Online Home Shopping

A Project Submitted in Partial Fulfillment of the Requirements for the

Degree of

Bachelor of Science in Computer Science and Engineering

by

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Abstract

The online home shopping Application helps to store a large amount of shopping items listed like computers laptops and other devices. Each product item is identified by name. For each item of product, store also needs to record its names, titles, and category, publish date, quantity in stock in time, offers and price. This information is provided by system to make a digital store for the customers. One customer can place any number of orders. For each order, the store needs to record who place this order, when, the order status, total price, shipping address, payment method, bill address and ordered product. Currently for payment method, it defined check transfer and cash on delivery; hence the store needs to record this payment information. Customer can also manage their shopping carts. One customer can have any number of shopping carts. Now a days we badly need an online shop to buy computer and related devices from trusted online shop which can satisfy customer's demand. Our system will exactly try do that and satisfy them by delivering them the products.

Approval

The project report "Online Home Shopping" submitted by Saima Azmerry Bhuiyan, ID: CSE051 06485, Md. Mushfiqur Rahman Joy, ID: CSE 051 06517, to the Department of Computer Science & Engineering, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science (B.Sc.) in Computer Science & Engineering and as to its style and contents.

Board of Examiner's Name, Signature and Date:

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(Board Member 1)	**(Board Member 2)**	**(Board Member 3)**
Date:	Date:	Date:

Supervisor's Signature and Date:

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Supervisor Name

Date:

Declaration

We, hereby, declare that the work presented in this Project is the outcome of the investigation Performed by us under the supervision of Mr.Tamjid Rahman ,Associate Professor, Department of Computer Science & Engineering, Stamford University Bangladesh. We also declare that no part of this Project has been or is being submitted elsewhere for the award of any degree or Diploma.

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Date:

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1 INTRODUCTION

Title is ordering system which takes orders online. We deliver product from our Shop to customer and corporate office using our excellent riders. We have Bike and taxi for delivery. It will create customer and promote ourproduct. An online presence where customers can place orders and producers can build an inventory of available products. By simplifying the logistics process, creating a larger demand and providing predictable and sustainable order this will allow more farmers to provide products and more customers to make orders.

1.1 BACK GROUND OF PROJECT

Now Days online ordering systems are so much popular day by day. Today, with technology's help, one key advantage of an online ordering system is that you can have your pie and carve it. The customer gets to choose product on the online ordering system's frontend menu without taking a minute of your time. It's a dream come true when managing online orders, online ordering menu and sales reports can be this easy on our online ordering system. [1]

The challenges are as follows

- A customer can order at will when they have time to.
- Also, the customer is able to customize their order without errors in communication between the customer and the person taking the order.
- In addition to customer advantages, the delivery company is able to take more orders with fewer staff.
- The Shop does not need anemployee or hostess to be on the phone to take the order.
- The interface of the site has to be user friendly.
- The application must provide admin panel so that admin can upload resources easily.

1.2 Aims and Objectives

Online product ordering is a process of ordering product from a local zone or cooperative through a web page. Much like ordering consumer goods online, many of these allow customers to keep accounts with them in order to make frequent ordering convenient. A customer will search for a favorite website, usually filtered via type of cuisine and choose from available items, and choose delivery or pick-up. Payment can be amongst others either by cash, with the shop returning a percentage to the online cosmetic zone. [1]

The objectives and aims of the project are as follows:

- To provide an easy complete delivery solution.
- It is committed to providing the highest quality product and superior service from our online shop to the customers in a clean and welcoming environment.
- That's why we work with officials, and shops to serve a wide range ofproduct choices.
- To provide the quick delivery of product for customers to make life comfortable.
- At the shop level, we have a shop with top quality cosmetic delivery system to customers.
- Customer can see a profile of his or her.
- Admin can add new category and author.
- Admin can add Products to the site.
- Admin can sign in to do so.

1.3*Problem with Current System*

As online ordering system, does not have any system currently running. It is proposed to be a web application with a particular focus and that is providing services on purchasing products.

1.4 Tools We Have Used

The tools we have used to create this site:

- PHP5
- Apache
- HTTP server
- JQuery

PHP framework-slim micro framework

PHP is the world's most popular scripting language for many different reasons – flexibility, ease-of-use, among others – but often times coding in PHP, or any language for that matter, can get rather monotonous and repetitive. That's where a PHP framework can help. [2]

PHP frameworks streamline the development of web applications written in PHP by Providing a basic structure for which to build the web applications. In other words, PHP frameworks help to promote rapid application development (RAD), which saves you time, help build more stable applications, and reduce the amount of repetitive coding for developers. [2]

DBMS-SQLite and Query builder

The SQLite database query tool provided by Razor's includes such features as a custom SQLite database browser tailored to SQLite, with SQLite specific features and syntax highlighting, custom SQLite visual tools, and SQLite specific database administration tools. SQLite has bindings to many programming System.

Bootstrap CSS framework

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web. It would be easy to send you over to their page and call it a day. Their setup guide is indeed a host of useful information – links to CDNs, explanations on how to install with Bower, npm, and Composer, information on integration with Auto prefixed and LESS, a bunch of templates, licenses, and translations – but it is certainly not a step by step guide to getting started (which very well might be in the spirit of autodidactic). [3]

JavaScript

JavaScript is an interpreted programming or script language from Netscape. It is somewhat similar in capability to Microsoft's Visual Basic, Sun's Tcl, the UNIX-derived Perl, and IBM's REXX. In general, script languages are easier and faster to code in than the more structured and compiled languages such as C and C++. Script languages generally take longer to process than compiled languages, but are very useful for shorter programs.[4]

JQuery

JQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. JQuery is designed to change the way that you write JavaScript. JQuery also supports the idea of plugins. Plugins allow people to create mini-libraries that complement jQuery. The plugins can be anything from form validation to picture slide shows. We will look at plugins in future articles.

