CS518 Software Quality Assurance Term Project – Handout II

Guidelines for Different Documents:

Though this is a research based project where students have to search for different documents available on the net related to deliverables need to be submitted, though some guidelines for each deliverable are proposed under:

1. **Method & Quality Planning Document**
   Following headings are useful
   - Management Responsibility
     The responsibility of your company
     Quality Achievement Steps
     Quality Policy of the company
   - Responsibility & Authority
     Responsibilities of Client Company
     Responsibilities of Project Manager, System Analyst, Tester, Quality Controller, Developer, Designer, Database Developer, document writer & Team members
   - Quality System
     How will you ensure quality system?
     What steps you have taken for CMM level III
     Different techniques you are applying
     Quality Planning & Standards
     Quality Milestones (Mention the names of the deliverables you are required to submit in the course in the form of table). Table can contain three columns (Milestone, Description, Due Date [Write down the arbitrary due dates for each milestone)
     Other Quality Milestones
   - Document Control
     Document Standards
     Identification of each document
     Approval Procedure of each document & Document Distribution
     Document & Data Changes
     Data Control Documents
   - Product Identification & Traceability Procedure
   - Process Control
     The process model applied with different activities done in different phases with respect to the project
     ERD of the system
   - Inspection & Testing
     Plans for Inspections & Testing
     Document Review, FTR, Inspection, Review Meeting, Testing Plans, Final Inspection, Meetings with clients etc.
   - Training Needs
   - Handling, Storage, Packaging & Delivery

2. **Testing Strategy & Acceptance Test Specification Documents**
   - Introduction
   Document Purpose & Overview
   Project & System Overview
   Objectives of Testing
   Scope & Techniques of Testing {Mention techniques you will be conducting with reference to the system}
   Audience of the Document
   - Test Procedure
   Testing Steps
   Starting & Ending Criteria
   Responsibilities of the people
   Testing Environment
   - Validation Test Report
   How the requirements will be validated? Develop a check list
   Product Requirements
   - Form Testing, Query Testing & Integrity Testing
     - Examples of all form tests, query tests & integrity tests
     - State the test were pass or fail
     - Signatures
     - All forms, screens checklist, when the test was conducted, pass/fail
   - Acceptance Criteria
   - Test Cases
   Write as many test cases for different, forms, reports, navigations, options etc
    A test case should at least have following
   Name of the Test Case (Give a unique name for every test case)
   Test Case ID (A unique ID)
   Tester (Name of the tester)
   Date (The Date when the test was conducted
   Status (Tested/Untested)
   Review Date
   Review by
   Result (Pass/Fail/Changes Required)
   Precondition (Any precondition for the item under test)
   Description of The test
   Valid Inputs/ Invalid Inputs/ expected outputs / actual outputs
   Each Passed or Failed
   Changes Required
   Post Conditions
   - Test Schedule

EXAMPLE OF VALIDATION PRODUCT REQUIREMENT & TEST CASE:

Snap Game has the following Product Requirements, which the Application had to meet to pass the Test successfully.

No.	Product Requirement	Pass/Fail
	General:	
RQ1	Snap Game shall have four forms, Welcome Form, Entry Form, Game Form and Summary Form	Pass
	Welcome Form:	Pass
RQ2	When the Snap Application is launched the Welcome screen shall be displayed	Pass
RQ3	A click button shall be displayed to enable the user to go to the next screen (Entry Form)	Pass
	Entry Form :	Pass
RQ4	The Entry Form shall request User Identification (Name)	Pass
RQ5	The Name box shall contain no more than 25 positions	Pass
RQ6	When no name is entered and the user presses Start button a message appears instructing the user to enter a name or exit the game	Pass
RQ7	The Entry Form shall have a Start button	Pass
RQ8	When user click Start button, the Game form shall be displayed	Pass
RQ9	The Entry form shall have an Exit button	Pass
RQ10	When user clicks on the Exit button, the Game Application shall be exited/terminated	Pass
	Game Form :	Pass
RQ11	The Game Form displays an Image randomly	Pass

