** MINISTRY OF EDUCATION AND TRAINING**

**FPT UNIVERSITY**

Capstone Project Document

Smart Buy

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| **Capstone Project code** | SmartB |

-Ho Chi Minh City, 01/2014-

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***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.

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# 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. To achieve this, we have to resolve the most important problem of shopping: price. How can we know that the price of a product is not too high? Or somewhere else has better price? 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.

According to the description above, we can realize that price is the most important thing in shopping. Is the price too high? Does somewhere else have better price? How much can I bargain? Our system will help you with those problems.

## 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 appropriate 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. In case there is no Internet connection available, user still can use the system in offline mode with data from the previous synchronization.

## 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 on current day.

### Suggestion

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

### View Price

* User can view the price range of a product.

### User Management

* Staff can manage users.

### Market Management

* The admin can manage markets.

## Role and Responsibility

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| --- | --- | --- | --- | --- |
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Table 1: Roles and Responsibilities