1.4.1 Justification of Method and Framework

Online Cosmetic ordering system is too small. So, most of the business oriented application is developed by Agile, RAD etc. A particular user of the system has no difficulty in reading the text on the display. The system is navigable through intuition. Menu choices are presented in form of buttons, which contain text as well as little pictures illustrating the choice for better understanding. DSDM a tern uses iterative development. It starts with project initiation and ends with deploying the project.

1.5 Feasibility Study

As the name implies, a feasibility study is used to determine the viability of an idea. The objective of such a study is to ensure a project is legally and technically feasible and economically justifiable. It tells us whether a project is worth the investment.[6]

Feasibility studies are useful to businesses in many ways. Some of the reasons organizations conduct feasibility studies are as follows:

- Not every project is doable.
- Not every project should be taken up. This will engage otherwise useful resources and block their use on other tasks.
- Not every project makes effective use of the resources of an organization.

Five Areas of Project Feasibility

1.5.1Technical Feasibility- assessment is centered on the technical resources available to the organization. It helps organizations assess if the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems. Technical feasibility also involves evaluation of the hardware and the software requirements of the proposed system.

1.5.2Economic Feasibility- helps organizations assess the viability, cost, and benefits associated with projects before financial resources are allocated. It also serves as an independent project assessment, and enhances project credibility, as a result. It helps decision-makers determine the positive economic benefits to the organization that the proposed system will provide, and helps quantify them. This assessment typically involves a cost/ benefits analysis of the project.

1.5.3Legal Feasibility- investigates if the proposed system conflicts with legal requirements like data protection acts or social media laws.

1.5.4 Operational Feasibility **-** This involves undertaking a study to analyze and determine whether your business needs can be fulfilled by using the proposed solution. It also measures how well the proposed system solves problems and takes advantage of the opportunities identified during scope definition. Operational feasibility studies also analyze how the project plan satisfies the requirements identified in the requirements analysis phase of system development. To ensure success, desired operational outcomes must inform and guide design and development. These include such design-dependent parameters such as reliability, maintainability, supportability, usability, disposability, sustainability, affordability, and others.

1.5.5 Scheduling Feasibility **-**is the most important for project success. A project will fail if not completed on time. In scheduling feasibility, we estimate how much time the system will take to complete, and with our technical skills we need to estimate the period to complete the project using various methods of estimation.

This project documentation will be included a detailed analysis about the project's scope, aims, development etc. The design will be done by following UMLS and DSDM a tern will be implemented for development.

2 Project Management and Maintenance

2.1 Project Management

Agile Project Management is how you deliver high value and technical quality within your time and budget constraints. However, the principles go beyond software development. It's a mindset for people who need a management approach that builds consensus quickly in a fast-paced environment. Agile Project Management uses facilitated work sessions with business and IT to get to a shared understanding of the problem, the solution and the plan. Outputs such as low-fidelity prototypes and story maps help you move quickly to a solution.[6]
So, while implementation DSDM a tern approach, it is high considered three things in project management-

- Quality assurance
- Time Table
- Accepting change for certain period of development life cycle

Agile Project Management uses facilitated work sessions with business and IT to get to a shared understanding of the problem, the solution and the plan. Outputs such as low-fidelity prototypes and story maps help you move quickly to a solution. You don't often get it right the first time. Agile Project Management helps you find the source of the problem quickly through frequent testing. And even better, it gives you to the tools to solve it because you have involved the right stakeholders continuously. [6]

The manifesto for Agile Software development also known as the "agile manifesto" and it came out with DSDM consortium.

Figure 2.1: Agile Manifesto

Agile software development methodology is process for developing software like: waterfall model, iterative model etc. However agile methodology differs significantly from other methodologies.

