|  |
| --- |
| Crest care hospital management system  master test plan |

Version information

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Remarks** | **Author** |
| 0.0.1 | 10.04.2020 | None | Theekshana |
|  |  |  |  |

Distribution list

|  |  |
| --- | --- |
| **Name** | **Company/Function** |
|  |  |
|  |  |

Approval Client

|  |  |  |
| --- | --- | --- |
| Client: Crest care hospital | | Signature |
| Name | John martin |  |
| Division | IT support |  |
| Department | IT department |  |
| Function | Approval of final design |  |
| Location | 482 High St Rd, Mount Waverley VIC 3149 |  |
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| E-Mail address | Crestcare@cch.com.au | Date: 10.04.2020 |

Management summary

|  |  |  |
| --- | --- | --- |
| **Project objective**  Main objective of the project is to design and develop a management system for Crest care hospital in order to manage all the essential activities switching the current manual data handling process into a web based application to increase the accuracy, efficiency, and the security of data. | | |
| **Test objective and assignment**  To develop and deliver fully functional error free final software solution for the customer to meet their requirement | | |
| **Short description of the test approach**  Frequently meetings and times limits are being conducted in test approach | | |
| **Results to be realized** | | |
| *Result*   * Successfully build and executed test * Successfully executed and completed UA test * Complete all areas of the test | *Document*   * ST Test report * UAT Test report * End report Testing | *Delivery date* 9-30-2020  09-30-2020  09-30-2020 |
| **Qualitative objectives**  At the end all the test levels need to be successfully completed within the time and all system objects need to be clear meeting the acceptance criteria | | |

|  |  |
| --- | --- |
| **Estimate** | |
| **Test process risks and measures** | |
| *Test process risks*  • management of time   * Error free solution | *Measures to be taken*  • allocate reasonable time   * Each object must go through the double check |
| **Go/no-go decisions**  < Example: After each test level the test manager makes sure that a test report is drawn up. This report will, after review with the project manager, be presented to the key stakeholders, who then decide if it is possible to go to the next test level.  At the end of the test project a test end report will be drawn up, containing a risk based assessment of the test object. Based on this end report the key stakeholders make the final decision to go to production or not. > | |

Table of Contents

1 Introduction 1

1.1 Project and project objective 1

1.2 Objective of the master test plan 1

1.3 Involved in creating the master test plan 1

2 Assignment formulation 2

2.1 Client 2

2.2 Supplier 2

2.3 Assignment 2

2.4 Scope 2

2.4.1 Within scope 2

2.4.2 Out of scope 2

2.5 Preconditions and assumptions 3

2.6 Acceptant and acceptance criteria 3

2.6.1 Acceptant 3

2.6.2 Acceptation criteria 3

3 DocumentatiON 4

3.1 Basis for the master test plan 4

3.2 Standards 4

3.3 Test basis 4

4 Test strategy 6

4.1 Product risk analyses 6

4.2 Test strategy 7

5 Approach 9

5.1 Evaluation 9

5.2 The <name test level> 9

**5.2.1** **Goal** 9

**5.2.2** **Short description** 9

5.3 Phasing per test level 10

5.4 Test products 11

5.5 Review plan 12

5.6 Entrance and exit criteria for each test level 12

5.6.1 << Optional: User Acceptance Test >> 12

5.7 Go/No go 13

6 Organization 14

6.1 Organization structure 14

6.2 Roles, tasks and responsibilities 14

6.3 Structure of meetings 14

6.4 Structure of reporting 15

6.5 Completion 15

7 Infrastructure 16

7.1 Test environments 16

7.2 Test tools 16

7.3 Office setup 16

8 Management 17

8.1 Test process management 17

8.2 Test infrastructure management 17

8.3 Test product management 17

8.4 Defects procedure 17

9 Test process risks and countermeasures 18

10 Global Estimation & Planning 19

10.1 Estimation 19

10.2 Planning 20

10.3 Milestones 20

11 Glossary 21

# Introduction

## Project and project objective

This master test plan fits to the project plan of Crest care hospital management system. The objective of the project is to design and develop a well structures management system for Crest care hospital to convert all their manual activities into computerized.

## Objective of the master test plan

The objective of the Master Test Plan (MTP) is to inform all who are involved in the test process about the approach, the activities, including the mutual relations and dependencies, and the (end) products to be delivered for the test project <project name>.

