Eyeconic - Glasses Shop Management System

Version 1.0

Revision History

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| **Date** | **Version** | **Description** | **Author** |
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# Introduction

This Requirements Management Plan provides an overview of how the requirements of our online glasses store are managed. It includes the purpose, scope and overview.

## Purpose

This Requirements Management Plan is to describe how the online glasses store project will set up requirements documents and requirement types, and their respective requirement attributes and traceability.

## Scope

This Requirements Management Plan aims to people who are planning to establish an online glasses store.

## Overview

The rest of the Requirements Management Plan including requirement management, requirement management program, milestones, training and resources. Requirement management is a brief description of who is going to be responsible for performing the various activities described in the requirements workflows as well as tools, environment and infrastructure are used in fulfilling the requirements management functions throughout the project. The requirement management program is also inspected and evaluated. Milestones are section which identifies the internal and customer milestones related to the requirements management effort. Finally, training and resources describe the software tools, personnel, and training required to implement the specified requirements management activities.

# Requirements Management

## Organization, Responsibilities, and Interfaces

|  |  |
| --- | --- |
| **RUP Role** | **Responsibility** |
| **Customer (C)** | * Provide requirement |
| **Project Manager (PM)** | * Analyze and set up timeline of the plan * Separate work for each member and team * Manage timeline, risk and progress * Understand business * Contact with customer |
| **Project Manager Assistant (PMA)** | * Help project manager * Follow, deploy and control project * Write report for PM * Manage group and project |
| **Business Analyst (BA)** | * Analyze business system, data, architect,enterprise * Analyze requirement or solutions * Formulate strategy |
| **Developer (Dev)** | * Complete production following requirement * Fix bugs * Create production through coding * Maintain production * Fix production following customer requirement |
| **Tester** | * Write test case,test plan * Compile code, run test case,debug * Give solution for bugs |
| **Designer** | * Design logo, theme |

In our group, Long and Anh are responsible for Business Modeling, Huong and An are responsible for Requirements Definition, Tung is responsible for Analysis & Design and all five members are responsible for Prototyping. Besides, the use-cases are divided equally and undertaken by every member in our team.

## Tools, Environment, and Infrastructure

|  |  |
| --- | --- |
| **Tool** | **Purpose** |
| StarUML | Draw use cases diagram , activity diagram, class diagram |
| Visual Paradigm | Draw use cases diagram , activity diagram, class diagram |
| LucidChart | Draw use cases diagram , activity diagram, class diagram |
| Draw.io | Draw use cases diagram , activity diagram, class diagram |
| Microsoft Word | Write project |
| Visual Studio Code | Write and edit code |
| Notpad++ | Write and edit code |
| Excel | Write report and list |
| Microsoft Project | * Set the baseline for the project. * Assign resources to project and keep track of project’s milestones. |
| Google Drive | Version control requirements items generated throughout the project. |

# The Requirements Management Program

## Requirements Identification

|  |  |  |
| --- | --- | --- |
| **Artifact**  **(Document Type)** | **Traceability Item** | **Description** |
| Stakeholder Requests (STR) | Stakeholder Request (STRQ) | Key requests, including Change Requests, from stakeholders |
| Vision (VIS) | Stakeholder Need (NEED) | Key stakeholder or user need |
| Vision (VIS) | Feature (FEAT) | Conditions or capabilities of this release of the system |
| Use-Case Model | Use Case (UC) | Use cases for this release, documented in Rational Rose |
| Supplementary Specification (SS) | Supplementary Requirement (SUPP) | Non-functional requirements that are not captured in the use-case model |

## Traceability

Traceability matrix and traceability graph can be made to enable users to find the origin of each requirement and track every change that was made to the requirements.

***3.2.1. Criteria for <traceabilityitem>***

* + - * Understand the source of requirements.
      * Manage the scope of the project.
      * Verify that all requirements of the system are fulfilled by the implementation.
      * Verify that the application does only what it was intended to do.
      * Manage changes to requirements.
      * Assess the project impact of a change in a requirement.
      * Assess the impact of a failure of a test on requirements (i.e. if test fails the requirement may not be satisfied).

## Attributes

### Attributes for <traceability item>

Attributes assigned to each requirement will be used to manage the software development process and to prioritize the features for each release.

***3.3.2. Attribute Matrix***

The following table is a listing of requirement types created in requisite pro and the attributes associated with each requirement type. It is recommended the indicated attributes be used to manage project requirements.