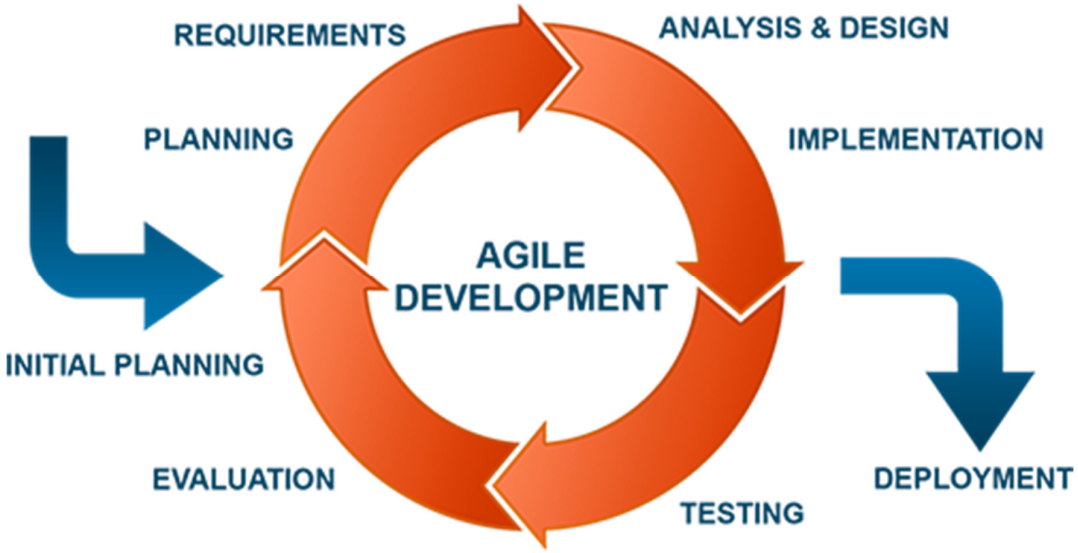


Figure 2.2: Agile Development Model

2.2 Quality Management

A quality management system (QMS) is a formalized system that documents processes, procedures, and responsibilities for achieving quality policies and objectives. A QMS helps coordinate and direct an organization's activities to meet customer and regulatory requirements and improve its effectiveness and efficiency on a continuous basis. In the scenario of online cosmetic ordering system, quality control is the basic features like strong authentication method. [6]

2.3 Risk Management

Risk management involves understanding, analyzing and addressing risk to make sure organizations achieve their objectives. So, it must be proportionate to the complexity and type of organization involved. Enterprise risk management (ERM) is an integrated and joined up approach to managing risk across an organization and its extended networks.[6]

Because risk is inherent in everything we do, the type of roles undertaken by risk professionals are incredibly diverse. They include roles in insurance, business continuity, health and safety, corporate governance, engineering, planning and financial services.

The key factor that to consider in risk management is as follows-

2.3.1 Identify Key Stakeholder

The primary key stakeholder's are-

- Project owners.
- Project manager
- The user of the application
- The development team
- The budget of the project both cost and time

2.3.2 Identify Critical Success Factors

Critical success factors are a limited number of key variables or conditions that have a tremendous impact on how successfully and effectively an organization meets its mission or the strategic goals or objectives of a program or project. Businesses must perform the activities associated with critical success factors at the highest possible level in order to achieve their intended objectives and achieve competitive advantage.

2.4 Change Management

Change management is the discipline that guides how we prepare, equip and support individuals to successfully adopt change in order to drive organizational success and outcomes. While all changes are unique and all individuals are unique, decades of research show there are actions we can take to influence people in their individual transitions.[6] Change management provides a structured approach for supporting the individuals in your organization to move from their own current states to their own future states.

2.4.1 Identify the Changes

In the project the identification of changes a method of studying a system by examining its component parts and their interactions. Analyzing the flow of information within an organization with data-flow diagrams. An approach to analysis and design of an application, system, or business that emphasizes modularity and visual modeling. Service-oriented analysis and design, a method of Service-oriented modeling to design business systems Structured analysis, methods in software engineering for converting specified requirements into software programs and hardware configurations structured systems analysis and design method, a systems approach to the analysis and design of information systems.

2.4.2 Applying the Changes

User interaction will help to identify the changes and when changes are final it will be implemented through the combination of parallel development and iterative development. It involves the project Management issues.

3 System Analysis and Design

The terms analysis and synthesis stem from Greek, meaning "to take apart" and "to put together," respectively. These terms are used in many scientific disciplines, from mathematics and logic to economics and psychology, to denote similar investigative procedures. Analysis is defined as "the procedure by which we break down an intellectual or substantial whole into parts," while synthesis means "the procedure by which we combine separate elements or components in order to form a coherent whole." Systems analysis researchers apply methodology to the systems involved, forming an overall picture. System analysis is used in every field where something is developed. [7]

3.1 Requirements

3.1.1 Basic Requirement list (Functional)

The Functional Requirements Specification documents the operations and activities that a system must be able to perform.

Functional Requirements should include:

- Descriptions of data to be entered into the system
- Descriptions of operations performed by each screen
- Descriptions of work-flows performed by the system
- Descriptions of system reports or other outputs
- Who can enter the data into the system?
- How the system meets applicable regulatory requirements?

Interface requirements

- Field 1 accepts numeric data entry.
- Field 2 only accepts dates before the current date.
- Screen 1 can print on-screen data to the printer.

Security Requirements

- Members of the Data Entry group can enter requests but cannot approve or delete requests.
- Members of the Managers group can enter or approve a request but cannot delete requests.
- Members of the Administrators group cannot enter or approve requests but can delete requests.

3.1.2 Basic Requirement list (Non-Functional)

The non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with functional requirements that define specific behavior or functions. The plan for implementing functional requirements is detailed in the system design. The plan for implementingnon-functional requirements is detailed in the system architecture, because they are usually Architecturally Significant Requirements. [7]

Requirements for the users-

- The user with a display of the number of records in a database.
- This is a functional requirement.
- How up-to-date [update] this number needs to be, is a non-functional requirement.
- If the number needs to be updated in real time, the system architects must ensure that the system is capable of updating the [displayed] record count within an acceptably short interval of the number of records changing.

Requirements for the Admin-

- Admin can add more than one type of payment method
- Admin can see the publisher, categories.

