| **Identifier** | **TC1** |
| --- | --- |
| Related requirements(s) | User Registration |
| Short description | Verifying the user registration process on RetroTunes platform ensures users can successfully create a new account with all necessary validations and secure storage of credentials. |
| Pre-condition(s) | The RetroTunes platform is online and accessible. Test environment and database are ready. |
| Input data | Valid Email: testuser@example.com, Username: testuser, Password: SecurePassword123! |
| Detailed steps | 1. Navigate to the RetroTunes registration page.  2. Click on "Register".  3. Fill in the registration form with provided data.  4. Submit the form.  5. Verify confirmation message and redirection. |
| Expected result(s) | The system validates input, creates the account, confirms account creation to the user, and securely stores user data. |
| Post-condition(s) | User account is created and data is securely stored; user can log in with the new credentials. |
| Actual result(s) | Everything works as expected; the system validated the input, created the account, confirmed account creation, and securely stored the user data. |
| Test Case Result | Pass |

| **Test Case** | **Email** | **Username** | **Password** | **Confirm Password** | **Expected Outcome** | **Actual Outcome** | **Verdict** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Valid | Valid | Valid | Valid | Success | Success | Pass |
| 2 | Invalid | Valid | Valid | Valid | Failure | Failure | Pass |
| 3 | Valid | Invalid | Valid | Valid | Failure | Failure | Pass |
| 4 | Valid | Valid | Valid | Invalid | Failure | Failure | Pass |
| 5 | Valid | Valid | Short | Short | Failure | Failure | Pass |
| 6 | Valid | Valid | Long | Long | Success | Success | Pass |
| 7 | Invalid | Invalid | Invalid | Invalid | Failure | Failure | Pass |
| 8 | Null | Valid | Valid | Valid | Failure | Failure | Pass |
| 9 | Valid | Null | Valid | Valid | Failure | Failure | Pass |
| 10 | Valid | Valid | Null | Null | Failure | Failure | Pass |

| **Identifier** | **TC2** |
| --- | --- |
| Related requirements(s) | Buy Items from Marketplace |
| Short description | Verify the functionality of buying music items from the marketplace on the RetroTunes platform. |
| Pre-condition(s) | User is logged into their RetroTunes account. The RetroTunes platform is accessible and functional. Music items are available for browsing. |
| Input data | User Credentials: RegisteredUser@example.com, Password: ValidPassword  Item: 'RetroTunes Greatest Hits', Barcode: '12345’', Description: 'Vinyl', Price: '$19.99' |
| Detailed steps | 1. Log into RetroTunes with valid credentials.  2. Navigate to the marketplace.  3. Select and add 'RetroTunes Greatest Hits' to RetroCart.  4. Check for confirmation notification.  5. Validate item details and purchase it. |
| Expected result(s) | The music item is added to the Owned items list with accurate details displayed (title, artist, format, price). |
| Post-condition(s) | The added music item remains in the Owned items for future actions. |
| Actual result(s) | Everything works as expected; the item is added and displayed correctly in Owned items, with proper confirmation provided. |
| Test Case Result | Pass |

