# **IT314: Software Engineering**

# **Black Box Testing**



**Group: 15 Conference Management System**

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1. For the Sign-up Page:

* In order to use the functionalities of the system, a simple Sign up screen of software or a web application will be tested for the user to sign up.
* The Sign up screen has four fields: Username, Email ID, Password and Confirm Password as input and the output will be to enable access to the system.
* A black box testing for this portal will not consider the specifications of the code, rather it will test the valid email and password to create right account.
* This form of testing will check the input and the output where the output is possibly of 2 types:

1. A user inputs a correct username and password that exists in the system database. Hence, he/she is able to log in.

OR

1. A user inputs an incorrect username and password that does not exist in the database. Hence, he/she will receive an “error message”.

* Equivalence Class Partitioning:
* As there are 2 inputs that can either be correct or incorrect, there will be a total of 24= 16 Equivalence classes.
* For taking the Sign up credentials, the following criteria should be met in order to successfully login into the website:

1. Every field is compulsory to fill.
2. The Email ID should be a registered email and should have @gmail, @yahoo, etc. extension.
3. The Email ID shoul be UNIQUE, i.e. it should not be existing already.
4. The Password should be a minimum of 8 characters and a Maximum of 15 characters which should include AT LEAST ONE lowercase letter, Upper case letter, number and a special character.
5. Confirm the password's value should be the EXACT same as the password field.

Boundary value analysis:

| Test case | Email | Organization name/User name | Password | Confirm Password | Output | Reason |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | parvadhami@gmail.com | Parva | parvaThe@ | parvaThe@ | Success |  |
| 2 | parva@gmail.com | Parva123 | Ppp123#09999990 | Ppp123#09999990 | Error | Password exceeds length |
| 3 | sarthakmsonagara@gmail.com | Sarthak2002 | sOnagara314# | sonagara314# | Error | Passwords don’t match |
| 4 |  | Champ | 786#22Mann | `786#22Mann | Error | Email missing |
| 5 | 202001134@daiict.ac.in |  | Pol23##l | Pol23##l | Error | Username missing |
| 6 | shams@yahoo.com | Shams |  | 90#mnn | Error | Password missing |
| 7 | drishti@gmail.com | Drishti | PPP23mnn |  | Error | Confirm password missing |
| 8 | babu234@gmail.com | babumoshai | Polygo##l | Polygo##l | Error | Password criteria not met |
| 9 | shaily1988@gmail.com | Shaily123 | !@#$%^&\*11 | !@#$%^&\*11 | Error | Password criteria not met |
| 10 | cyrus550@gmail.com | cyrusthegreat | pok@mOn | pok@mOn | Error | Password criteria not met |
| 11 | fillagmail.com | Fillan | Gaza@123 | Gaza@123 | Error | Password criteria not met |
| 12 | dora1234@gmail.com | Dora | Po23$$ | Po23$$ | Error | Password criteria not met |
| 13 |  |  |  |  | Error | Every field is blank |
| 14 | parvadhami@gmail.com | poker | Ram123@# | Ram123@# | Error | Email Already exists |

**Note:** For User Sign up, there shall be an EXTRA field that shall ask the User whether his/her ‘Role’ is that of:

1. Publisher
2. Attendee

The User will have to compulsorily check the ‘radio’ box in order to make an account.

Hence, the Test case table for the user shall remain as above EXCEPT that it will include the aforementioned criterion.

2. For Login Page:

**2. For the Login Page:**

* For the Login page, there shall be two inputs:

1. Email ID
2. Password

* The System shall check if the Email ID and the Password that have been entered have been registered in its Database.

**Equivalence Class Partitioning:**

| Equivalence Classes | Email | Password | Expected Output |
| --- | --- | --- | --- |
| E1 | Valid | Valid | Successful |
| E2 | Valid | Invalid | Error |
| E3 | Invalid | Valid | Error |
| E4 | Invalid | Invalid | Error |

**3. Managing Conference:**

* While adding the conference into the system, certain inputs shall be given.
* For any conference to be successfully uploaded in the system:

1. Name of the conference.
2. A brief description of the conference
3. Date of beginning of the conference
4. Date of ending conference
5. Guest Speaker
6. Topic for the conference

* In the aforementioned inputs the first four shall be compulsory.

**Decision Table-based Testing:**

| **Category** | |  | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **C1** | **Empty name?** | **YES** | **NO** | | | |
| **C2** | **Empty Description** |  | **YES** | **NO** | | |
| **C3** | **Valid Start date?** |  | **NO** | **YES** | |
| **C4** | **End date >**  **Start date** |  | **NO** | **YES** |
| **A1** | **Successful** |  |  |  |  |  |
| **A2** | **Enter Valid details** |  |  |  |  |  |