RQ12	After a certain time (TBD) The Image shall be displayed at another position randomly	Pass
RQ13	The Image shall be displayed 10 times	Pass
RQ14	When the user hits the Image by clicking on it with the mouse, it shall display a different Image (TBD) in the same position	Pass
RQ15	After displaying the Image 10 times at different positions randomly, the Game shall stop	Pass
	Database :	Pass
RQ16	The Database shall contain a table	Pass
RQ17	The Table shall contain the following fields: Name of Player, Number of Hits, High Score and Level	Pass
RQ18	The Database shall include a Table of Successful Hits	Pass
RQ19	The Database shall refresh each time a new game is played. The Database shall contain a table	Pass
	Short Cuts - Welcome Form	Pass
RQ20	The shortcut for Click Here (to Entry form) shall be Alt + C	Pass
	Short Cuts - Entry Form	Pass
RQ21	The shortcut for Name shall be Alt + N	Pass
RQ22	The shortcut for Start shall be Alt + S	Pass
RQ23	The shortcut for Exit shall be Alt + X	Pass
	Shortcuts - Game Form	Pass

Test Cases

Test Case : Snap_Welcome_001

Control Document

Test Case	Snap_Welcome_001
Tester **Date**	Tester 1 (test date)
Status	Tested
Review Date	(Date Reviewed)
Reviewed By	Tester 2 (Name preferred)
Result	Pass

Product Requirement Reference :

RQ1 : Snap Game shall have 4 four forms – Welcome Form, Entry Form, Game Form and Summary Form

RQ2: When the Snap Application is launched the Welcome screen shall be displayed

RQ3 : A click button shall be displayed to enable the user to go to the next screen (Entry Form)

RQ20 : The shortcut for Click Here (to Entry form) shall be Alt + C

Test description :

➢ Verify that the Snap Application is launched, the Welcome screen is displayed
➢ Verify that the user can continue to the next screen by pressing either on the click button ("Click here to continue") or by pressing and holding down the Alt button whilst pressing the C Button

Pre-Condition :
➢ Snap application is loaded on test PC

Sub-Case 1: Use activates Snap application and continues to next screen

Steps	Verification/Activity	Expected result	Test 1	Test 2	Test 3
1.	User activates Snap application on test PC	• Verifies that Snap application activates • Verify that Welcome screen is displayed	√	√	√
2.	User continues to the next screen by pressing on the 'Click here to Continue' button	• Verify that Welcome screen closes • Verify that Entry form screen opens	√	√	√

3.	Repeat Step 1	Same as 1	√	√	√
4.	User continues to next screen by pressing Alt + C key	• Verify that Welcome Screen closes • Verify that Entry form screen opens	√ √	√ √	√ √

Post Condition

➢ Welcome screen opens when the Snap application is activated
➢ The Entry form opens when the user continues to the next screen

Issues :

➢ None

3. **User Manual**
   - **Introduction to the System & Document**
     Purpose of the Document
     Intended Readers
     System Responsibilities
   - **Installation Instructions**
     System Overview
     Hardware & Software Requirements
     Installation of Software (Step by Step)
   - **Conventions Used**
   - **System Navigation**
     The step by step flow of the system with description & usage
   - **System Reports**
   - **Maintenance & Operation**

HELP FOR THE SYSTEM:

The detailed guidelines of what is required from the system are mentioned on the handout 1 of the project details.

The best way to understand the system is to consider the system under the following user roles:

a) The customer or the visitor of the Real Estate Agency
This can be any random person who can come & visit the real estate for any purpose either to sell/rent his property, buy or rent a property or just to have a look. This person will just have search rights and can't modify/edit any detail in the system. He can view different properties according to his needs.

b) The employee/staff of the Real Estate Agency
They will have the rights to add/delete a property
They will have the rights to add customer (Can be buyer, seller, renter, and rentee)
And all other rights for searching properties, details of customers, property sold, rented, available etc.

Sample Reports Can be:

Available Property for Rent
Available Property for Sell for some area within some specified price range, size etc.
Properties sold by the estate agency within some specified time period
Customers looking properties for rent
Customers selling properties at a particular area etc
Rent properties for different No of rooms
(All the attributes mentioned in Project Details handout 1 can be helpful)

SUBMISSION REQUIREMENTS:

All the documents hard copy & soft copy is essential
The system executable file
The installation file
Any other software/component necessary for the system to be installed
Code