TEST DOCUMENT

Group #3

Project Enlightenment

Version 1.0

Objectives

This document is prepared to produce test cases, taking their results by executing them and comparing the results with the requirements for the Computer Training For Visually Impaired Automation Tool (CTVIAT). The tests include unit tests for each individual part of the program, integration tests for the modules of the program, functional tests for the general work capability of the program and finally performance testing to measure and improve the working performance of the program.

Document References

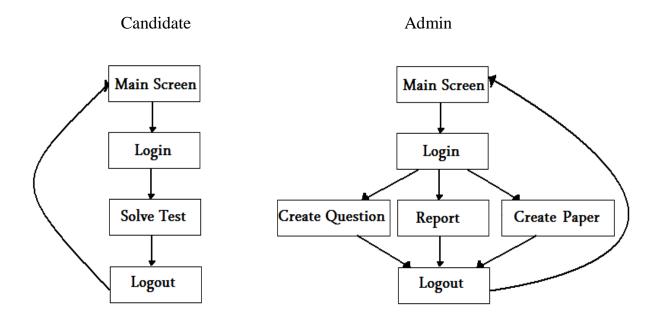
This document is prepared by considering the previously prepared documents Requirement Analysis Document (RAD), Software Design Document(SDD), Object Design Document(ODD) and the ones written while project implementation. To satisfy the user and system requirements, functional or nonfunctional requirements determined in Requirement analysis document is the first goal of this document. While running integration and functional tests the objects and design issues described in software design document and object design documents will be tested.

Test Summary

In the requirement analysis document the basic requirements were to login with a user account, to create a user with an admin account, to create a question with an admin account, to create a test with an admin account, to solve a test with a candidate account. The further tests will be advanced requirements such as to create a user friendly interface for visually impaired people, to continue a incompleted test with a candidate account, look at the result of tests, to create action-based questions with an admin account and to solve action-based questions with a candidate account.

Testing Strategy

There are two subsystems in our program , which are admin and candidate as follows :



We will try to test different alternatives of these basic tasks and in addition to these, we will try to look at the user interface through the eyes of a candidate.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: Eray Saltik | | Eray Saltik | | | |
|--|--------------------------------|--|---------------------------------|--|--|
| Test Type | | Unit Testing | | | |
| Test Case Number | | 1 | | | |
| Test Case | e Name | Login Screen | | | |
| Test Case Description | | | | | |
| | | The application will start with a login screen and this test aims to check whether login screen works properly | | | |
| | | Item(s) t | o be tested | | |
| Can a candidate login right? | | | | | |
| 2 | Can an admin login right? | | | | |
| 3 Does the application warn in a wrong | | | ong login attempt? | | |
| | | Specif | ications | | |
| | | | Expected | | |
| Input | | | Output/Result | | |
| Admin / A | Admin | | The admin screen appears | | |
| Ferhat / 1 | | | The candidate screen appears | | |
| Mehmet / 1234 | | | A warning pop up window appears | | |
| | | Procedu | ıral Steps | | |
| 1 | 1 Open the application | | | | |
| 2 | 2 Enter user name and password | | | | |
| 3 Click to login | | | | | |

- The admins and candidates can login to their accounts easily.
- If username or password is wrong, application warns the user.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | Eray Saltik | | | | |
|------------------------------|--|---|--|--|--|
| Test Type | Unit Testing | Unit Testing | | | |
| Test Case Numbe | r 2 | | | | |
| Test Case Name | Create A Objecti | ive Question With An Admin Account | | | |
| Test Case Descrip | | The admin can create objective question through the question creation screen. | | | |
| | Item(s) t | o be tested | | | |
| 1 Can a a | Can a admin create a objective question with its answer? | | | | |
| | Specif | ications | | | |
| | | Expected | | | |
| | Input | Output/Result | | | |
| Question => What | 's the latest version of | At the top of the screen a label with a text | | | |
| Windows? | | "Question Creation is successfull appears. | | | |
| Options => 98 XP | Vista 7 | | | | |
| Answer \Rightarrow 7 (Four | rth option) | | | | |
| | Procedural Steps | | | | |
| 1 Click C | Click Create Question for Question Creation Screen | | | | |
| 2 Select Q | Select Question Type | | | | |
| 3 Fill ques | Fill question data | | | | |
| 4 Select Q | Select Question Subject | | | | |
| 5 Click Cr | Click Create Question to finish | | | | |

