:HaPN@fsoft.com.vn) | Explain whole questions about JS course |

### FPT Software Interfaces

|  |  |  |  |
| --- | --- | --- | --- |
| **Department** | **Contact Person**  **(name-position)** | **Contact address**  **(email, telephone)** | **Responsibility** |
| Teacher | Nguyen Van Sang | 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 | Management course of student |

### FPT University’s Interfaces

# 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 | x | PM |
| Task assignment | MS Project Professional 2013 | Weekly |  | PTL |
| Task status reporting | Daily Report | 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 |
| Transfer/Sharing of project documentation/information | TortoiseGit | When available | All project documentation and information | PM, Project Team Members, QA |

|  |
| --- |
| Supervisor Communication and Reporting: |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 | 12h45 Friday, Weekly | As above | PM |
| Requirement gathering/clarification | Face to face meeting | During requirement analysis phase | As in Q&A list | PM |

|  |
| --- |
| Communication with Supervisor |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |

# Configuration Management

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