The master test plan describes this approach, the activities and (end) products that need further elaboration in the other system test plans. These system test plans need to be abstracted from this master test plan.

## Involved in creating the master test plan

|  |  |  |
| --- | --- | --- |
| **Name** | **Function** | **Responsibility** |
| Theekshana | Design MTP | <Write MTP> |
| Manusha | Review and feedback | <Review MTP> |
| Prabhashi | Approve and feedback | <Approve MTP> |
|  |  |  |

# Assignment formulation

## Client

Crest care hospital

## Supplier

H.K. Theekshana Ravinath

## Assignment

Fully functional error free final software solution satisfying all the areas of requirement

## Scope

### Within scope

According to the project scope, Crest care hospital management system will be designed to satisfy all the essential requirement of the client from patient registration until make invoices. To develop the system must have to consider about the feasibility of the project and the budgets estimated. As minimum needs to be covered in the testing part are listed below.

* Hospital management system
* 0.0.1 version of the software
* All essential functionalities
* UI functionalities and database functionalities
* User friendliness of user interfaces

### Out of scope

The following areas will not be covered in the testing process as they are out of the scope

* Test activities which are executed by others
* Upgrading of hardware requirement to fit the system
* Future upgradation of the project

## Preconditions and assumptions

Preconditions concern conditions that third parties like the client, the project or the users, impose to the test process and within which the test process must operate (definition TMap® Next). The following demands are enforced:

* Test of the project must be done before 30/10/2020
* Master test plan need to be obtained along with the project initiation

Assumptions are external circumstances or events that must occur to ensure the test process’ success, but that cannot be controlled by the test process. In other words, these are the requirements of the test process vis-à-vis others (definition TMap® Next).

## Acceptant and acceptance criteria

### Acceptant

The table below states the acceptant of <system>:

|  |  |  |
| --- | --- | --- |
| **Name** | **Function** | **Department** |
|  |  |  |
|  |  |  |

### Acceptation criteria

The table below states which acceptance criteria there are for <system> and to which standard they should apply:

|  |  |
| --- | --- |
| **Description** | **Standard** |
|  |  |
|  |  |

# DocumentatiON

This chapter describes the documentation used in relation with the master test plan. The described documentation concerns a first inventory and will be elaborated, actualized and detailed at a later stage, during the separate test levels.

## Basis for the master test plan

The following documents are used as basis for this master test plan.

|  |  |  |  |
| --- | --- | --- | --- |
| **Document name** | **Version** | **Date** | **Author** |
|  | 0.0.1 | 10.04.2020 | theekshana |
|  | 0.0.1 | 10.04.2020 | theekshana |
|  | 0.0.1 | 10.04.2020 | theekshana |

## Standards

The following conventions and standards are applied for this test plan.

|  |  |  |  |
| --- | --- | --- | --- |
| **Document name** | **Version** | **Date** | **Author** |
| TMap® Next for result driven testing | 1e edition | 2006 | T. Koomen, L. van der Aalst, B. Broekman en M. Vroon |
|  |  |  |  |

## Test basis

The test basis contains the documentation that serves as basis for the tests that have to be executed. The overview below describes the documentation that is the starting point for testing.

|  |  |  |  |
| --- | --- | --- | --- |
| **Document name** | **Version** | **Date** | **Author** |
|  |  |  |  |
|  |  |  |  |

# Test strategy

The time available for testing is limited; not everything can be tested with equal thoroughness. This means that choices have to be made regarding the depth of testing. Also it is strived to divide test capacity as effective and efficient as possible over the total test project. This principle is the basis of the test strategy.

The test strategy is based on risks: a system has to function in practice to an extent that no unacceptable risks for the organization arise from it. If the delivery of a system brings along many risks, thorough testing needs to be put in place; the opposite of the spectrum is also true: 'no risk, no test'.

The first step in determining the test strategy is the execution of a *product* *risk analyses*. This is elaborated in §4.1.

The test strategy is subsequently based on the results of the risk analyses. The test strategy lays down *what,* *how* and *when* (in which test level) is being tested and is focused in finding the most important defects as early as possible for the lowest costs. This can be summarized as testing with an optimal use of the available capacity and time. The test strategy is described in §4.2.

## Product risk analyses

The product risks are determined in cooperation with the client and the other parties involved. This product risk analyses (PRA) is comprised of two steps:

* Make an inventory of the risks that are of interest
* Classify the risks.

