Software Requirements Specification

Version 1.0

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points e-payments support system

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**1.0. Introduction**

**1.1. Purpose**

The purpose of this document is to present a detailed description of the points e-payments support system. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

**1.2. Scope of Project**

This software system will be a points e-payments support System for buying and selling products online. This system will be designed to help the customer to order and buy what they want of various categories and products and with every product they buy they will receive a number of points which they can exchange later with a gift of there choice and all of that is from the comfort of their home , and it will also help the vendor to promote their products to a large and wide number of customers and assure an easy and safe transaction between the two parties .

**1.3. Glossary**

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Customer | A person with the ability to view and buy products |
| Vendor | A person with the ability to sell their product |
| Admin | A person that manages the system |
| Database | Collection of all the information monitored by the system |
| Software requirements specification | A document that completely describes all of the functions of a proposed system and the constraints under which it must be operate for example, this document |

**1.4. References** IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

**1.5. Overview of Document**

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product. Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

**2.0. Overall Description**

**2.1 System Environment**

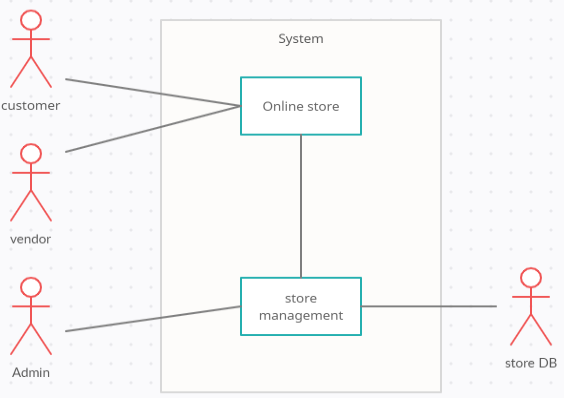


Figure 1 - System Environment

The points e-payments support System has three active actors and one cooperating system. The Customer, Vendors accesses the Online store through the mobile application. And the Admin Manages the system on the internet and communicates with the Vendors through email.

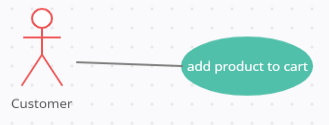
2.2 Functional Requirements Specification

This section outlines the use cases for each of the active readers separately. The customer, the vendor and the Admin will have only one use case apiece according to what was required for the submitting of this document.

**2.2.1 Customer Use Case**

Use case: add product to cart

Diagram:



Brief Description

The customer opens the mobile app on his device logs in with his account and picks the product he likes then he add it to the cart

Initial Step-By-Step Description

Before this use case can be initiated, the Customer has already opened the app and logged in to his account.

1. The customer browses through a variety of products on the main menu or he can choose a category to browse in to it.
2. The customer clicks the product that he likes.
3. The system will display a pop up window that contains the product details.
4. The customer will determine the quantity he wants if he liked the product.
5. The system will calculate and display the order cost.
6. The customer clicks the add to cart button.
7. The system update the customer cart.

Xref: Section 3.2.1, add product to cart

2.2.2 Vendor Use Case

Use case: update product info

Diagram:



Brief Description

The vendor updates an earlier added product.

Initial Step-By-Step Description

Before this use case can be initiated, the Vendor has already opened the app and logged in to his account.

1. The vendor opens his product list.
2. The system displays the list
3. The vendor select the product that he wishes to update.
4. The system will display the current product details.
5. The vendor changes the details as he desire and clicks finish.
6. The system will update the product in the data base.

Xref: Section 3.2.2, update product.

**2.2.3 Admin Use Case**

Use case: add category

Diagram:



Brief Description

The Admin adds a category for products

Initial Step-By-Step Description

Before this use case can be initiated, the admin has logged into the online web management system.

1. The admin selects the category tap
2. The system displays all the category in the data base.
3. The admin clicks the "add new category" button inserts the name for it and clicks finish.
4. The system adds the new category to data base.

Xref: Section 3.2.3, add category

**2.3 User Characteristics**

The Customer is expected to be Internet literate ,be able to use a search engine and to be able to use mobile application. The main screen of the e-payment application will have the search function and a link to “products/Information.” And Customer should be able to transfer money from electronic payment systems to another accepted money form, or transfer to a bank account.

The Vendor is expected to be Internet literate and to be able to use mobile application.

The Admin is expected to be Windows and Internet literate and has an understanding to how data base software works.

**2.4 Non-Functional Requirements**

The E-Payment will be on a server with high speed Internet capability. The main physical machine to be used by the customer and the vendor will be the mobile phone.

Because of its ability to store card information. and The user-friendly nature of mobile makes it easier to use.