3.1.3 Initial Use Case Diagram

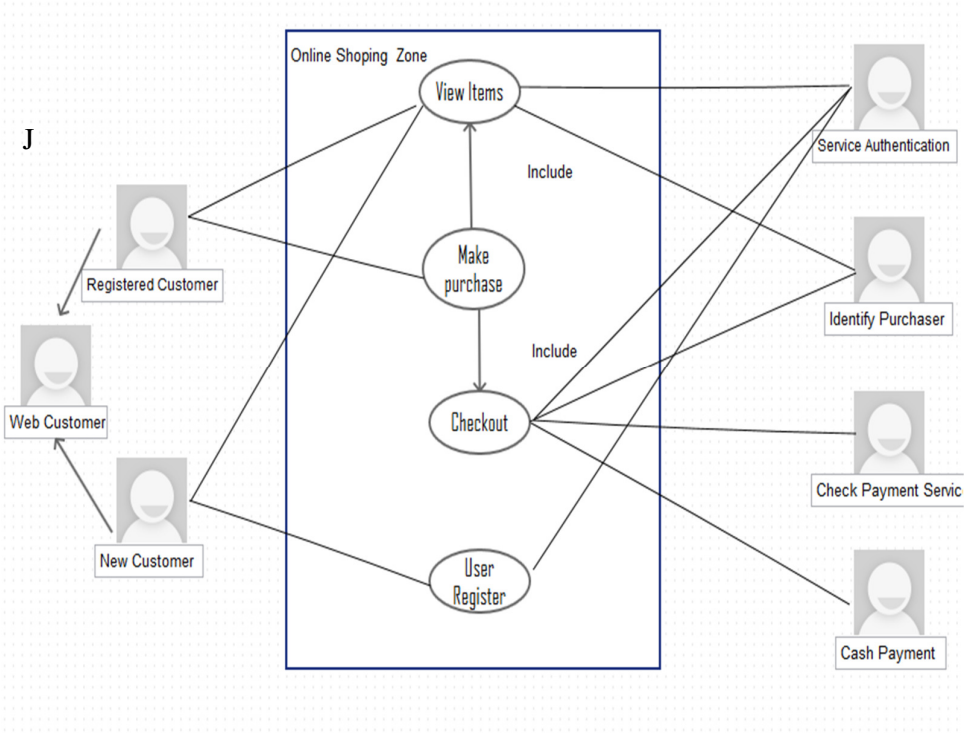


Figure: Initial use case where view item, make purchase,checkout,user register are shown

4 Design Specification

A design specification is a detailed document providing information about the characteristics of a project to set criteria the developers will need to meet. Its use is called for where a structure or product has to be specially made to meet a unique need. For example, a design specification must include all necessary drawings, dimensions, environmental factors, ergonomic factors, aesthetic factors, and cost, maintenance that will be needed, quality, safety, documentation and description. It also tells specific examples of how the design of the project should be executed, helping others work properly.

4.1 Structural Model

4.1.1 High Level Class Diagram

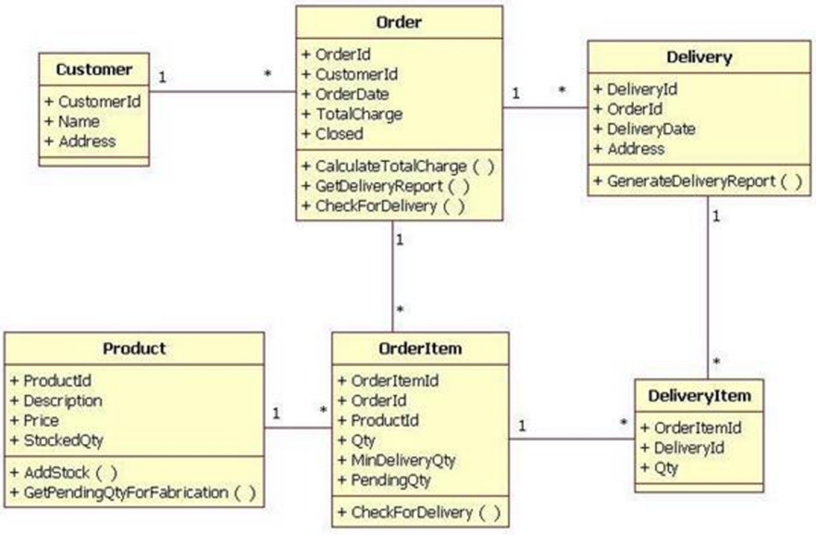


Figure 4.1: class diagram where primary technical services are shown.

4.2 Data Model Data

Models are fundamental entities to introduce abstraction in a DBMS. Data models define how data is connected to each other and how they are processed and stored inside the system.