- The admin can create an objective question with its answer options.
- The admin can determine the correct answer.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | Eray Saltik | | | |
|--------------------------------------|---|--|--|--|
| Test Type | Unit Testing | | | |
| Test Case Number | 3 | | | |
| Test Case Name | Create A Descrip | otive Question With An Admin Account | | |
| | The admin can create descriptive question through the question creation screen. | | | |
| | Item(s) to | o be tested | | |
| 1 Can a admin cre | | question with its answer? | | |
| | Specif | ications | | |
| | | Expected | | |
| Input | | Output/Result | | |
| Question => How can we create a Word | | At the top of the screen a label with a text | | |
| file? | | "Question Creation is successfull appears. | | |
| Answer => Right Click, New, Word | | | | |
| | Procedu | iral Steps | | |
| 1 Click Create Qu | Click Create Question for Question Creation Screen | | | |
| 2 Select Question | Select Question Type | | | |
| 3 Fill question data | a | | | |
| 4 Select Question | Subject | | | |
| 5 Click Create Question to finish | | | | |

- The admin can create an descriptive question
- The admin can determine the correct answer.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | | Eray Saltik | | | |
|--|--|--|--|--|--|
| Test Type | | Unit Testing | | | |
| Test Case Number | | 4 | | | |
| Test Case | e Name | Create A Action | -based Question With An Admin Account | | |
| Test Case Description | | | | | |
| | | The admin can create action-based question through the question creation screen. | | | |
| | | Item(s) t | o be tested | | |
| Can a admin create an action-based question with its answer? | | | sed question with its answer? | | |
| | | Specif | ications | | |
| | | | Expected | | |
| Input | | | Output/Result | | |
| Requested Action | | | At the top of the screen a label with a text | | |
| | | "Question Creation is successfull appears. | | | |
| | | Procedu | iral Steps | | |
| 1 | Click Create Question for Question Creation Screen | | | | |
| 2 | Select Question Type | | | | |
| 3 | 3 Fill question data | | | | |
| 4 | 4 Select Question Subject | | | | |
| 5 Click Create Question to finish | | | | | |

- The admin can create an action-based question
- The admin can determine the correct answer.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | Eray Saltik | | | | |
|---------------------------|---|--|--|--|--|
| Test Type | Unit Testing | | | | |
| Test Case Number | 5 | 5 | | | |
| Test Case Name | Create A Test | | | | |
| Test Case Description | | | | | |
| | An admin can cr | reate a test with the question which are created | | | |
| | and stored before |). | | | |
| | | | | | |
| | | | | | |
| | Item(s) t | o be tested | | | |
| 1 Can an admin | Can an admin look at the questions which are stored before? | | | | |
| 2 Can an admin c | Can an admin create a test from question library? | | | | |
| | Specifications | | | | |
| | | Expected | | | |
| Input | | Output/Result | | | |
| Questions in the database | | At the top of the screen a label with a text | | | |
| | "Question Creation is successfull appears. | | | | |
| | Procedi | ural Steps | | | |
| 1 Click Create T | Click Create Test | | | | |
| 2 Select the Ques | Select the Question Type and Subject | | | | |
| 3 Add the selecte | Add the selected question to right side | | | | |
| 4 Select other que | Select other questions | | | | |
| 5 Click Create Te | Click Create Test to Finish | | | | |

- The admin can view all question stored in the database according to their subject and type.
- The admin can add any question to his/her test.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | | Eray Saltik | | | |
|------------------------|--|--|--|--|--|
| Test Type | e | Functional testing | | | |
| Test Case Number | | 6 | | | |
| Test Case | e Name | Create A User | | | |
| Test Case Description | | The admin can create an admin or a candidate user account. The creation password must match to proceed. | | | |
| | | Item(s) t | o be tested | | |
| 1 | Can the admin ca | reate an admin ac | ecount? | | |
| 2 | Can the admin ca | reate a candidate | account? | | |
| | - | Specif | ications | | |
| Expected | | | | | |
| | | | Expected | | |
| | Input | | Expected Output/Result | | |
| Eray / 1 / | | | | | |
| Eray / 1 / Mehmet / | 1 | | Output/Result | | |
| - | 1 | Procedu | Output/Result The screen is renewed. | | |
| - | 1 | | Output/Result The screen is renewed. A warning pop up window appears | | |
| Mehmet / | 1 2 / 1 | er | Output/Result The screen is renewed. A warning pop up window appears | | |
| Mehmet / | 1 2 / 1 Click Create Us | ame | Output/Result The screen is renewed. A warning pop up window appears | | |
| Mehmet / | 1 2 / 1 Click Create Us Write the user na | er ame ord | Output/Result The screen is renewed. A warning pop up window appears | | |
| 1 2 3 | 1 Click Create Us Write the user na Write the passwo | er ame ord ord again | Output/Result The screen is renewed. A warning pop up window appears | | |