X – Attribute is mandatory. This attribute will be visible in requisite pro for a requirement type

O – Attribute is optional. This attribute will be visible in requisite pro for a requirement type and will be given default value if the user does not select the attribute.

Blank cell means that attribute does not apply to the requirement type and hence will not be visible to the user.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Attribute** | | **Stakeholder Request (STRQ)** | **Feature (FEAT)** | **Use Case (UC)** |
| **Description** | | X | X | X |
| **Target Release** | |  | X | X |
| **Actual Release** | |  | X | X |
| **Status** | X | | X | X |
| **Priority** | X | | X |  |
| **Assigned To** |  | | X |  |
| **Rationale** |  | | X |  |
| **Assumptions** | O | | X |  |
| **Risk** | X | | X |  |
| **Source** | X | | X |  |
| **Complexity** |  | | X |  |
| **Volatility** |  | | X |  |
| **Part** |  | |  | X |
| **Analyst** | X | |  | X |
| **Architect** |  | | X | X |
| **Planned Iteration** |  | |  | X |
| **Actual Iteration** |  | |  | X |
| **Notes** | X | | X | X |

* Denotes attributes that will impact the suspect state for traceability when change occurs.

## Reports and Measures

All the reports in this Requirement Definition are formatted as Rational Unified Process (RUP) specific documents.

The Rational Unified Process (RUP) is an iterative software development process framework created by the Rational Software Corporation, a division of IBM since 2003. RUP is not a single concrete prescriptive process, but rather an adaptable process framework, intended to be tailored by the development organizations and software project teams that will select the elements of the process that are appropriate for their needs. RUP is a specific implementation of the Unified Process.

## Requirements Change Management

### Change Request Processing and Approval

When working on project, expect change. While change can have a significant impact on a project, it’s change requests that aren’t appropriately approved, incorporated, and communicated that cause significant issues and have negative impacts that often spiral out across the organization. In this section, we look at how to manage change requests so that an informed decision can be made about whether or not to approve them, and how change can be incorporated into a project with as little disruption as possible.

The first question to consider is what exactly the scope of the change request is. A change request could be related to the business, stakeholder, or functional requirements. Along with identifying what the change is, you’ll want to identify the benefit of making change or the business need driving the change as well. This will help your change approval team determine whether or not the proposed change is worth the effort.

Do the changes affect other modules and arise conflicts? If the changes have this negative effect, rejected them.

If the changes bring many values, they are higher prioritized.

If the changes affect even change structure, they are implemented early.

How much does the change extend the baseline? If the change drags the project baseline, deprioritizes them.

Based on the change assessment, the changes which are of highest priorities will be approved by the CCB. Lower-priority changes will have status of pending, and lowest-priority changes will be rejected.

### Change Control Board (CCB)

The change control board includes team leader. Our team consists of five members and Pham Duc Tung is team leader. Opinions of every member are proposed and discussed to change requests appropriately, finally, approvals are followed by team leader.

### Project Baselines

The project baseline was approved by the team leader.

• 10/10/2019: Project kick start.

• 11/10/2019 – 17/10/2019: Determine project scope, a vision document, a use-case model survey, an intial project glossary, initial risk assessment.

• 17/10/2019 –17/11/2019: Identify all use-cases and actors, supplementary requirements (non-functional or not associated with a use case), software architecture description and execute architectural prototype.

• 17/10/2019 –30/11/2019: Provide a product ready to put into the hands of end users, the software product integrated on the adequate platforms and a description of the current release.

•1/12/2019 –7/12/2019: Deployment-specific engineering: cutover, commercial packaging and production, sales roll-out, field personnel training.

Tuning activities: bug fixing, enhancement for performance and usability.

Assessment of the deployment baselines against the complete vision and the acceptance criteria for the product.

• 7/12/2019: Project finishes.

## Workflows and Activities

Firstly, business modeling is required. Then, all the members discuss and make the decision on what our group needs to establish an online bookstore. Finally, An and Huong is assigned to be in charge of the Requirements Definition part and set out Requirements Management Plan.

# Milestones

• 18/10/2019: Ideas were proposed, unified and finalized to set the requirements for the project.

• 27/10/2019: A Requirements Management Plan was set out.

# Training and Resources

Star UML, LucidChart, Draw.io or similar software is required to draw UML diagrams included in our project report. Visual Studio Code is required to build our online book store website. Visual Studio is required to design our website’s backend, and the members spend time on learning and developing PHP to go along with Visual Studio.