4.2.1 Entity Relationship Diagram

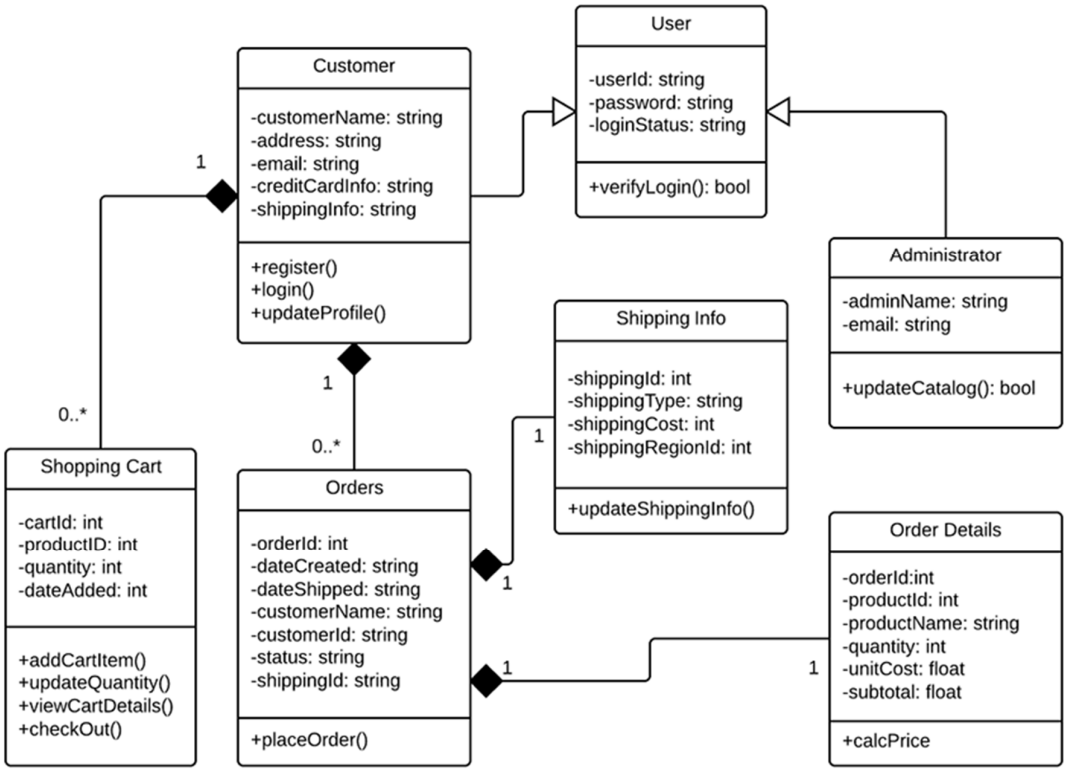


Figure 4.2: Entity Relationship Diagram

Though our online cosmetic ordering system is a non-OOP system, it provides some magnificent design for coding and data structure.

5 Test Plan and Development

A right test plan can test out how the system will be tested. There are many traditional testings' available. Like Test-driven development (TDD) is a software development process that relies on the repetition of a very short development cycle: requirements are turned into very specific test cases, and then the software is improved to pass the new tests, only. This is opposed to software development that allows software to be added that isn't proven to meet requirements. [8]

5.1 Test Plan

The following objective will be the goal of testing plan

- Meets the requirements that guided its design and development,
- Responds correctly to all kinds of inputs,
- Performs its functions within an acceptable time,
- Is sufficiently usable,
- Can be installed and run in its intended environments, and
- Achieves the general result its stakeholder's desire.

5.2 Scope

5.2.1 Functions to Be Tasted

The functions will be tested are as follows-

- The browser compatibility will be tested
- The usability of the system will be tested
- The system to be tested

5.2.2 Functions Not to Be Tested

The functions that are not to be tested are as follows-

- The performance of the system
- Accessibility test of the system
- Unit testing of the codes

5.3 Test Strategy

5.3.1 System Testing

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black-box testing, and as such, should require no knowledge of the inner design of the code or logic. As a rule, system testing takes, as its input, all of the "integrated" software components that have passed integration testing and also the software system itself integrated with any applicable hardware system.[8] The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together or between any of the *assemblages* and the hardware. System testing is a more limited type of testing; it seeks to detect defects both within the "inter-assemblages" and also within the system as a whole.

5.3.2 Security Testing

Security testing is a process intended to reveal flaws in the security mechanisms of an information system that protect data and maintain functionality as intended. Due to the logical limitations of security testing, passing security testing is not an indication that no flaws exist or that the system adequately satisfies the security requirements. Typical security requirements may include specific elements of confidentiality, integrity, authentication, availability, authorization and non-repudiation. Actual security requirements tested depend on the security requirements implemented by the system. Security testing as a term has a number of different meanings and can be completed in a number of different ways. As such a Security Taxonomy helps us to understand these different approaches and meanings by providing a base level to work from.

