**Object Oriented Analysis and Design with Software Engineering Laboratory**

**Subject Code: UE18CS355**

As part of the next deliverable for OOAD-SE projects, students need to prepare test cases and perform manual testing on the system implemented.

**Instructions:**

1: Prepare at least 8-10 test cases for each **implemented use case** (functional requirements) as per the below given template which should include Unit, Integration and System Test cases.

2: Carry out manual testing for all the test cases and populate the columns Actual Result and Test Result.

**Template of a Test case:**

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

* **Test Case ID :** Each test case should be represented by a unique ID. To indicate test types, follow some convention like "UT\_01" indicating "Unit Testing - Test Case#1."
* **Name of the module :** Specify the name of the **main module or sub module** being tested
* **Test Case Description :** Specify the summary or test purpose in brief
* **Pre- Conditions :** Any requirement that needs to be done before execution of this test case.
* **Test Steps** : Mention all the steps in detail and specify the order in which it is to be executed.
* **Test Data :** Input for the test case to be executed. Specify different data sets with precise values to be used as input. (create test case for both valid and invalid inputs)
* **Expected Results :** Mention the expected results including error or precise messages that should be displayed on screen
* **Actual Results :** After execution of test case fill this column with the result obtained
* **Test Result (Pass/Fail) :** Mark this field as “fail” if the actual result is not same as expected result else mark as “pass”.