| **Test Case** | **User Email** | **User Password** | **Item Barcode** | **Item Description** | **Item Price** | **Expected Outcome** | **Actual Outcome** | **Verdict** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Valid | Valid | 12345 | Vinyl | $19.99 | Success: Item added to Owned items with correct details. | Success: Item added to Owned items with correct details. | Pass |
| 2 | Invalid | Valid | 12345 | Vinyl | $19.99 | Failure: User cannot log in. | Failure: User cannot log in. | Pass |
| 3 | Valid | Invalid | 12345 | Vinyl | $19.99 | Failure: Incorrect password, no purchase possible. | Failure: Incorrect password, no purchase possible. | Pass |
| 4 | Valid | Valid | Incorrect | Vinyl | $19.99 | Failure: Item barcode not found. | Failure: Item barcode not found. | Pass |
| 5 | Valid | Valid | 12345 | Vinyl | Incorrect | Failure: Item price mismatch, alerts user. | Failure: Item price mismatch, alerts user. | Pass |
| 6 | Valid | Valid | 12345 | Vinyl | $19.99 | Success: Purchase completes with valid payment. | Success: Purchase completes with valid payment. | Pass |
| 7 | Valid | Valid | Null | Vinyl | $19.99 | Failure: No item selected, purchase fails. | Failure: No item selected, purchase fails. | Pass |
| 8 | Null | Valid | 12345 | Vinyl | $19.99 | Failure: User not logged in, cannot access marketplace. | Failure: User not logged in, cannot access marketplace. | Pass |
| 9 | Valid | Null | 12345 | Vinyl | $19.99 | Failure: Password required for transaction verification. | Failure: Password required for transaction verification. | Pass |
| 10 | Valid | Valid | 12345 | Vinyl | $19.99 | Success: Correct details confirmed, transaction proceeds. | Success: Correct details confirmed, transaction proceeds. | Pass |

| **Identifier** | **TC3** |
| --- | --- |
| Related requirements(s) | Set Budget Functionality |
| Short description | Verify the functionality of setting a budget on RetroTunes, ensuring users can specify and save a budget amount for marketplace purchases. |
| Pre-condition(s) | User is logged into their RetroTunes account. The RetroTunes platform is accessible and functional. |
| Input data | Budget Amount: $100  User Password: ValidPassword |
| Detailed steps | 1. Log into RetroTunes with valid credentials.  2. Navigate to the "Set Budget" section.  3. Enter a budget amount of $100 in the budget field.  4. Enter the password in the password field.  5. Click the "Set Budget" button.  6. Observe the system response and check for a confirmation message that the budget has been set. |
| Expected result(s) | The system accepts the budget amount, validates the user password, and saves the budget. User receives confirmation that the budget is set. |
| Post-condition(s) | The specified budget amount is stored in the user’s profile and displayed correctly in the user interface. |
| Actual result(s) | Everything works as expected; the system validates the password, sets the budget, and confirms that the budget has been set. |
| Test Case Result | Pass |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case** | **User Email** | **User Password** | **Budget Amount** | **Expected Outcome** | **Actual Outcome** | **Verdict** |
| 1 | Valid | Valid | $100 | Success: Budget set correctly, confirmation received. | Success: Budget set correctly, confirmation received. | Pass |
| 2 | Invalid | Valid | $100 | Failure: Cannot log in, budget not set. | Failure: Cannot log in, budget not set. | Pass |
| 3 | Valid | Invalid | $100 | Failure: Incorrect password, budget not saved. | Failure: Incorrect password, budget not saved. | Pass |
| 4 | Valid | Valid | Incorrect | Failure: Invalid budget amount, error message shown. | Failure: Invalid budget amount, error message shown. | Pass |
| 5 | Valid | Valid | $100 | Success: Budget set correctly, confirmation received. | Success: Budget set correctly, confirmation received. | Pass |
| 6 | Valid | Valid | Null | Failure: No budget entered, cannot set budget. | Failure: No budget entered, cannot set budget. | Pass |
| 7 | Null | Valid | $100 | Failure: User not logged in, cannot set budget. | Failure: User not logged in, cannot set budget. | Pass |
| 8 | Valid | Null | $100 | Failure: Password required for setting budget. | Failure: Password required for setting budget. | Pass |
| 9 | Valid | Valid | $0 | Failure: Zero is an invalid budget, error message shown. | Failure: Zero is an invalid budget, error message shown. | Pass |
| 10 | Valid | Valid | $100 | Success: Budget set correctly, confirmation received. | Success: Budget set correctly, confirmation received. | Pass |