5.3.3 Usability Testing

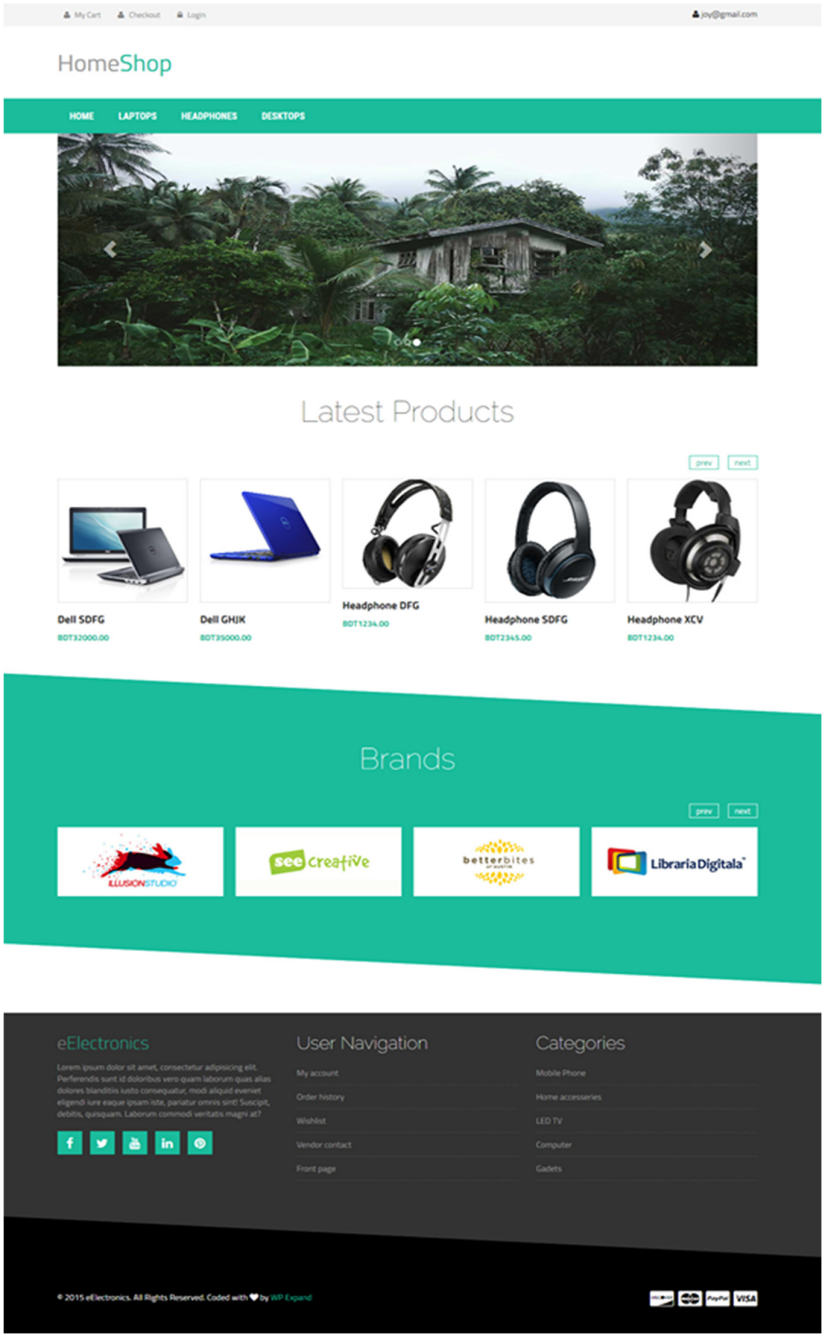
Usability testing focuses on measuring a human-made product's capacity to meet its intended purpose. Examples of products that commonly benefit from usability testing are Cosmetics, consumer products, web sites or web applications, computer interface, documents, and devices. Usability testing measures the usability, or ease of use, of a specific object or set of objects, whereas general human-computer interaction studies attempt to formulate universal principles.

5.4 Development

In every project this part this part is circular part. The language framework set up for the development. In the following part of this documentation the technical definition an explanation why this documents are implemented.

