** MINISTRY OF EDUCATION AND TRAINING**

**FPT UNIVERSITY**

Capstone Project Document

Find Fit Shoes

|  |  |
| --- | --- |
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| **Ext. Supervisor** | N/A |
| **Capstone Project code** | FFS |

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Report No.2: Project Management Plan (PMP)

# Problem Definition

## Name of this CapStone Project

Find Fit Shoes(FFS)

## Problem Abstract

In recent years, the development of e-commerce in Vietnam has brought significant changes and conveniences in our life. Instead of going to the conventional retail stores to choose the things to buy in tradition way, we can order many kinds of products by online shopping. There are a number of e-commerce websites which allow us to buy a wide range of items, and delivery to our homes which can save time and reduce cost, but they also have some disadvantages. We usually see product through some pictures and details, and if we want to experience the product before purchase, they do not permit that. For example, when we want to buy some shoes, it is impossible to feel how the shoes fit due to different shoe-size systems.

That’s why users have had the frustrating experience of ordering shoe online, only to find that the shoes do not fit their feet comfortably. And when they have to return back, it’s really time-consuming and cost-ineffective for both buyer and seller. Our system will, therefore, help users to deal with this problem, find the shoes which fit to their true size on the current selling shoe websites in Vietnam and support users order them.

## Project Overview

### The Current System

Most of current e-commerce website, particularly in Vietnam, just sell shoe like other items. They have search and filter functions based on some criteria like brand, style, price, color, origin and so on. Consumers usually decide to order a product which rely on some descriptions and images that provided from these websites such as zalora.vn, lazada.vn, giaytot.com, giayworld.com, etc. Some websites have the articles or tips that guide user how to choose the shoes fit to their size. However, no website, currently, has any functions that allow consumers to input their foot size in order to calculate their true shoe size in different shoe-size system and suggest the shoes fit to them.

### The Proposed System

The system will support users to input their foot size to determine shoe size in the different system and suggest the shoes that are sold at the parsed websites in Vietnam then support to order them. The system will have the following functions:

* Administrators can manage the system, manage accounts, and configure system.
* System can parse the current selling shoe websites to get the information, recommend or suggest shoes that fit user’s size, support order product online.
* Staff will define or configure and train the parser to collect from other webs to our system.
* Users can calculate their shoe size based on inputted foot size, search the available products in the parsed website.

### Boundaries of the System

The system can be used by every people with a laptop/computer with

Internet connection.

- The system is not intended for managing these aspects:

+ Managing product quality.

+ Managing your expense.

- The language of the system is English.

- The complete product includes:

+ The website, for staff and user.

+ All the process document involved.

### Development Environment

#### Hardware requirements

|  |  |  |
| --- | --- | --- |
| Windows Minimum | Requirements | Recommended |
| Internet Connection | Wifi (4 Mbps) Cable | Wifi (8 Mbps) |
| Operating System XP | XP, Vista, 7, 8 | XP, Vista, 7, 8 |
| Computer Processor | Intel® Core 2 Duo Intel® | Core(TM) i5 CPU , M  460 @ 2.53GHz |
| Computer Memory | 1GB RAM | 3GB or more |

#### Software requirements

Microsoft Windows 7 Ultimate: operating system and platform for

development.

- SQL Server 2008 Enterprise R2: used to create and manage the

database for system.

- Star UML: used to create models and diagrams.

- Skype: used for communication and meeting.

- Visual Studio 2012: used to implement website.

- Google Code & Tortoise SVN: used for source control.

# Project organization

## System Process Model

Project is developed under waterfall model.

Requirement Specifications

System and Software Design

Implementation and Unit Testing

Implementation and Unit Testing

Operation and Maintenance

Figure 1: Waterfall Development Model

For more information: Chapter 4 – Software processes in book Software

Engineering 8th – Ivan Sommerville.