**Test Cases - login/signup/viewing video/searching video/uploading:**

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-01 | User login | To test the login functionality | Access to the Welcome Page | 1. Navigate to the Welcome Page  2.Click on “Login” button  3. Enter “email” and “password” | Email: dhanya@gmail.com.  Password : dhans123 | Login should be successful and automatic redirection to Home Page | Login successful and automatic redirection to homepage | Pass |
| UT-02 | User sign up | To test the signup functionality | Access to the Welcome Page | 1. Navigate to the Welcome Page  2.Click on “Signup” button  3. Enter “email”  ,”password”,”first name”,”lastname”,”age” and “phone no.” | Email:  [chethan@gmail.com](mailto:chethan@gmail.com)  Password: chethu123  firstName:  Chethan  lastName:  Mahindrakar  age: 20  phone no: 9988998765 | Sign up should be successful with a “Account successfully created. Login to use the application!” success message displayed | Sign up successful  with  Account successfully created. Login to use the application!” success message displayed | Pass |
| UT-03 | User sign up | To test the signup functionality | Access to the Welcome Page | 1. Navigate to the Welcome Page  2.Click on “Signup” button  3. Enter “email”  ,”password”,”first name”,”lastname”,”age” and “phone no.” | Email:  [chethan@gmail.com](mailto:chethan@gmail.com)  Password: chethu123  firstName:  Chethan  lastName:  Mahindrakar  age: 20  phone no: 9988998765 | Sign up should be unsuccessful with a “A user with the same email address exists!” message | Sign up is unsuccessful with a “A user with the same email address exists!” message | Pass |
| IT-01 | Search Video and Watch Video | To test the search video functionality integrated with watch video functionality | User must have logged in.  Access the Home Page | 1.Navigate to the Home Page  2. Click on “Search Video” button  3. Search for the video by entering the video title in the search text box  4. Click “Search” button | Search field:  “Funny Puppy” | Search should be successful and the user should be directed to the Watch Video page with all the information of the searched video i.e **Video,** **Title, Description, Likes, Comments, Channel** | Search should be successful and the user should be directed to the Watch Video page with all the information of the searched video i.e Video, Title, Description, Likes, Comments, Channel | Pass |
| UT-04 | Search Video | To test the search video functionality | User must have logged in.  Access the Home Page | 1.Navigate to the Home Page  2. Click on “Search Video” button  3. Search for the video by entering the video title in the search text box | Search field:  “Monkey Video” | Search should be unsuccessful. An error message of “No video of this title” must be displayed” | Search is unsuccessful. Error message of “No video of this title” is displayed | Pass |
| UT-05 | Search Video | To test the search video functionality on invalid input | User must have logged in.  Access the Home Page | 1.Navigate to the Home Page  2. Click on “Search Video” button | Search field:  empty | Search should be unsuccessful and an error message “Enter the search field” should be displayed | Search is unsuccessful and the error message “Enter the search field is displayed” | Pass |
| UT-06 | Watch Video | To test the play video functionality | User must have logged in.  Be on the Watch Video Page | 1.Navigate to Watch Video Page | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Navigate to Watch Video page for “Funny Puppy” video  3. Click on “Play Video” button | The video must be played in the video player. | The video is played in the video player. | Pass |
| IT-02 | Watch Video | To test the likes functionality for a user who has not liked the video before | User must have logged in.  Be on the Watch Video Page | 1.Navigate to Watch Video Page | 1.Click on “Like” button | Like counter should be incremented in database and displayed | The **like** counter is incremented and displayed | Pass |
| IT-03 | Watch Video and Video Database | To test the likes functionality for a user who has already liked the video | User must have logged in.  Be on the watch video page | 1. Navigate to Watch Video page | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Navigate to Watch Video page for “Funny Puppy” video  3.Click on “Like” button | Like counter should not be incremented | The like counter is not incremented as the user has already liked the video before | Pass |
| IT-04 | Watch Video and Video Database | To test the comments functionality | User must have logged in.  Be on the watch video page | 1.Navigate to Watch Video page | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Navigate to Watch Video page for “Funny Puppy” video  3. Enter the comment text in the text field  4.Click on “Add Comment” button | Comment list of the video must be appended with the latest comment in the database and must be displayed | The comment list of the video is appended with the latest added comment in the database. The comment is displayed along with the other pre-existing comments for the video | Pass |
| UT-07 | Watch Video | To test comments functionality when invalid input is given | User must have logged in.  Be on the watch video page | 1.Navigate to Watch Video page | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Navigate to Watch Video page for “Funny Puppy” video  3.Click on “Add Comment” | Comment addition must be unsuccessful and the error message ‘Enter the comment field” must be displayed | Comment addition is unsuccessful and the error message “Enter the comment field” is displayed | Pass |
| UT-08 | Upload Video | To test the upload video functionality | User must have logged in.  Navigate to the Upload Video Page | 1. On the home page, click on “View User Dashboard”  2.Click on “Upload Video” button  3. On the Upload Video Page, enter the “title”, “description” and upload video file. | Title : “Brain 101”  Description:”Video about the brain” | The video should be uploaded successfully and a “Video successfully uploaded” success message is to be displayed | The video is uploaded successfully and a “Video successfully uploaded” success message is displayed. | Pass |
| UT-09 | Upload Video | To test the upload video functionality, when there is is already a video in the database with the same title | User must have logged in.  Navigate to the Upload Video Page | 1. On the home page, click on “View User Dashboard”  2.Click on “Upload Video” button  3. On the Upload Video Page, enter the “title”, “description” and upload video file. | Title : “Space 101”  Description:”Video about the universe” | The video upload should be unsuccessful and the error message “A video with the same title already exists” must be displayed | The video upload is unsuccessful and the error message “A video with the same title already exists” is displayed |  |
| ST-01 | End to End - Search Video | To login and search for a video and play it | - | 1. login with a valid email and password ,  2.click on “Search Video” button on the Home Page,  3. enter the title to search for in the Search Page,  4. click on the “Play Video” button in the Watch Video page  5.. Click on “Go back to homepage” button  6.click on “Logout” | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Click on “Search Video”  3. Enter “Funny Puppy” in search field  4. CLick on “Play Video” button | Video must successfully plas.After watching, user must successfully log out | Video successfully plays.After watching, user successfully logs out | Pass |
| ST-02 | End-to-End Upload Video | To login and upload a video | A video to upload | 1.Login with valid email&password  2.Click on “View User dashboard” button on Home Page  3. Click on “Upload Video” button  4. Enter video title,description and .mp4 video file  4. Click on “Upload’ button  5. Click on “Go back to home page”  6.. Click “log out” | 1. Log in as “[dhanya@gmail.com](mailto:dhanya@gmail.com)”  2. Title: “Space Boy”  3. Description:”Space music video” | Video must successfully upload, user must be able to successfully logs out of the system | Video successfully uploaded and user logs out of system`` | Pass |