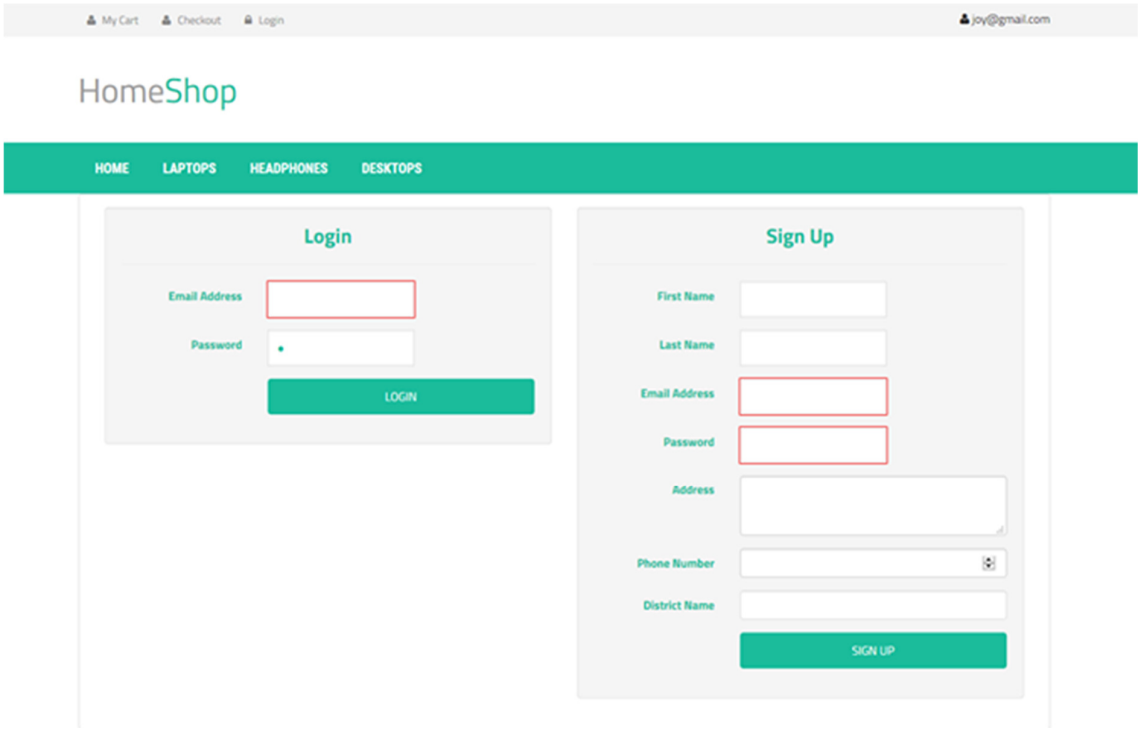
6 User Interface and Implementation

6.1 Home Page



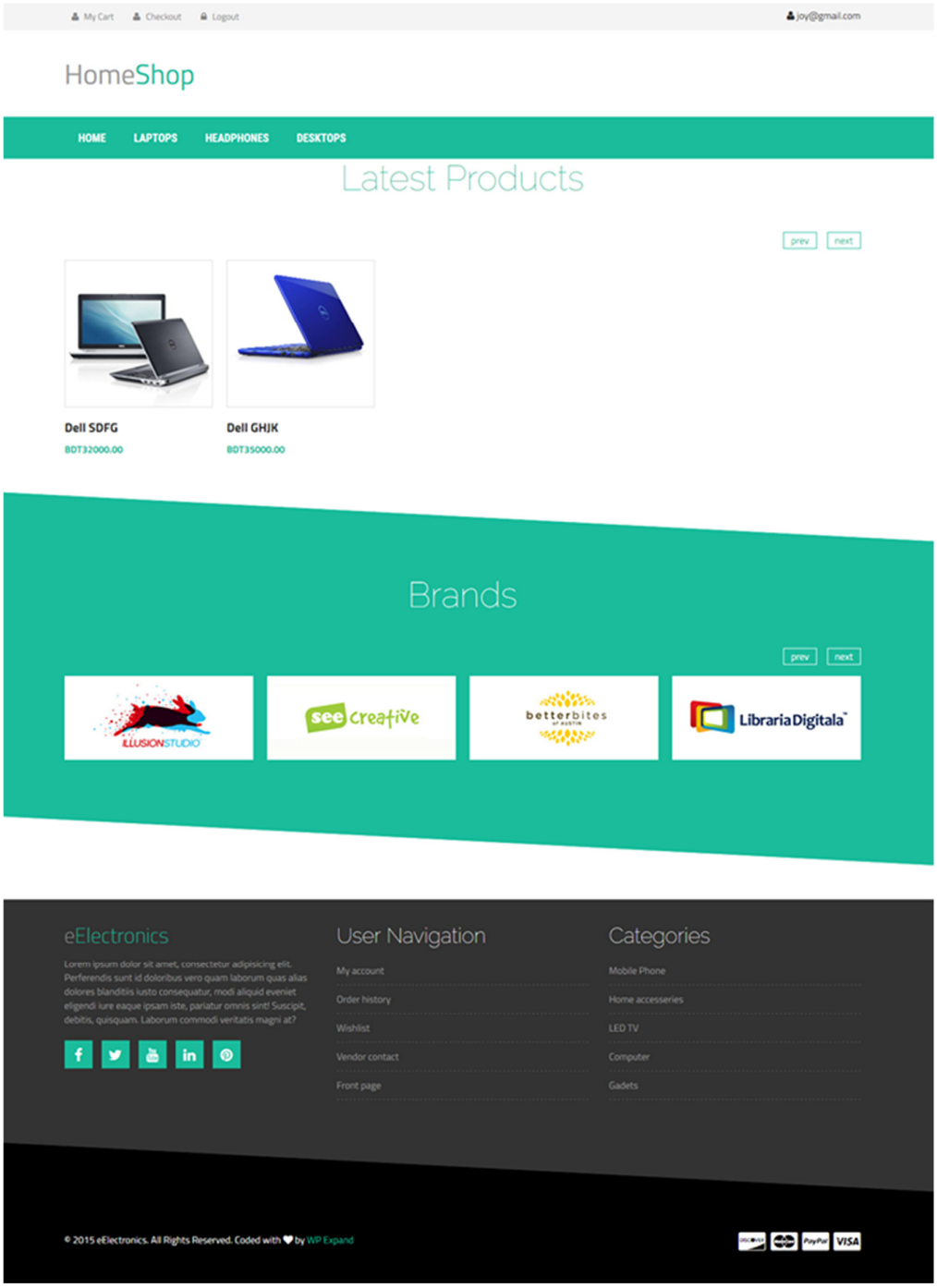
This is the homepage of our site which is very user friendly

6.2Admin Login Page



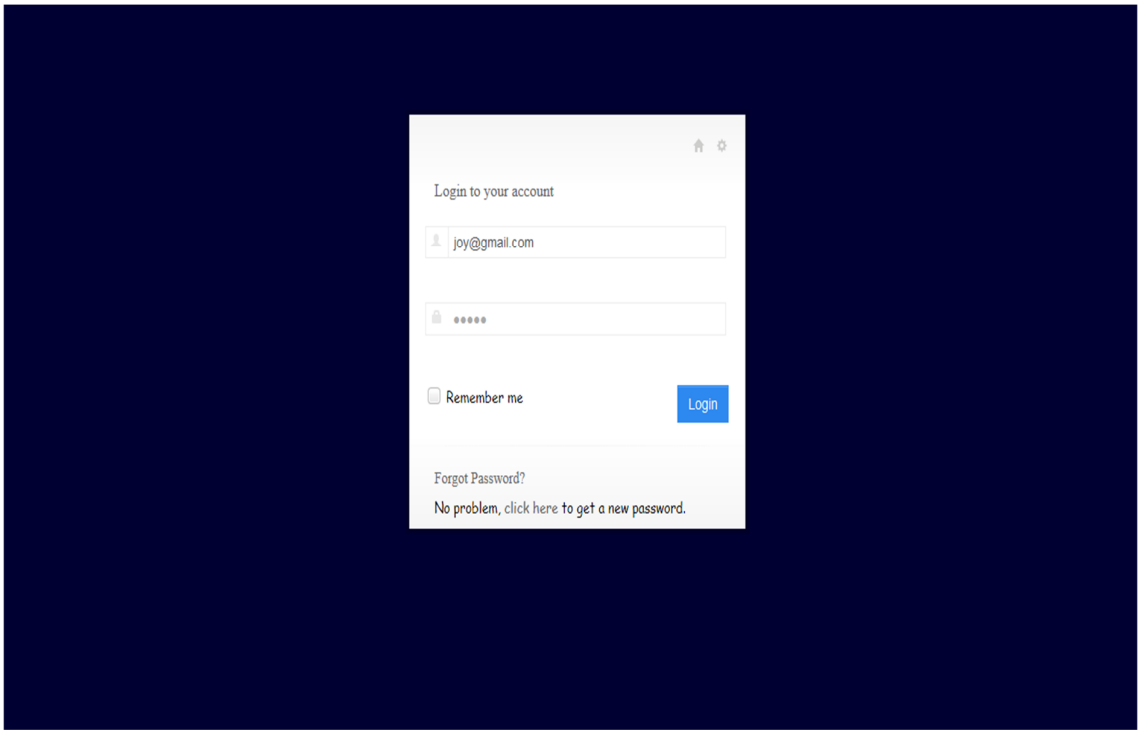
Where an admin can log in and enter the admin panel

