

Black Box Testing

For Login Page:

Condition			Student Login	Company Login	Admin Login	Placement Manager Login
Email	Password	Role				
Valid	Valid	Valid	Login successful-Student Profile Page	Login successful-Company Profile Page	Login successful-Admin Statistics Page	Login successful-Admin Statistics Page
Valid	Valid	Invalid	Error Message	Error Message	Error Message	Error Message
Valid	Invalid	Valid	Error Message	Error Message	Error Message	Error Message
Valid	Invalid	Invalid	Error Message	Error Message	Error Message	Error Message
Invalid	Valid	Valid	Error Message	Error Message	Error Message	Error Message
Invalid	Valid	Invalid	Error Message	Error Message	Error Message	Error Message
invalid	Invalid	Valid	Error Message	Error Message	Error Message	Error Message
Invalid	Invalid	Invalid	Error Message	Error Message	Error Message	Error Message
Unregistered	Valid/Invalid	Valid/Invalid	Error Message	Error Message	Error Message	Error Message

Test data:

Email	Password	Role	Expected Output	Displayed Output
202001189@daiict.ac.in	Dev@1234	Student	Successful Login - Student Profile Page	Successful Login - Student Profile Page
202001189@daiict.ac.in	Dev@1234	Company	Error Message	Error Message (Message: Error retrieving user with email 202001189@daiict.ac.in)
202001189@daiict.ac.in	1234	Student	Error Message	Error Message (Message: Password Invalid)
202001189@daiict.ac.in	1234	Company	Error Message	Error Message (Message: Error retrieving user with email 202001189@daiict.ac.in)
202001226@daiict.ac.in	Dev@1234	Student	Error Message	Error Message (Message: Password Invalid)
202001226@daiict.ac.in	Dev@1234	Company	Error Message	Error Message (Message: Password Invalid)
202001226@daiict.ac.in	1234	Student	Error Message	Error Message (Message: Password Invalid)
202001226@daiict.ac.in	1234	Company	Error Message	Error Message (Message: Password Invalid)
2020@daiict.ac.in	Dev@1234	Student	Error Message	Error Message (Message: Error retrieving user with email

				2020@daiict.ac.in)
2020@daiict.ac.in	1234	Company	Error Message	Error Message (Message: Error retrieving user with email 2020@daiict.ac.in)

For registration of students:

Email:

Equivalence Partitions	Expected Output	Displayed Output
Email Address with all conditions satisfied. E.g. 202001189@daiict.ac.in	Valid Email Address	Valid Email Address
Email Address without any prefix. E.g. @daiict.ac.in	Invalid Email Address	Invalid Email Address (Message: Please enter a part followed by @)
Email Address without @. E.g. 202001189daiict.ac.in	Invalid Email Address	Invalid Email Address (Message: Please include a @ in the email address)
Email Address without email client after @. E.g. 202001189@.ac.in	Invalid Email Address	Invalid Email Address (Message: . is used at wrong position)
Email Address without domain. E.g. 202001189@	Invalid Email Address	Invalid Email Address (Message: Please enter a part following @)
Email Address without TLD. E.g. 202001189@daiict	Invalid Email Address	Invalid Email Address (Message: Please match the requested format)
Using the same email that has already registered. E.g. 202001189@daiict.ac.in	Error Message	Error Message: Duplicate Key Error

First name, Middle name, Last name:

Equivalence Partition	Expected Output	Displayed Output
Valid value (Not null). E.g. Dev	Valid Input	Valid input
Null value	Invalid Input	Invalid Input

Date Of Birth:

Equivalence Partition	Expected Output	Displayed Output
Valid value. E.g. 12-12-2002	Valid Date	Valid Date
Null value	Invalid Input	Invalid Input (Message: Field is incomplete)
Future Date. E.g. 23-04-2024	Invalid Date	Valid Date

Mobile Number/Alternate Mobile Number field:

Equivalence Partitions	Expected Output	Displayed Output
Mobile number with 10 digits. E.g. 12345-67890	Valid mobile number	Valid mobile number
Mobile number with less than 10 digits. E.g. 1234-6789	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)
Mobile number with more than 10 digits. E.g. 123451-678901	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)
Mobile number with non-numeric values. E.g. abs24-dgd34	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)
Mobile number without the hyphen or any other value. E.g. 1234567890/12345=67890	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)

