** MINISTRY OF EDUCATION AND TRAINING**

**FPT UNIVERSITY**

Capstone Project Document

Smart Buy

|  |  |
| --- | --- |
| **Group 1** | |
| **Group members** | Doan Ho Anh Triet – Team Leader – SE60763  Huynh Thanh Viet – Team Member - SE60666  Dang Huu Hoang – Team Member - 60486  Tran Trung Dung – Team Member - 60236 |
| **Supervisor** | Mr. Kieu Trong Khanh |
| **Ext. Supervisor** | N/A |
| **Capstone Project code** | SmartB |

-Ho Chi Minh City, 01/2014-

*This page is intentionally left blank*

***ACKNOWLEDGEMENTS***

We wish to thank various people for their contribution to this project: Our teachers for their advice and participation in the final review, our friends for their valuable technical support.

Special thanks should be given to Mr. Kieu Trong Khanh, our research supervisor for his professional guidance and the useful, constructive recommendations throughout the course of this project.

# Table of Contents

[Table of Contents 4](#_Toc376986982)

[List of Tables 4](#_Toc376986983)

[Report No. 1 Introduction 5](#_Toc376986984)

[1. Project Information 5](#_Toc376986985)

[2. Introduction 5](#_Toc376986986)

[3. Current Buying Habits 5](#_Toc376986987)

[4. Problem Definition 5](#_Toc376986988)

[5. Proposed Solution 5](#_Toc376986989)

[5.1 Feature functions 5](#_Toc376986990)

[5.2 Advantages and disadvantages 6](#_Toc376986991)

[6. Functional Requirements 6](#_Toc376986992)

[6.1 Data Management 6](#_Toc376986993)

[6.2 Suggestion 6](#_Toc376986994)

[6.3 User Management 6](#_Toc376986995)

[6.4 Market Management 6](#_Toc376986996)

[7. Role and Responsibility 6](#_Toc376986997)

# List of Tables

[Table 1: Roles and Responsibilities 6](#_Toc376987007)

# Report No. 1 Introduction

## Project Information

* Project name: **Smart Buy**
* Project Code: **SmartB**
* Product Type: **Website, Phone Application**
* Start Date: **January 7th, 2014**
* End Date:

## Introduction

People go shopping every day. They buy clothes, books, stationeries, etc… and most importantly - food. They often buy them at their familiar markets, or the nearest one. Today, together with the growing use of smart phones, we should find a smarter way to do our daily jobs, such as shopping. Our system will, therefore, help users to find the price of a product in the market, keep track of the price fluctuation, suggest the best way to buy a list of products, etc…

## Current Buying Habits

Below are some buying habits:

* At familiar markets: Here, people only go to some fixed markets every day. They are familiar with them, so they do not want to try somewhere else.
* At the nearest markets: People of this type like buying things at their nearest place. Travel distance is a matter to them, not the price.
* At random markets: The last one category - people with this habit often go to any markets to buy things they need. Neither travel distance nor price is the matter to them.

## Problem Definition

Below are the advantages and disadvantages of current buying habits:

* At familiar markets

+ Advantages: Familiar with many things there, price maybe cheaper, the quality can be trusted.

+ Disadvantage: Can’t explore new things at new markets.

* At the nearest markets

+ Advantages: Save time and effort.

+ Disadvantages: Price can be high, quality can’t be trusted.

* At random markets

+ Advantages: Have the latest info of many markets.

+ Disadvantages: Price can be high, quality can’t be trusted.

## Proposed Solution

The system is intended for use by those with a smart phone or a laptop/computer with Internet connection. The system will have the following functions:

### **Feature functions**

* Admins can manage the system, manage accounts, and configure system.
* System can parse, suggest, and recommend product price daily or on requests.
* Staff can create and update new users, manually input product price, and compile statistics.
* Users can request to view the price, ask for the best buying way, and update product price.

### Advantages and disadvantages

The advantages and disadvantages of the proposed solution:

* Advantages: Provide latest price to users, help users buy things at the lowest price and within shortest travel distance.
* Disadvantages: Users must have a smart phone or a laptop/computer to use this system. Internet connection is required to obtain the latest information.

## Functional Requirements

Function requirements of the system are listed as below:

### Data Management

* System will parse data from many websites automatically at specific times.
* Staff can force the system to parse data any time.
* Staff can input data manually or by importing excel files.
* Staff can compile statistics.
* Users can update product price daily.

### Suggestion

* System can suggest the best way to buy a product or a list of products to the user.

### User Management

* Staff can add/edit/activate/deactivate users.

### Market Management

* The admin can add/edit/activate/deactivate markets.

## Role and Responsibility

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Full Name | Role | Position | Contact |
| 1 | Kiều Trọng Khánh | Project Manager | Instructor | khanhkt@fpt.edu.vn |
| 2 | Đoàn Hồ Anh Triết | Developer | Leader | doanhoanhtriet@gmail.com |
| 3 | Huỳnh Thanh Việt | Developer | Member | viethtse60666@fpt.edu.vn |
| 4 | Đặng Hữu Hoàng | Developer | Member | hoangdang.nt@gmail.com |
| 5 | Trần Trung Dũng | Developer | Member | Acam37@gmail.com |

Table 1: Roles and Responsibilities