## Roles and Responsibilities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Full name | Role in Group | | Responsibilities | |
| 1 | Kieu Trong Khanh | | Project manager | | * Specify user requirement * Control the development process * Give out technique and business analysis support | |
| 2 | Hoàng Trung Hiếu | Team Leader,  BA, DEV, Tester | | * Managing process * Designing database * Clarifying requirements * Prepare documents * GUI Design * Create test plan * Coding * Testing | |
| 3 | Nguyễn Mạnh Khương | Team Member,  BA, DEV, Tester | | * Designing database * Clarifying requirements * Prepare documents * GUI Design * Create test plan * Coding * Testing | |
| 4 | Nguyễn Thị Hồng | Team Member,  BA, DEV, Tester | | * Designing database * Clarifying requirements * Prepare documents * GUI Design * Create test plan * Coding * Testing | |

Table 3: Roles and Responsibility Details

## Tools and Techniques

- Front-end technologies: HTML5, CSS3, JavaScript, jQuery, AJAX.

- Back-end:

+ Website: ASP.NET MVC4 + Entity Framework 5.

+ Scheduler: Quartz.

+ Parse data from Excel file: Linq to excel.

- Web Server: Microsoft IIS.

- Database Management System: MS SQL Server 2008 Enterprise R2.

# Project management plan

## Iteration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Phase**  **/Iteration** | **Description** | **Deliverables** | **Resource needed** | **Dependencies and Constrains** | **Risks** |
| **Requirements**  **Definition** | - Study similar existing systems.  - Identify and clarify requirements for the system in general. | - Introduction of proposed  system.  - Main functions. | 30 man-days | N/A | Misunderstand the requirements.  Unclear scope of project. |
| **System and Software**  **Design** | - Choose the software development model  - Research technology needed for project  - Design main structure of system | - Project management  plan.  - Demo technology  - Use case  - ERD  - SRS | 30 man-days | Depend on  “Requirements  Definition” | Lack of experience.  Technology is difficult to use  Not cover all use case of project |
| **Implementation**  **and Unit Testing** | - Coding core  functions first  - Coding other  functions  - Update user  interface  - Unit test | - System design description  - Main user’s  functions on  web  - Parser system  - Support order function  - Test case | 60 man-days | Depend on “System and  Software Design” | Lack of experience.  Parser problem.  Technical obstacle in support order function. |
| **Integration and**  **System Testing** | - Integration test  - System test | - Test case | 30 man-days | Depend on “Implementation and Unit Testing” | Lack of  experience.  Test case  not cover all  situation. |
| **Operation and**  **Maintenance** | - Deploy on server | - Installation  Guide  - User’s Guide | 10 man-days | Depend on all previous phase | Lack of experience. |

Table 3: Iteration

## Task sheet

### Phase 1: Requirements Definition

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Author** |
| **1. Collect**  **requirements** | Collect requirements from customer.  Identify main functions | HieuHT, HongNT, KhuongNM |
| **2. Introduction** | Complete Introduction Report | HieuHT |

**Table 5 Phase 1: Requirements Definition**

### Phase 2: System and Software Design

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Author** |
| **1. Project management**  **plan** | Prepare project management plan | HieuHT |
| **2. Website prototype** | Build prototype of proposed system  (website). | HieuHT, HongNT, KhuongNM |
| **3. Use case**  **diagram** | Design Use case diagram. | HieuHT, HongNT, KhuongNM |
| **4. ERD** | Design ER diagram | HieuHT, HongNT, KhuongNM |

Table 5: Phase 2: System and Software Design

### Phase 3: Implementation and Unit Testing

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Author** |
| **1. Main user’s functions on web** | - Calculate shoe size function  - Suggest shoe function  - Search product function | HongNT |
| **2. Parse shoe data system** | - Parse data from currently selling shoe in Vietnam | KhuongNM |
| **3. Support order function** | - Support user place order in other website via our website | HieuHT |
| **4. Unit testing** | Write and perform test case for main user function. | HongNT |
| Write and perform test case for parser system | KhuongNM |
| Write and perform test case for support order function | HieuHT |

Table 6: Phase 3: Implementation and Unit Testing

### Phase 4: Integration and System Testing

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Author** |
| **1. Integration testing** | Write test case and testing for integrate functions | HieuHT, HongNT, KhuongNM |
| **2. System testing** | Write test case and testing for all system | HieuHT, HongNT, KhuongNM |

Table 6: Phase 4: Integration and System Testing

### Phase 5: Operation and Maintenance

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Author** |
| **1. Installation guide** | Complete installation guide | HieuHT |
| **2. User’s guide** | Complete user’s guide | HongNT |

Table 8: Phase 5: Operation and Maintenance

## All Meeting Minutes

**Refer to Meeting Minutes folder.**