Mobile number with hyphen not after 5 digits. E.g. 1234-567890	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)
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Boundary Value Analysis	Expected Output	Displayed Output
Mobile number with 10 digits. E.g. 12345-67890	Valid mobile number	Valid mobile number
Mobile number with 9 digits. E.g. 12345-6789	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)
Mobile number with 11 digits. E.g. 12345-678901	Invalid mobile number	Invalid mobile number (Message: Please match the requested format)

10th Percentage/12th Percentage field:

Equivalence Partitions	Expected Output	Displayed Output
Value between 0 to 100. E.g. 75	Valid Percentage	Valid Percentage
Value less than 0. E.g. -23	Invalid Percentage	Invalid Percentage (Message: Value must be greater than or equal to 0.)
Value greater than 100. E.g. 134	Invalid Percentage	Invalid Percentage (Message: Value must be less than or equal to 100.)
Value with more than two digits after dot. E.g. 67.7893	Invalid Percentage	Invalid Percentage (Message: Please enter a valid value.)
Non-numeric values. E.g. abcd	Invalid Percentage	Unable to enter the value

Boundary Value Analysis	Expected Output	Displayed Output
Value equals 99.99	Valid Percentage	Valid Percentage
Value equals 100/100.00	Valid Percentage	Valid Percentage

Value equals 100.01	Invalid Percentage	Invalid Percentage (Message: Value must be less than or equal to 100.)
Value equals -00.01	Invalid Percentage	Invalid Percentage (Message: Value must be greater than or equal to 0.)
Value equals 0/00.00	Valid Percentage	Valid Percentage
Value equals 0.01/00.01	Valid Percentage	Valid Percentage

CPI field:

Equivalence Partitions	Expected Output	Displayed Output
Value between 0 to 10. E.g. 7.68	Valid CPI	Valid CPI
Value less than 0. E.g. -3.4	Invalid CPI	Invalid CPI (Message: Value must be greater than or equal to 0.)
Value greater than 10. E.g. 13.34	Invalid CPI	Invalid CPI (Message: Value must be less than or equal to 10.)
Value with more than two digits after dot. E.g. 3.456	Invalid CPI	Invalid CPI (Message: Please enter a valid value.)
Value with non-numerical values. E.g. 2.abd	Invalid CPI	Unable to enter the value

Boundary Value Analysis	Expected Output	Displayed Output
Value equals 9.99	Valid CPI	Valid CPI
Value equals 10/10.00	Valid CPI	Valid CPI
Value equals 10.01	Invalid CPI	Invalid CPI (Message: Value must be less than or equal to 10.)
Value equals -00.01	Invalid CPI	Invalid CPI (Message: Value must be greater than or equal to 0.)

Value equals 0/00.00	Valid CPI	Valid CPI
Value equals 0.01/00.01	Valid CPI	Valid CPI

Active Backlog/Total Backlog:

Equivalence Partitions	Expected Output	Displayed Output
Value greater than equal to 0. E.g. 8	Valid Input	Valid Input
Value less than 0. E.g. -3	Invalid Input	Invalid Input (Message: (Message: Value must be greater than or equal to 0.)
Float value. E.g. 1.34	Invalid Input	Invalid Input (Message: Please enter a valid input)
Non-numeric value. E.g. abc	Invalid Input	Unable to enter the value
Active Backlog > Total Backlog. E.g. Active Backlog =3, Total Backlog =1	Error Message	Valid Input

After fixing:

Active Backlog > Total Backlog. E.g. Active Backlog =3, Total Backlog =1	Error Message	Error Message (Message: Active backlog cannot be greater than total backlog.)
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Boundary Value Analysis	Expected Output	Displayed Output
Value equal to 0	Valid Input	Valid Input
Value equal to -1	Invalid Input	Invalid Input (Message: Value must be greater than or equal to 0.)

Resume Link:

Equivalence Partitions	Expected Output	Displayed Output
Input value is a URL. E.g. https://drive.google.com/file/d/1NJTZIV1FCF9iWYz_fZY5a7346aDKWO66/view	Link accepted	Link accepted
Input value is not a URL. E.g. abcdef	Invalid URL.	Invalid URL (Message: Please enter a URL.)

Password, Confirm Password:

Error: Every Password input was getting accepted.