- The admin can create an admin and a candidate account
- The admin should write the account password two times, if it doesn't match, a warning pop-up apperars.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | | Eray Saltik | | | | | | |
|-----------------------|--|------------------------------------|------------|---------------|------------|------------|------|--------------|
| Test Type | | Integration + Functional | | | | | | |
| Test Case Number | | 7 | | | | | | |
| Test Case Name | | Create report | | | | | | |
| Test Case Description | | | | | | | | |
| | | The admin | can | create | reports | about | a | candidate's |
| | | | | | | | | |
| | | | | | | | | |
| | | Item(s) | to b | e tested | | | | |
| 1 | Can the admin l | ook at all cand | idate | data? | | | | |
| 2 | Can the admin o | reate PDF repo | orts al | oout a ca | ındidate's | perform | ance | ?? |
| | ' | Spec | cifica | tions | | | | |
| | | | | | Ex | pected | | |
| | Input | | | Output/Result | | | | |
| Candidate | e's name to search | and find | A] | ocation | for saving | ; is asked | and | l a PDF file |
| | | called "name_CTVIAT_Report.pdf" is | | | df" is | | | |
| | | | cre | ated | | | | |
| | | Proce | dura | l Steps | | | | |
| 1 | Click Create Report | | | | | | | |
| 2 | Search candidate's name | | | | | | | |
| 3 | Find and select the candidate's name | | | | | | | |
| 4 | Click Create Report to Finish | | | | | | | |
| 5 | Select the folder where the report will be created | | | | | | | |
| 6 | Open created PDF file to check the performance of user | | | | | | | |

- The admin can find and select all candidates to look at their performances.
- The admin can create PDF reports about candidates.

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | | Ferhat Elmas | | | | |
|----------------------|---|---|---|--|--|--|
| Test Type | e | Functional Testing | | | | |
| Test Case | Number | 8 | | | | |
| Test Case | Name | Solving a test | | | | |
| Test Case | Description | The candidate can start solving any test according to its | | | | |
| | | subject | | | | |
| Item(s) to be tested | | | | | | |
| 1 | Can a candidate | start a test? | | | | |
| 2 | Can a candidate | see and answer the | he question in the test? | | | |
| 3 | Can a candidate see the time of test? | | | | | |
| 4 | Can a candidate complete a test or save a test to continue later? | | | | | |
| | Specifications | | | | | |
| | Expected | | | | | |
| | Input | | Output/Result | | | |
| A test to solve | | | Test is solved correctly, answers are saved, | | | |
| | | | user can navigate in the questions and time is | | | |
| | | | calculated is correctly, candidate can save the | | | |
| | | | test to continue later | | | |
| | Procedural Steps | | | | | |
| 1 | Listen question | Listen question, repeate question | | | | |
| 2 | 2 Type answer | | | | | |
| 3 | Navigate in the | questions | | | | |
| 4 | 4 Finish or Discontinue the test | | | | | |

- The candidate can select and start any test according to its subject
- The candidate can answer the question and is informed about the time during the test for every 10 minutes.

• The candidate can finish a test or save the test to continue later.

Test 9

- Location of test is a laptop with 2.40 GHZ CPU, 4 GB Ram and 512 MB Screen Card
- Means of Control: The test is executed manually by entering different inputs .

| Tested By: | | Ferhat Elmas | | | |
|------------------|---|---------------------|--|--|--|
| Test Type | | Functional Testing | | | |
| Test Case Number | | 9 | | | |
| Test Case | Name | Continue a saved | l test | | |
| Test Case | Description | The candidate ca | an continue solving any saved test according | | |
| | | to its subject | | | |
| | | Item(s) to | o be tested | | |
| 1 | Can a candidate | continue solving | a saved test? | | |
| 2 | Can a candidate | finish solving a s | avad tast? | | |
| 2 | Can a candidate | Tillish solving a s | aved test: | | |
| | | Specif | ications | | |
| | | | Expected | | |
| Input | | | Output/Result | | |
| An incom | plete test | | Test is started from where the candidate was | | |
| | | | and the time is accumulated from where it | | |
| | | | was | | |
| Procedural Steps | | | | | |
| 1 | Choose an old test and start it | | | | |
| 2 | Solve next questions and navigate in answered questions | | | | |
| 3 | Discontinue or finish the test | | | | |

- The candidate can continue solving a saved test
- The candidate can finish a saved a test.