**Software Project Management Plan**

**for**

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**Document Control**

**Change History**

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**Document Owner**

Rudaiba Adnin is responsible for developing and maintaining this document.

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# Overview

## Purpose and Scope

We are interested in creating a website that will be useful to common people interested in trading of products. The **eMarketPlace** website accomplishes this.

The **eMarketPlace** website will provide users the ability to log in to their account. Then the other features will lead them to search and order products as their wish and review the products. Vendors will be facilitated to create separate account, add and update their products, control the prices of the products.

The application will be created for using through a computer browser. So people having access to the internet can use the facilities of this website.

The user interface will be intuitive and simple to navigate, with 95% of new users being able to use the application without referencing the user manual. A user guide and system administration manual will be provided.

## Goals and Objectives

The overall objective is to develop a web platform for common people, both consumers and vendors to ease the trading system of products.

Project Goals:

1. Design and develop a website that functions as expected, looks great and is acceptable by moderators.
2. Provide different interfaces for general users, vendors and the admin.
3. Allow customers to search and order products of different categories and prices easily, review and rate products when they are delivered
4. Allow vendors to provide advertise for their products, control their products’ price and see the reviews of their products
5. Learn about software engineering and creating a web based software.

Project Objectives:

1. To give a primitive solution of providing fake reviews in e-commerce websites.
2. Create a website that is easily understandable and functions in a simple and intuitive manner.

## Project Deliverables

|  |  |
| --- | --- |
| **Date** | **Deliverable** |
| 04/26/19 | Requirements Specification |
| 05/03/19 | Project Plan |
| 05/10/19 | Iteration #1 Plan |
| 05/17/19 | Database and Interface design |
| 05/31/19 | Technical Prototype |
| 06/14/19 | Testing on Prototype and Demonstration to Moderators |
| 07/05/19 | Architecture Document |
| 07/19/19 | Iteration #1 Complete |
| 07/26/19 | Test Report |
| 08/02/19 | Iteration #2 Planning, Design Modification |
| 08/23/19 | Iteration #2 Complete |
| 08/30/19 | User Guide and System Administration Manual |
| 09/13/19 | Product Released |

## Assumptions and Constraints

### Assumptions

Assumptions:

1. All the team members have access to the internet while developing the system.
2. All the team members have the same version of operating system and other tools.
3. They have enough disk space to store the source codes and test case data in local machines.
4. Running the system on local server and demonstrating it by the same machine will be acceptable by the moderators.

### Constraints

Constraints:

1. The website can only be visited through a computer browser currently.
2. Buyers can not pay using digital/online payment method.

## Success Criteria

A working prototype, which is easy to use, that allows users to search and order products as well as vendors to add and update products.

## Definitions

|  |  |
| --- | --- |
| **Term** | **Definition** |
| **Actor** | user or other software system that receives value from a user case. 3 kinds of actors in this system: User, Vendor and Central Admin |
| **Baselined** | the work product has undergone a formal review and can only be changed through the prescribed change control procedures |
| **Client or Customer** | the person or organization for which this Roo Balance application is being built. |
| **Developer** | the person or organization developing the system, also sometimes called the supplier. |
| **Project** | activities that will lead to the production of the Roo Balance application. |
| **eMarketPlace Website** | the product that is being described here; the software system specified in this document. |
| **Scenario** | one path through a user case |
| **Stakeholder** | anyone with an interest in the project and its outcomes. This includes clients, customers, users, developers, testers, managers and executives. |
| **User** | the person or persons who will actually interact with the eMarketPlace website. |
| **Use case** | describes a goal-oriented interaction between the system and an actor. A use case may define several variants called scenarios that result in different paths through the use case and usually different outcomes. |

# Startup Plan

## Team Organization

|  |  |  |
| --- | --- | --- |
| **Role** | **Actor(s)** | **Responsibility** |
| Project Supervisor | Sakshar | Review system developments weekly, giving suggestions about modification in design and development |
| Project Manager | Abhik | Call team meetings, coordinate communications within group, coordinate communications outside group, break out tasks, assign them to teammates |
| Developer | Abhik, Rudaiba, Bishal | Develop software based on requirement and architect specifications |
| Programmer | Abhik, Rudaiba, Bishal | Program to requirement and architect specifications |
| Tester | Abhik, Rudaiba,  Bishal | Write test cases, perform unit testing of test cases against incremental release of code, perform integrated testing of test cases against incremental release of code, report issues |
| Architect | Abhik, Rudaiba | Specify overall internal workings of application |
| Requirement Engineer | Abhik, Rudaiba | Outline and document project dependencies and requirements. This includes internal and external dependencies. |

