

**Project quality management Plan**

**<My Doctor Project>**



**Prepared by:**  Pham Duc Thang - SE03055

Bui Quoc Trong - SE03418

Nguyen Duy Linh - SE03150

Tran Anh Duong - SE02797

Pham Minh Tuan - SE02875

Nguyen Van Hung - SE02582

VERSION HISTORY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| 1.0.0 | <ThangPD > | <11/04/2016> | <ThangPD> | <11/04/2016> | Create new |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

TABLE OF CONTENTS

[1 Introduction 4](#_Toc448233080)

[1.1 Purpose of The Project Quality Management Plan 4](#_Toc448233081)

[1.2 Scope 4](#_Toc448233082)

[2 Project Quality Management Overview 4](#_Toc448233083)

[2.1 Organization, Responsibilities, and Interfaces 4](#_Toc448233084)

[2.2 Tools, Environment, and Interfaces 5](#_Toc448233085)

[3 Project Quality Management 5](#_Toc448233086)

[3.1 Quality Planning 7](#_Toc448233087)

[3.1.1 Define Project Quality 7](#_Toc448233088)

[3.2 Quality Assurance 8](#_Toc448233089)

[3.3 Quality Control 8](#_Toc448233090)

[Appendix A: Project Quality Management Plan Approval 10](#_Toc448233091)

# Introduction

##### This document describe the Q&A plan for <My Doctor>, who has responsibility in development processes and how this project is developed. It defines the quality which will be archived and managed throughout various project phrases.

## Purpose of The Project Quality Management Plan

##### - Identify quality standard relevant to this project and the way to satisfy them.

##### - Introduce techniques, procedures which will be used in <My Doctor>

##### - Ensure the project deliverables are completed with an acceptable quality.

## Scope

##### This document is for all members engage to <My Doctor>

##### It is used in: Software requirement, evaluation and acceptance standards are developed

# Project Quality Management Overview

## Organization, Responsibilities, and Interfaces

|  |  |  |
| --- | --- | --- |
| Name | Role | Quality Responsibility |
| ThangPD | Project Management | Planning and defining scope, developing schedules, allocating resources, coordinating communication, generally responsible for keeping the team’s focus on main goal, and tries to keep the project team focused on the right goal at a time. |
| TrongBQ | Developer, Designer | Involve to code product.  Involve to design product. (Build system architecture, coding. Review codes. Fix bug) |
| LinhND | Developer | Involve to code product.  (Building common framework, Investigate solution. Build system architecture, coding. Review codes. Fix bug) |
| TuanPM | Developer | Involve to code product. (Colecting database. To be in charge of data issues. Review code. Fix bug) |
| DuongTA | QA and Tester | - Responsible for test execution, including test set-up and test run, evaluation of test run and error recovery, defect logging and test results recording.  - Create test cases, Execute test cases  - Manage the Quality Assurance function |
| HungNV | QA and Tester | -Audits and approve project deliverables from QA perspective. Review plans and deliverables for compliance with applicable standards. Provides guidance and assistance on process matters  - Create test cases, Execute test cases |

## Tools, Environment, and Interfaces

* Programming languages:
* C#, HTML5,Objective C
* Framework:
* AngularJS v1.2.22 (JavaScript)
* Software Architecture:
* Web Service
* Process Model:
* Iterative and Incremental Software Process Model.
* Version Control:
* Github.
* IDEs:VisualStudio 2015, Xcode, Resharper 10.0.2 ultimate.
* DBMS:
* MySQL v5.5, Redis v3.0, MySQL Workbench v6.2.
* UML tools:
* Enterprise Architect v12, Astah Professional v6.9.0
* Manage tools:
* Jira
* Web server:
* Apache2.0.
* Other: Microsoft Office 2013, Microsoft Visio 2013, Microsoft Project 2013

# Project Quality Management

At the highest of levels Quality Management involves planning, doing, checking, and acting to improve project quality standards. PMI PMBOK breaks the practice of Quality Management into three process groups: Quality Planning (QP), Quality Assurance (QA) and Quality Control (QC). The following sections define how this project will apply each of these practice groups to define, monitor and control quality standards.