**Test Cases - Recommend Similar Videos/Homepage:**

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-01 | Recommending trending videos on Homepage | To test if recommendations are working on the homepage | Must have logged in | - | - | Display 4 popular videos on homepage | Displays 4 popular videos on homepage | Pass |
| UT-02 | Getting to personalized recommendations page | To check user can go to next page on clicking button | Must have logged In | click on Get Personalized Recommendations | - | Display page with ability to personalize recommendations | Displayed page with ability to personalize recommendations | Pass |
| UT-03 | Getting Personalized recommendations | To check if user gets personalized recommendations | Must have logged in and clicked “Get Recommendations” button | Enter the tags (max 2) from displayed list | Any 2 tags from displayed list, seperated by , | Display 2 videos similar to tags | Displays 2 videos similar to tags | Pass |
| UT-04 | Getting personalized recommendations - pers\_recc | To traverse from homepage to end with 2 videos similar to tags entered | Must have logged in | From homepage, click button  “Get Personalized recommendations”  enter tags from given list  enter | Any 2 tags from displayed list separated by , | Display 2 videos similar to tags | Display 2 videos similar to tags | Pass |
| IT-01 | Playing a recommended Video on Homepage | To play a video recommended to user on homepage | Must have logged in | Click on a picture button of whatever video you want to watch, and then select play video in the viewer | - | Plays the Video | Plays the Video | Pass |
| IT-02 | Playing a personalized recommended video | To play a video, personally recommended based on tags inserted by user | Must have logged in | Click on “Get personalised recommendations” button and enter any 2 tags from given list of possible tags, click on the picture and press play video | Any 2 Tags from the displayed list, seperated by , | Plays the video | Plays the video | Pass |
| IT-03 | Playing a video by clicking a recommended video | To play a video by clicking the picture displayed (either on homepage or personalised recommendations) | Must have logged in, or must have entered 2 tags from given list | Click on picture, click on play video | - | Plays the Video | Plays the Video | Pass |
| UT-05 | Going back to dashboard before or after personalised recommendations | To go back to user dashboard once we finish giving out personalised recommendations | Must have logged in and clicked on “get Personalised Recommendations” | Click on “Back to Dashboard” | - | Goes back to homepage | Goes back to homepage | Pass |
| UT-06 | Going to homepage after getting personalised recommendations - from homepage | To start at homepage, get personalised recommendations and go back to homepage | Must have logged in | Click on “Get Personalised Recommendations” button, enter any 2 tags from the given list, click on “get recommendations” and then click the “Back to homepage” button | Any 2 tags from list of given tags | Goes back to homepage safely | Goes back to homepage Safely | Pass |
| UT-07 | Going back to homepage without entering any data in tags entry field | To go back to homepage without entering tags in the entry field | Must have logged in and clicked on “get personalized recommendations” button | CLick on “back to homepage” | - | Goes back to homepage safely | Goes back to homepage safely | Pass |
| ST-01 | End to end - playing a recommended video on homepage | To login, play a recommended video on homepage | - | Must login by entering valid email password, click on a picture that appears on homepage and click on play video | - | Plays Video | Plays video | Pass |
| ST-02 | End to end - playing a personally recommended video | To login, get a personally recommended video and play it | - | Must login by entering valid email password, click on “Get personalized recommendations” Button, enter any 2 tags from given list of valid tags and click “Get recommendations”, clicks the picture of the video they want to watch and then clicks play video | Any 2 tags from given list | Plays video | Plays Video | Pass |