| **Identifier** | **TC4** |
| --- | --- |
| Related requirements(s) | Create Post Functionality |
| Short description | Verify that an admin can create a playlist with all required media on the RetroTunes platform. |
| Pre-condition(s) | User is logged in as an admin. The RetroTunes platform is accessible and functional. |
| Input data | Song Name: "Summer Hits"  Choose Image: [Valid Image File]  Choose Song: [Valid Audio File]  Choose Lyrics: [Valid Lyrics File]  Genre: Rock  Artist Name: "Various Artists" |
| Detailed steps | 1. Log into RetroTunes with admin credentials.  2. Navigate to "Add Item".  3. Fill in "Song name" with "Summer Hits".  4. Upload a valid image, song, and lyrics files.  5. Select "Rock" from the genre dropdown.  6. Enter "Various Artists" in the artist name field.  7. Click the "Post" button.  8. Check for a confirmation message and that the post appears correctly. |
| Expected result(s) | The playlist is successfully created with all media uploaded correctly, and visible under admin's posts. |
| Post-condition(s) | The new playlist is added to the database and available for users to view. |
| Actual result(s) | Success: The playlist was created successfully with all required media, and the confirmation was received as expected. |
| Test Case Result | Pass |

| **Test Case** | **Admin Logged In** | **Song Name** | **Image Uploaded** | **Song Uploaded** | **Lyrics Uploaded** | **Genre Selected** | **Artist Name** | **Expected Outcome** | **Actual Outcome** | **Verdict** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Yes | Valid | Yes | Yes | Yes | Valid | Valid | Success | Success | Pass |
| 2 | No | Valid | Yes | Yes | Yes | Valid | Valid | Failure | Failure | Pass |
| 3 | Yes | Null | Yes | Yes | Yes | Valid | Valid | Failure | Failure | Pass |
| 4 | Yes | Valid | No | Yes | Yes | Valid | Valid | Failure | Failure | Pass |
| 5 | Yes | Valid | Yes | No | Yes | Valid | Valid | Failure | Failure | Pass |
| 6 | Yes | Valid | Yes | Yes | No | Valid | Valid | Failure | Failure | Pass |
| 7 | Yes | Valid | Yes | Yes | Yes | Invalid | Valid | Failure | Failure | Pass |
| 8 | Yes | Valid | Yes | Yes | Yes | Valid | Null | Failure | Failure | Pass |

| **Identifier** | **TC5** |
| --- | --- |
| Related requirements(s) | Delete Songs Functionality |
| Short description | Verify that an admin can successfully delete a song from the RetroTunes platform. |
| Pre-condition(s) | User is logged in as an admin. The song exists on the platform. The RetroTunes platform is accessible and functional. |
| Input data | Song ID: 12345 (Assumed valid and existing song) |
| Detailed steps | 1. Log into RetroTunes with admin credentials.  2. Navigate to the admin dashboard or song management section.  3. Locate the song by ID 12345.  4. Select the option to delete the song.  5. Confirm the deletion when prompted.  6. Check for a confirmation message that the song has been successfully deleted. |
| Expected result(s) | The song is removed from the database and is no longer available on the platform. User receives a confirmation of deletion. |
| Post-condition(s) | The song with ID 12345 is no longer listed or accessible on the platform. |
| Actual result(s) | Success: The song was deleted successfully, and confirmation was received as expected. |
| Test Case Result | Pass |

| **Test Case** | **Admin Logged In** | **Song ID Exists** | **Confirmation Given** | **Expected Outcome** | **Actual Outcome** | **Verdict** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Yes | Yes | Yes | Success | Success | Pass |
| 2 | Yes | No | Yes | Failure | Failure | Pass |
| 3 | No | Yes | Yes | Failure | Failure | Pass |
| 4 | Yes | Yes | No | Failure | Failure | Pass |
| 5 | Yes | Yes | Yes | Success | Success | Pass |
| 6 | Yes | No | No | Failure | Failure | Pass |
| 7 | No | No | Yes | Failure | Failure | Pass |
| 8 | No | Yes | No | Failure | Failure | Pass |