The store Manager will run on the Admin’s PC and will contain a My-SQL database. My-SQL is already installed on this computer and is a Windows operating system. **3.0. Requirements Specification**

**3.1 External Interface Requirements**

The only external link is to enter the storage base, the customer must enter the information of his previously existing account. Otherwise, one must be created through the id, full name, phone number, e-mail, gender, so the admin checks the entered information and saves it to the base and gives an order to allow the customer to access the storage and choose his points and operations.

Also, the seller can update and change product information and then the admin changes the list.

**3.2 Functional Requirements**

The Logical Structure of the Data is contained in Section 3.3.1.

**3.2.1 Customer Use Case**

|  |  |
| --- | --- |
| Add product to cart | **Use Case Name** |
| Section 3.2.1, add product to cart | **XRef** |
| The customer opens the mobile app on his device logs in with his account and picks the product he likes then he add it to the cart | **Trigger** |
| The mobile app displayed with grids for searching and info in the main screen. | **Precondition** |
| 1. The customer browses through a variety of products on the main menu 2. The customer clicks the product that he likes. 3. The system will display a pop up window that contains the product details. 4. The customer will determine the quantity he wants if he liked the product. 5. The system will calculate and display the order cost. 6. The customer clicks the add to cart button. 7. The system update the customer cart. | **Basic Path** |
| The customer can choose a category to browse in to it.  Or use the search engine | **Alternative Paths** |
| The product has been added | **Postcondition** |
| The customer may be abandon operation any time | **Exception Paths** |
|  | **Other** |

**3.2.2 Vendor use case:**

|  |  |
| --- | --- |
| update product info | **Use Case Name** |
| Section 3.2.2, update product | **XRef** |
| The vendor updates an earlier added product. | **Trigger** |
| The Vendor has already opened the app and logged in to his account from the main screen. | **Precondition** |
| 1. The vendor opens his product list. 2. The system displays the list 3. The vendor select the product that he wishes to update. 4. The system will display the current product details. 5. The vendor changes the details as he desire and clicks finish. 6. The system will update the product in the data base. | **Basic Path** |
| None | **Alternative Paths** |
| The product has been updated | **Postcondition** |
| The vendor may be abandon the operation any time | **Exception Paths** |
|  | **Others** |

**3.2.3 Admin Use Case**

|  |  |
| --- | --- |
| add category | **Use Case Name** |
| Section 3.2.3 | **XRef** |
| The Admin adds a category for products | **Trigger** |
| The admin has to log into the online web management system. | **Precondition** |
| 1. The admin selects the category tap 2. The system displays all the category in the data base. 3. The admin clicks the "add new category" button inserts the name for it and clicks finish. 4. The system adds the new category to data base. | **Basic Path** |
| None | **Alternative Paths** |
| The category has been added | **Postcondition** |
| The customer may be abandon the operation any time | **Exception Paths** |
|  | **Other** |

**3.3 Detailed Non-Functional Requirements**

**3.3.1 Logical Structure of the Data**

The logical structure of the data to be stored in the internal Article Manager database is given below.

**Figure 2- Logical Structure of the Manager Data**

Customer

category

vendor

mange

update

Add to cart

add

admin

product

The data descriptions of each of these data entities is as follow

Customer Data Entity:

|  |  |  |  |
| --- | --- | --- | --- |
| **Comment** | **Description** | **Type** | **Data Item** |
|  | The full name of the customer | Text | Full Name |
|  | The name of the customer account | Text | User name |
|  | The customer email | Text | Email |
|  | The customer phone number | number | Phone Number |
|  | The customer account password | Text | Password |
| May be several | Product entity | Pointer | Product |

Vendor Data Entity:

|  |  |  |  |
| --- | --- | --- | --- |
|  | The full name of the Vendor | Text | Full Name |
|  | The name of the Vendor account | Text | User name |
|  | The Vendor email | Text | Email |
|  | The Vendor phone number | number | Phone Number |
|  | The Vendor account password | Text | Password |
| May be several | Product entity | Pointer | Product |

Product Data Entity:

|  |  |  |  |
| --- | --- | --- | --- |
|  | The name of the product | Text | Name |
|  | The price of the product | Number | Price |
|  | The points of the product | Number | Points |
|  | The category of the product | Text | Category |
|  | The count of the product | Number | Count |

Admin Data Entity:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | The full name of the admin | | Text | Full Name |
|  | The name of the admin account | | Text | User name |
|  | The admin email | | Text | Email |
|  | The admin phone number | | Number | Phone Number |
|  | The admin account password | | Text | Password |
| May be several | Product entity | Pointer | | Product |

**3.3.2 Security**

The server on which the E-payment resides will have its own security to prevent unauthorized sell/buy.

And stores card information on a mobile device.

The use of app by a Customer or Vendor on the mobile makes them easier to use and save.

The PC on which the Admin resides will have its own security.

Only the Admin will have physical access to the web site for program it.