The complete product risk analysis is mentioned in appendix <appendix number>.

During the risk assessment the test goals were also formulated. These can be found together with the corresponding characteristics in table below.

|  |  |  |
| --- | --- | --- |
| **Test goal** | **Description** | **Characteristic** |
| Flexibility | Flexibility of different resolution sizes | Website can be fitted with different aspect of screen sizes |
| Compatibility | Support for different platforms | Support web browser and mobile devices |
|  |  |  |

The acceptants <optional: and other parties involved with the project> have determined the product risks. The extent of the risk (the risk class) is dependent on the chance of failure (how big the chance is that it goes wrong?) and it depends on the damage for the organization if it actually occurs.

The risk class (RC) determines the thoroughness of the test. Risk class A is the highest risk class and C is the lowest. The test strategy is subsequently focused on covering the risks with the highest risk class as early as possible in the test project.

First the chance of failure and damage are determined for each risk. The risk class has been taken directly from this.

#### Risk table

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristic** | **Part** | **RC** | **Argumentation** |
| Functionality | 1 | C |  |
| User-friendliness | 2 | B |  |
| Performance | 1 | B |  |
| Security | 2 | A |  |
| Suitability | 2 | C |  |
| Etc. |  |  |  |

## Test strategy

For each risk from the product risk analysis the risk class is qualifying the thoroughness of the test. Risk class A is the highest risk class and C the lowest. The test strategy is subsequently focused on covering the risks with the highest risk class as early as possible in the test project.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic /object part** | **PRA-RK** | **Evaluation** | **Development test** | **ST** | **FAT** | **UAT** | **Impl** |
| Functionality | C |  |  |  |  |  |  |
| - part 1 | C |  |  |  |  |  |  |
| - part 2 | C |  |  |  |  |  |  |
| - total | C |  |  |  |  |  |  |
| User-friendliness | B |  |  |  |  |  |  |
| Performance | B |  |  |  |  |  |  |
| - online | B |  |  |  |  |  |  |
| - batch | A |  |  |  |  |  |  |
| Security | A |  |  |  |  |  |  |
| Suitability | C |  |  |  |  |  |  |

<Explanation for the table above:

|  |  |
| --- | --- |
| PRA-RC | Risk class (from product risk analysis, where A=high risk, B=average risk, C=low risk) |
| Evaluation | Evaluation/review of the various intermediary products (requirements, functional design, technical design) |
| Development test | Unit test and Unit integration test |
| ST | System test |
| FAT | Functional acceptance test |
| UAT | User acceptance test |
| Impl | Implementation |
|  | Limited thoroughness of the dynamic test |
|  | Medium thoroughness of the dynamic test |
|  | High thoroughness of the dynamic test |
| S | Static testing (checking and examining the products without executing the software |
| I | Implicit testing (including in another test type without creating specifically designed test cases |
| <blank> | If a cell is blank, it means that the relevant test or evaluation level does not have to be concerned with the characteristic |

**>**

# Approach

In this chapter each test level in the test strategy (the *what*) will be translated to a concrete test approach (the *how*). << Make sure that the Test levels

For this MTP the following test levels are acknowledged:

|  |  |
| --- | --- |
| **Test level** | **Goal** |
| system test | End result as expected requirement |
| Functional acceptance test | Expected functions performs properly |
| Production acceptance test | User friendliness of interfaces |

## Evaluation

## The <name test level>

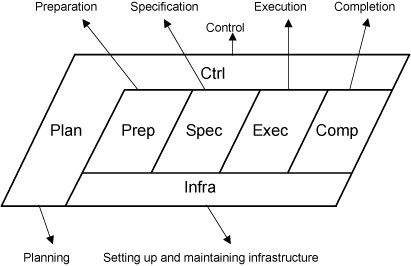
### **Goal**

All the expected functionalities should be working properly as per client’s requirement

### **Short description**

The test plan is in the progress of acceptance from all the stakeholders of the project

## Phasing per test level



In the **Planning** phase, the test manager formulates a coherent approach that is supported by the client to adequately execute the test assignment. This is laid down in the test plan. In the **Control** phase the activities in the test plan are executed, monitored, and adjusted if necessary. The **Setting up and maintaining infrastructure** phase aims to provide the required test infrastructure that is used in the various TMap phases and activities. The **Preparation** phase aims to have access to a test basis, agreed with the client of the test, of adequate quality to design the test cases. The tests are specified in the Specification phase and executed in the **Execution** phase. This provides insight into the quality of the test object. The test assignment is concluded in the **Completion** phase. This phase offers the opportunity to learn lessons from experiences gained in the project. Furthermore activities are executed to guarantee reuse of products.

