**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 accout, 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 :

## Candidate Admin

## 

## 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.

## Test 1

### Test Specification and Test Description

* 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** | | 1 | |
| **Test Case 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) to be tested** | | | |
| 1 | Can a candidate login right? | | |
| 2 | Can an admin login right? | | |
| 3 | Does the application warn in a wrong login attempt? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| Admin / Admin  Ferhat / 1  Mehmet / 1234 | | | The admin screen appears  The candidate screen appears  A warning pop up window appears |
| **Procedural Steps** | | | |
| 1 | Open the application | | |
| 2 | Enter user name and password | | |
| 3 | Click to login | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### The admins and candidates can login to their accounts easily.

### If username or password is wrong, application warns the user.

## Test 2

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **Tested By:** | | Eray Saltik | |
| **Test Type** | | Unit Testing | |
| **Test Case Number** | | 2 | |
| **Test Case Name** | | Create A Objective Question With An Admin Account | |
| **Test Case Description** | | The admin can create objective question through the question creation screen. | |
| **Item(s) to be tested** | | | |
| 1 | Can a admin create a objective question with its answer? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| Question => What’s the latest version of Windows?  Options => 98 XP Vista 7  Answer => 7 (Fourth option) | | | At the top of the screen a label with a text “Question Creation is successfull appears. |
| **Procedural Steps** | | | |
| 1 | Click Create Question for Question Creation Screen | | |
| 2 | Select Question Type | | |
| 3 | Fill question data | | |
| 4 | Select Question Subject | | |
| 5 | Click Create Question to finish | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### The admin can create an objective question with its answer options.

### The admin can determine the correct answer.

## Test 3

### Test Specification and Test Description

* 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 .

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

### Test Analysis Report

### The actual results of the tests are as follows :

### The admin can create an descriptive question

### The admin can determine the correct answer.

## Test 4

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **Tested By:** | | Eray Saltik | |
| **Test Type** | | Unit Testing | |
| **Test Case Number** | | 4 | |
| **Test Case 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) to be tested** | | | |
| 1 | Can a admin create an action-based question with its answer? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| Requested Action | | | At the top of the screen a label with a text “Question Creation is successfull appears. |
| **Procedural Steps** | | | |
| 1 | Click Create Question for Question Creation Screen | | |
| 2 | Select Question Type | | |
| 3 | Fill question data | | |
| 4 | Select Question Subject | | |
| 5 | Click Create Question to finish | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### The admin can create an action-based question

### The admin can determine the correct answer.

## Test 5

### Test Specification and Test Description

* 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 .

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

### Test Analysis Report

### The actual results of the tests are as follows :

### 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.

## Test 6

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **Tested By:** | | Eray Saltik | |
| **Test Type** | | Functional testing | |
| **Test Case Number** | | 6 | |
| **Test Case 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) to be tested** | | | |
| 1 | Can the admin create an admin account? | | |
| 2 | Can the admin create a candidate account? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| Eray / 1 / 1  Mehmet / 2 / 1 | | | The screen is renewed.  A warning pop up window appears |
| **Procedural Steps** | | | |
| 1 | Click Create User | | |
| 2 | Write the user name | | |
| 3 | Write the password | | |
| 4 | Write the password again | | |
| 5 | Check if it is an admin accout | | |
| 6 | Click Create User To Finish | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### 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.

## Test 7

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **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 performance. | |
| **Item(s) to be tested** | | | |
| 1 | Can the admin look at all candidate data? | | |
| 2 | Can the admin create PDF reports about a candidate’s performance? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| Candidate’s name to search and find | | | A location for saving is asked and a PDF file called “*name*\_CTVIAT\_Report.pdf” is created |
| **Procedural 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 | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### The admin can find and select all candidates to look at their performances.

### The admin can create PDF reports about candidates.

## Test 8

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **Tested By:** | | Ferhat Elmas | |
| **Test Type** | | 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 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** | | | |
| **Input** | | | **Expected**  **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, repeate question | | |
| 2 | Type answer | | |
| 3 | Navigate in the questions | | |
| 4 | Finish or Discontinue the test | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### 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

### Test Specification and Test Description

* 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 .

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| --- | --- | --- | --- |
| **Tested By:** | | Ferhat Elmas | |
| **Test Type** | | Functional Testing | |
| **Test Case Number** | | 9 | |
| **Test Case Name** | | Continue a saved test | |
| **Test Case Description** | | The candidate can continue solving any saved test according to its subject | |
| **Item(s) to be tested** | | | |
| 1 | Can a candidate continue solving a saved test? | | |
| 2 | Can a candidate finish solving a saved test? | | |
| **Specifications** | | | |
| **Input** | | | **Expected**  **Output/Result** |
| An incomplete 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 | | |

### Test Analysis Report

### The actual results of the tests are as follows :

### The candidate can continue solving a saved test

### The candidate can finish a saved a test.