## Project Communications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Event** | **Information** | **Audience** | **Format** | **Frequency** |
| Team Meeting | Task status: completed since last meeting & planned for next;  obstacles encountered; change requests in process | All team members | Informal meetings following class; Formal meetings as needed; E-mail status updates & problems as they occur | As needed |
| Project Status Report | Review finished items, status of prototype; review any problems, schedule slippage, programming issues | All team members,  Supervisor | In-person demonstration to the supervisor | Once in a week |

## Technical Process

The development process is planned to be carried on an iterative and incremental way. Feedback and suggestions from the supervisor will be used from each iteration to improve the next. The first iteration will focus on basic functionality of the software. Subsequent iterations will build upon that and incorporate more features as time allows.

## Tools

* Programming & Markup Languages – PHP, CSS, Javascript, SQL
* Operating System – Windows 10
* Version Control – All work products will be stored in a private git repository
* Platform – Laravel
* Development Tools – Visual Studio Code, XAMPP

# Iteration Plans

A detailed iteration plan will be provided for Iteration 1. Further task details are available in the schedule.

### First Iteration

In the first iteration, proper authentication for all types of accounts (Admin, User and Vendor accounts) are ensured and tested. Searching of products by users and addition & updating of products by vendors are implemented and tested. Product categories, subcategories and attributes can be added by admin without any problem.

### Second Iteration

Users can order products and it is ensured that ordering is not completed until the user is logged in. Users can see the order history and review products. Vendors can see the reviews of their products and see orders from their shops. Shipping status of product can be checked and changed by the admin. Customers’ comments and reports can be seen by admin.

### Final Product

Users home page is designed and developed showing the advertisements of products. Users can add coupon code to the cart. All three user interfaces are integrated after proper testing.

# Control Plan

## Monitoring and Control

The following list of dates includes formal reviews outside of the Communication Plan. Milestones are included to reference where the project is scheduled to stand as these reviews occur:

|  |  |
| --- | --- |
| **Date** | **Review / Milestone** |
| *05/31/2019* | *Milestone: Technical Prototype Complete* |
| 06/14/2019 | Prototype reviewed by the supervisor |
| *07/19/2019* | *Milestone: Iteration #1 Complete* |
| *07/26/2019* | *Milestone: Test Report Complete* |
| 08/02/2019 | Inspected and Reviewed by the supervisor |
| *08/23/2019* | *Milestone: Iteration #2 Complete* |
| *08/30/2019* | *Milestone: Product Released* |
| 09/18/2019 | Final Presentations |

## Configuration Management Plan

The following procedure is to be used when making changes to all baselined work products:

1. All project work products will be stored in a centralized private git repository.
2. All project work products (documents, source code, test cases, program data, test data, etc) will be stored in the private git repository but not all will be under change control (subject to formal change control procedures.) Only the system requirements, project plan and source code will be baselined and under configuration control.
3. Items that are subject to change control will be considered baselined after a group review at the end of the initial document creation.
4. The change control procedure once a product is baselined is:

(1) Anyone wanting to make a change to a baselined item notifies the manager and informs him about the details of the change

(2) Each member of the group has to pull from the remote main branch of the repository to a local branch before starting modification of the current version.

(3) A change to the project will have a suitable commit message to track initialization and subsequent changes. Every update will be pushed to a separate branch before merging to others’ works.

(4) If anyone of the team does object to the change, the reason for objecting will be discussed at a meeting where everyone is invited to attend and voice their opinion. At the end of the meeting a democratic vote will be held to decide whether or not the change should be allowed.

(5) If a change takes place, the initiator must collaborate with the project manager to update the schedule and merge his/her local branch to the main branch.

(6) The project will then be shown to the supervisor. If the supervisor accepts most of the changes, the team members will start planning for the next work.

# Supporting Process Plans

## Test Plan

The test plan defines the items that will be tested, methods for testing, and a schedule detailing the tasks, owners, and timeline.

The test plan will be available in a separate document in the version control system.

## Product Acceptance Plan

At the conclusion of each iteration, the prototype created will be tested to ensure it meets the requirements of that iteration. No separate environment need not be set up to test functionality because the system will run on a computer browser. The prototype in that iteration will be demonstrated to the supervisor and course teachers. They will give a combined decision whether to accept the prototype or not.