**Test Cases - View Playlist, Create playlist, Add/remove from playlist.**

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-01 | Creating a new playlist with a unique name. | Test to see if a new playlist can be created. | Must have logged in | Log in and navigate to ‘View User Dashboard’. Navigate to ‘Playlists’ and then go into Create Playlist. | Playlist name | New playlist must show in the database | Shows playlist in the database as well as in View Playlist. | Pass |
| UT-02 | Creating a playlist with name that already exists | To see if a playlist can be created if the name is not unique. | Must have been logged in and a playlist with such name should already exist. | Log in and navigate to ‘View User Dashboard’. Navigate to ‘Playlists’ and then go into Create Playlist. | Playlist name | Error message saying playlist exists must show | Error message saying playlist exists must show | Pass |
| UT-03 | Adding a video to an already existing playlist | To add a video into the playlist assuming the video is not in the playlist | Must have logged in and video must not already exist in the playlist | Log in and navigate to a video watch page. Click on the button to add into the playlist and choose the playlist you want to add to. | Playlist name to add into and video name. | Message saying that playlist has been successfully added. Change in the database must be observed. | Data added to the database. Message shows success. | Pass |
| UT-04 | Adding a video to an already existing playlist. | To add a video into the playlist assuming that video already is in the playlist | Must have logged in and video must already exist in the playlist. | Log in and navigate to a video watch page. Click on the button to add into the playlist and choose the playlist you want to add to. | Playlist name to add into and video name | Message saying that playlist already has the video. No changes in the database. Prompt to remove playlist from video. | Data not added to database. Message shows failure and prompts for deleting the video from the playlist is shown | Pass |
| IT-01 | Deleting a video from within a playlist. | To delete a video if it already exists in the playlist. | Must have logged in and video must already exist in playlist. | Log in and navigate to a video watch page. Click on the button to add into the playlist and choose the playlist you want to add to. | Playlist name to add into and video name | Message showing that playlist already has video. Prompt to delete video and message showing successful deletion if button is clicked. | Message showing video already exists in playlist.Button asks for deletion. If chosen, message that says deletion confirmed. Data removed from database. | Pass |
| IT-02 | Viewing all the playlists of a particular User. | To view the playlists that a user has in his account | Must have logged in and must have created playlists for output to show. | Log in and navigate to User dashboard. From here, navigate to Playlists and view playlists. | Current User information | All user playlists must be shown to the user | All playlists are shown to the user in the form of clickable buttons | Pass |
| IT-03 | Viewing the videos that are a part of the playlist | To view all the videos that a user has put into his playlist. | Must have logged in and must have videos inside his/her playlist | Log in and navigate to User dashboard. Navigate into view playlists from here and click on playlist whose contents need to be seen. | Current User information | All videos within the playlist must be shown to the user | All videos in the playlist are shown to the user in the form of clickable buttons. | Pass |
| UT-05 | Play a video in the playlist. | To watch the video from within a user’s playlist. | Must have been logged in and must have video in playlist | Log in and navigate into View playlist. Click the playlist and select the video to watch | Current User information | The video selected must be played | The chosen video is played on a default video playing app. | Pass |
| ST-01 | Navigating to Home page from User dashboard | To navigate back to the home page from the user dashboard. | Must have logged in. | Navigate into the User dashboard page and click on return to Home page. | - | Must be navigated into the home page screen. | Home page screen shows up after clicking the button. | Pass |
| ST-02 | Logging out from the User Dashboard | To log out from the User dashboard screen | Must have logged in | Navigate into the User dashboard page and click on log out. | - | Must be logged out | User is logged out and is taken to the Login or signup page | Pass |
| ST-03 | Navigating to dashboard from the ‘All Playlists’ screen | To go back to the User dashboard from the ‘All playlists’ page | Must have logged in | Navigate into user dashboard and select All playlists. Here, click the ‘Go back to dashboard’ button | - | User must be taken back to User dashboard | User is successfully taken back to his dashboard page | Pass |
| ST-04 | Navigating to Home page from the ‘All playlists’ screen. | To go back to the Home page from the ‘All playlists’ page | Must have logged in | Navigate into user dashboard and select all playlists. Here’ click the ‘go to home page’ button. | - | User must be taken back to the Home page | User is successfully taken back to his Home page | Pass |