## Test products

The deliverables are:

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Product** | **Comment** | **Delivery Date** |
| <Planning> | <Master test plan> | Planned | 30.09.2020 |
|  | <Test plan for each test level> | Need to be executed | 30.09.2020 |
|  |  |  |  |
| <Management> | <Risk report> | Designed | 10.08.2020 |
|  |  |  |  |
| <Setting up and maintenance infrastructure> | <Detail specification test environment> | Yet to be planned | 10.08.2020 |
|  |  |  |  |
| <Preparation> | <Report detail intake for each test level> | Yet to be planned | 17.08.2020 |
|  |  |  |  |
| <Specification> | <Test script pretest> | Test\_script.docx  Test\_steps.docx  Test\_case.docx | 05.08.2020 |
|  | <Test script for each test level> |  |  |
|  | <Test script for each test level> |  |  |
|  |  |  |  |
| <Execution> | <Defect log> | Yet to be planned | 17.08.2020 |
|  | <Status report> |  |  |
| <Completion> | <End report> | Finalized | 18.08.2020 |
|  | <Release advice (for each test level)> |  |  |

## Review plan

List the deliverables that have to be reviewed by the stakeholders.

* Master test plan
* Test plan for each test level
* End report
* Defect log

| **Deliverable** | **Authors** | **Type review** | **Reviewers** |
| --- | --- | --- | --- |
| master test plan | Theekshana |  |  |
| Test plan for each level | Theekshana |  |  |
| End report | Theekshana |  |  |

## Entrance and exit criteria for each test level

For the phase Specification and Execution the following entrance criteria are defined:

Entrance criteria for Specification phase:

Entrance criteria for Execution phase:

### << Optional: User Acceptance Test >>

For the phase Specification and Execution the following entrance criteria are defined:

Entrance criteria for Specification phase:

Entrance criteria for Execution phase:

The following exit criteria are defined for the UAT:

## Go/No go

# Organization

Organization<< See TMap® Next 5.2.8 and 8.6.5 >>

## Organization structure

## Roles, tasks and responsibilities

Describe for each role the tasks and the responsibilities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Department / Name employee(s)** | **# hours**  **per week** | **Period** | **Description of tasks and**  **responsibilities** |
| <Test manager> | Theekshana | 5 | 2 | <-Write MTP  -Coordinate overall test process> |
| <Test coordinator> | Manusha | 5 | 2 | <-Write test plan  -Coordinate test> |
| <Tester> | Kushal | 5 | 2 | <-Make test specifications  -Execute (re)tests> |
| <Optional: Functional administrators> | Prabhashi | 5 | 2 | <Support testing> |

## Structure of meetings

Mention all types of meetings within the test project, the objective of the meeting, the frequency and who needs to be present.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Goal** | **Frequency** | **Who** |
| Project meeting | Discuss overall project progress | <Weekly> | Project manager  Test manager |
| Progress meeting for each test level | Discuss progress for each test level | <Weekly> | Test manager  Testers |
| defect triage | Discuss and prioritize defects found during test | <Weekly> | Test manager – owns  Technical lead  Project Manager  Business lead |

## Structure of reporting

Mention all types of written communication.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Goal** | **Frequency** | **Who** |
| Risk report | Gives insight in the recognized risks of the tests | Ad-hoc | Test team |
| Release advice | Gives advice about quality/risks of the implementation of the test object | Once-only | Project manager |
| End report | Gives insight in the evaluation of the test process and test object | Once-only | Project manager |
| Progress report | Gives insight in the progress of these tests and quality/risks of the test object | Weekly | Test manager to key stakeholders |
| Defect reports | Gives insight to defects and their status’. | Weekly | Test manager to key stakeholders |

## Completion

This describes the procedures for the completion process at the end of the project.

# Infrastructure

Refer for a further elaboration to the detail test plans and for the infrastructure planning to chapter 10. See for checklists http://eng.tmap.net/Home/TMap/Downloads/index.jsp.