6.3 Available Product List



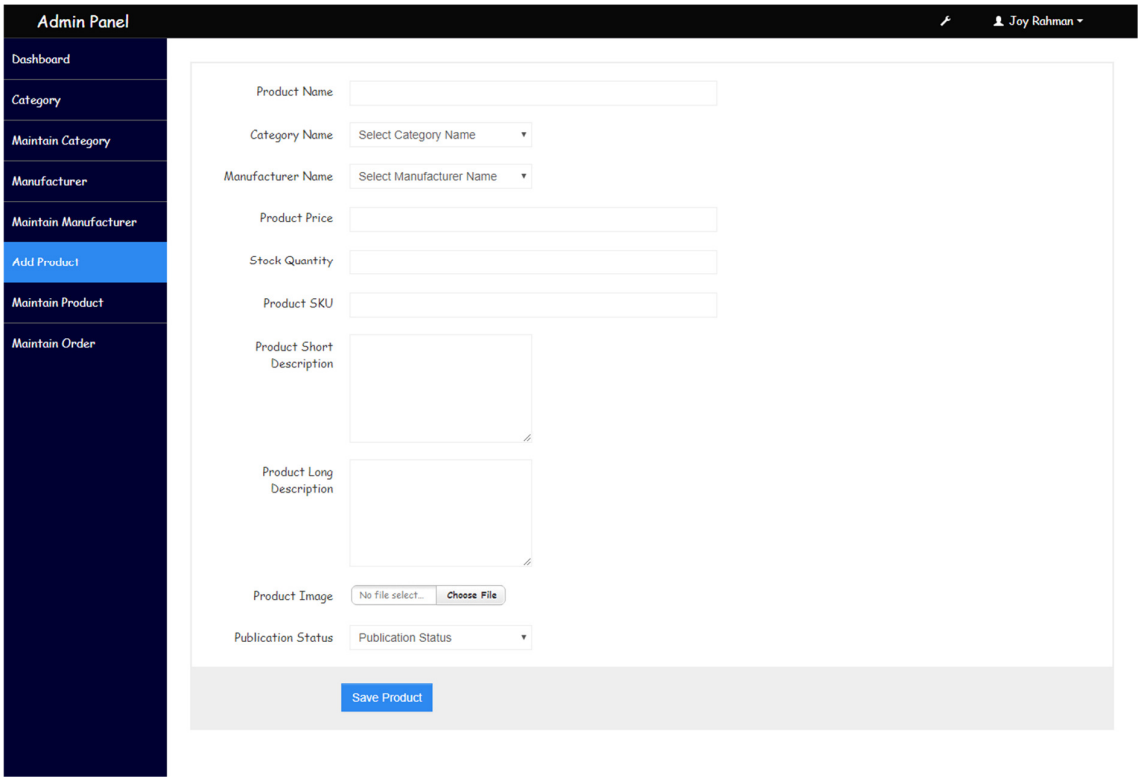
From the above page customer can find the latest product

6.4 Customer Login page to place the order



From the above page customer can log in their account to place the order

6.5 Product updating page for admin



From the above page admin can update the product

7 Conclusion

Online Cosmetic Ordering System name as “Cosmetics Zone” is generally an e-commerce site with a particular goal that can fashion lover people get good cosmetics. It gives the all kind of cosmetics. Every project must face problem or challenges while it’s being developed. In this chapter, we will discuss these problems of this project and also strong sides of the project. We are following agile incremental development and the other needed function will be added through further development.

7.1 Strength of the System

- The system has very light but easy user interface (GUI).
- The purchasing process of the application is very easy to perform.
- While customer orders his product, then he gets verification code in his mail.

7.2 Further Development

To transpire into the most quality online cosmetic serviceable brand in Bangladesh generating high valued customer satisfaction by the providing best quality online cosmetic service end to end and ensuring value, trust, excellence, desire in addition to those we associate & we believe.

7.3 Discussion

Online ordering system named as Title is an e-commerce site and it is developed by following agile methodology. It is committed to providing the highest quality online and superior service from our Shop to the customers in a clean and welcoming environment. That’s why we work with officials, and Shop to serve a wide range of cosmetic choices and provide the quick delivery of Products for customers to make life comfortable. At the Shop level, we have a Shop with top quality bike delivery system to customers.

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