| **Test Case ID** | **Test Case Description** | **Input Data** | **Expected Result** | **Result** | **Remarks**  **(If Fail)** |
| --- | --- | --- | --- | --- | --- |
| 1 | User Registration | Valid username, password, email | User account created successfully, activation pending | Pass | If already user email exists then it fails |
| 2 | User Registration | Invalid email, weak password | User account not created, error message displayed | Pass | If the input data is not perfect it will fails |
| 3 | Admin Activates User Account | Admin logs in, selects user to activate | User account status changes to 'active' | Pass | If user id is not found then it fails to activate |
| 4 | User Login Valid Credentials | Valid username, password | User logged in successfully, redirected to User Home | Pass | Unregister users cannot login here |
| 5 | Click on Training Module | User logged in | Training module opens successfully | Pass | If the code is incorrect then it fails |
| 6 | Click on Detection Module | User logged in | Detection process initiated | Pass | If training is not done it fails |
| 7 | Detection with Invalid Input Image | Invalid image file (e.g., corrupted) | Error message displayed, no prediction made | Pass | If the image is not valid it fails |