## Quality Planning

### Define Project Quality

|  |  |  |
| --- | --- | --- |
| Name | Description | Target |
| Effort efficiency | The percent of efficiency of project. | 99% |
| Customer satisfaction | The satisfaction of customers through the delivery times | Customers must be satisfied on the quality and progress of the project or surpass customer expectation. |
| Test Efficiency | Test the effectiveness of each function and each Role | 99% |
| Timeliness | All activities: development, test, maintenance, test. | All activities must ensure the completion of over 98% |
| Performance | Performance of Application. | 90% |

This below table is created based on norm concept of FPT Software.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Name | Unit | Norm 2016 | | | Reason |
| LSL | Target | USL |
| 1 | Leakage TS | Wdef/MM | 0.0 | 0.32 | 0.63 | 2016 |
|  | Development |  | 0.0 | 0.34 | 0.68 | 2016 |
|  | Maintenance |  | 0.0 | 0.20 | 0.40 | 2016 |
|  | Test |  | 0.0 | 0.00 | 0.10 | 2016 |
|  | Migration |  | 0.0 | 0.39 | 0.79 | 2016 |
|  | Others |  | 0.0 | 0.11 | 0.23 | 2016 |
| 2 | Customer satisfaction | Point | 80 | 84 | 88 | 2016 |
| 3 | Project productivity | LOC/pd | 65 | 72 | 79 | 2016 |
| 4 | Timeliness | % |  |  |  | 2016 |
| 5 | Development |  | 91 | 96 | 100 | 2016 |
|  | Maintenance |  | 90 | 95 | 100 | 2016 |
|  | Test |  | 96 | 98 | 100 | 2016 |
|  | Migration |  | 96 | 98 | 100 | 2016 |
|  | Others |  | 96 | 98 | 100 | 2016 |
| 6 | Effort Efficiency | % |  |  |  | 2016 |
|  | Development |  | 88 | 93 | 98 | 2016 |
|  | Maintenance |  | 90 | 95 | 100 | 2016 |
|  | Test |  | 95 | 100 | 105 | 2016 |
|  | Migration |  | 90 | 95 | 100 | 2016 |
|  | Others |  | 80 | 85 | 90 | 2016 |
| 7 | Unit Effort Efficiency | % | 75 | 80 | 85 | 2016 |
| 8 | Unit Busy Rate | % | 83 | 88 | 93 | 2016 |
| 9 | Process Compliance Rate | % | 90 | 95 | 100 | 2016 |
| 10 | Unit Leakage | Wdef/MM | 75 | 80 | 85 | 2016 |
| 11 | Defect Rate | Wdef/MM | 15.0 | 20.0 | 25.0 | 2016 |
| 12 | Defect Removal Efficiency | % | 85 | 95 | 100 | 2016 |
| 13 | Review Efficiency | % | 45 | 50 | 70 | 2016 |
| 14 | Correction Cost | % | 3 | 5 | 7 | 2016 |

## Quality Assurance

* Quality assurance includes all of the activities related to satisfying the relevant quality standards for a project.
  + Schedule and use quality assurance tools and techniques:

1. Benchmarking

2. Quality audits and review

3. Design of experiments

* + - Identify project management documents: Project work plan, Requirements and functional design documents and, Customer quality management documents

## Quality Control

Quality Control is a process to ensure that product quality is maintained or improved and errors are reduced and eliminated.

1. **Apply Quality Control techniques**

4 out of Seven Basic Tools of Quality will be used to control quality of project.

* **Cause-and effect diagrams**: Help tracing complaints about quality problems back to the responsible production operations, find the root cause of a problem.
* **Histograms**: Using graph of a distribution of variables, each bar represents an attribute or characteristic of a problem or situation, and the height of the bar represents its frequency.
* **Pareto charts:** Help identify and prioritized problems areas.
* **Flowcharts:** Displays the logic and flow of processes that help analyze how problems occur and how processes can be improved.

1. **Manage quality control results**

Quality Control can reveal some useful data about quality of project. We can take following actions to ensure quality go the way as expected.

* **Acceptance decision:** Quality control results may indicate how deliverable have achieved specifications and objectives of project. Based on those results, we can determine accepting the quality or reject it.
* **Rework:** If the quality haven't met the specifications and objectives, a rework is a must until meet the specifications and objectives.
* **Process adjustments:** Quality control results may show that a process is preventing the project from achieving quality objectives. Therefore, we need to make adjustment in the activity steps of process in order to meet the project objectives.

Appendix A: Project Quality Management Plan Approval

The undersigned acknowledge they have reviewed the **Project Quality Management Plan** and agree with the approach it presents. Changes to this **Project Quality Management Plan** will be coordinated with and approved by the undersigned or their designated representatives.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: |  |  |  |