## Test environments

| **Test level** | **Environment** | **Requirements** | **From** | **To** |
| --- | --- | --- | --- | --- |
| <ST> | Windows 7 or above | Core i5 processor, 4GB ram, 2GB VGA | 05.07.2020 | 05.08.2020 |
| <FAT> | MySQL server | Core i5 processor, 4GB ram, 2GB VGA | 05.07.2020 | 05.08.2020 |
| <UAT> |  |  |  |  |

## Test tools

|  |  |  |
| --- | --- | --- |
| **Test level** | **Test tool** | **Comment** |
| ST | * Laptop or PC * Web browser * Asana * NetBeans * Project plan | Referred to project plan |
| FAT | Core i5 processor, 4GB ram, 2GB VGA | Referred to project plan |

## Office setup

|  |  |  |
| --- | --- | --- |
| **Test level** | **Components** | **Comment** |
| <ST> |  |  |
| <…> |  |  |

# Management

## Test process management

The management of the test process can be divided into three parts:

* Progress and expenditure of budget and time: the management of the planning and guarding of the progress in terms of time, resources and means. This has been arranged as followed: < short description >;
* Quality indicators: the aim of testing is to provide information and advice on the risks and quality of the object to be tested. To be able to provide this information, quality indicators are registered. This has been arranged as followed: < short description >.
* Test statistics: the test manager builds statistics based on the above information. Statistics can supply insight into the progress of the test process and quality of the test object, including any trends. This has been arranged as followed: < short description >.

## Test infrastructure management

Test infrastructure is yet to be managed by the project team

## Test product management

yet to be decided by the organization

## Defects procedure

The defects management has been arranged in conformity with the defect procedure that is described in TMap® Next 12.4., or in conformity with defect procedure as it is used within the organization. For the registration and maintenance of defects the following tool is being used: < tool >.

The responsibility for the observance of this defects procedure lies with the <defect administrator>.

# Test process risks and countermeasures

This chapter makes an inventory of the most important potential project risks for the testing of <Name project>. By anticipating what possibly might occur, it’s possible to mitigate the risk by taking the appropriate countermeasures. The risks apply directly to the test process, or apply to risks that can be of direct consequence for the test project. Registration and monitoring of these risks continues after the MTP has been written, it is a continuous process.

The following risks have been recognized for the test process. See also <name risk log>.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Nr** | **Risk Event** | **Consequence** | **Impact** | **Chance** | **Score** | **Countermeasures** | **Owner** |
| ***1*** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

The test manager is aware of these points and monitors the countermeasures.

# Global Estimation & Planning

## Estimation

The estimation is as follows:

| **Test level** | **Who** | **P** | **C** | **I** | **P** | **S** | **E** | **C** | **Totals** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Overall | Test manager |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| ST | Test coordinator |  |  |  |  |  |  |  |  |
|  | Test specialists |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| FAT | Test coordinator |  |  |  |  |  |  |  |  |
|  | End users |  |  |  |  |  |  |  |  |
|  | Test specialists |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| UAT | Test coordinator |  |  |  |  |  |  |  |  |
|  | End users |  |  |  |  |  |  |  |  |
|  | Test specialists |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Totals:** | |  |  |  |  |  |  |  |  |

This estimation will be divided in sub activities in the detail test plans for each test level.

## Planning



The activities to be executed are in the table below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activity** | **Name** | **Start Date** | **End Date** | **Duration** | **Relations** |
|  |  |  |  |  |  |

## Milestones

The milestones of the test process of <system> are detailed in the table below.

|  |  |
| --- | --- |
| **Mile stone description** | **Date** |
|  |  |

# Glossary

|  |  |
| --- | --- |
| PRA | Product risk analysis; analyzing the product under test with the goal that the test manager and the other stakeholders achieve a joint view of what the more and less risky parts and characteristics of the system are. This with the purpose to relate the thoroughness of testing to it. |
| ST | System test, by the vendor of the solution in a (good controllable) laboratory environment executed test, which has to demonstrate that the developed system or parts of it comply with the functional and non functional specifications and the technical design. |
| UT | Unit test, by the developer in the development environment executed test, which has to demonstrate that a unit complies with the technical specifications. |
| DTAP | Development, Test, Acceptance and Production environment in a so called following, logical ‘street’. |