After Fixing Error:

Condition					Example	Output
Atleast 8 characters	Atleast one number	Atleast one upper case	Atleast one lower case	Atleast one special character		
Valid	Valid	Valid	Valid	Valid	Dev@1234	Valid Input
Valid	Valid	Valid	Valid	Invalid	Dev12345	Error Message: Please match the requested format
Valid	Valid	Valid	Invalid	Valid	DEV@1234	
Valid	Valid	Valid	Invalid	Invalid	DEV12345	
Valid	Valid	Invalid	Valid	Valid	dev@1234	
Valid	Valid	Invalid	Valid	Invalid	dev12345	
Valid	Valid	Invalid	Invalid	Valid	1234567@	
Valid	Valid	Invalid	Invalid	Invalid	12345678	
Valid	Invalid	Valid	Valid	Valid	Dev@Darji	
Valid	Invalid	Valid	Valid	Invalid	DevDarji	
Valid	Invalid	Valid	Invalid	Valid	DEV@DARJI	

Valid	Invalid	Valid	Invalid	Invalid	DEV DARJI	
Valid	Invalid	Invalid	Valid	Valid	dev@darji	
Valid	Invalid	Invalid	Valid	Invalid	devdarji	
Valid	Invalid	Invalid	Invalid	Valid	@@@@ @@@@	
Valid	Invalid	Invalid	Invalid	Invalid	NA	
Invalid	Valid	Valid	Valid	Valid	Dev@123	
Invalid	Valid	Valid	Valid	Invalid	Dev123	
Invalid	Valid	Valid	Invalid	Valid	DEV@12	
Invalid	Valid	Valid	Invalid	Invalid	DEV12	
Invalid	Valid	Invalid	Valid	Valid	dev@12	
Invalid	Valid	Invalid	Valid	Invalid	dev12	
Invalid	Valid	Invalid	Invalid	Valid	1234@	
Invalid	Valid	Invalid	Invalid	Invalid	1234	
Invalid	Invalid	Valid	Valid	Valid	Dev@	
Invalid	Invalid	Valid	Valid	Invalid	Dev	
Invalid	Invalid	Valid	Invalid	Valid	DEV@	
Invalid	Invalid	Valid	Invalid	Invalid	DEV	
Invalid	Invalid	Invalid	Valid	Valid	dev@	
Invalid	Invalid	Invalid	Valid	Invalid	dev	
Invalid	Invalid	Invalid	Invalid	Valid	@@@@	
Invalid	Invalid	Invalid	Invalid	Invalid	Blank	

Error: Accepting the form even if Confirm Password does not match with the Password.

Condition		Expected Output	Displayed Output
Old Password	Confirm Password		
Valid Password. E.g. Dev@1234	Matches with password	Password is Accepted	Password is Accepted

	E.g. Dev@1234		
Valid Password. E.g. Dev@1234	Doesn't matches with password E.g. DevDarji@1234	Error Message	Password is Accepted

After Fixing Error:

Condition		Password Change
Old Password	Confirm Password	
Valid Password. E.g. Dev@1234	Matches with password E.g. Dev@1234	Password is accepted
Valid Password. E.g. Dev@1234	Doesn't matches with password E.g. DevDarji@1234	Error message: Confirm Password not matched

For Company Registration/Edit Profile:

The HR Name, Email, Website, Contact No. and Password will have the same constraints as mentioned in the Student Registration.

Update Password:

Condition			Password Change
Old Password	New Password	Confirm New Password	
Matches with the old password value in the database. E.g. Dev@123	Valid E.g. DevDarji@123	Matches with new password E.g. DevDarji@123	Password is changed.
Matches with the old password value in the database. E.g. Dev@123	Valid E.g. DevDarji@123	Doesn't matches with new password E.g. Dev@1234	Error message: Confirm Password not matched
Doesn't match with the old password value in the database. E.g.	Valid E.g. DevDarji@123	Matches with the new password. E.g. DevDarji@123	Error message: Old Password is InCorrect

deV@1234			
Doesn't match with the old password value in the database. E.g. deV@1234	Valid E.g. DevDarji@123	Doesn't match with the new password. E.g. Dev@1234	Error message: Confirm Password not matched

Update Resume:

Equivalence Partition	Expected Output	Displayed Output
New URL is valid URL	The resume will be updated.	The resume will be updated.
New URL is invalid URL	Error message	Error message (message: Please enter a URL)

Edit Profile:

All the test cases will be the same as mentioned for the registration scenario and will only be available until he is not verified.

Error: Able to have CPI's value more than 10 (For Students).
Active Backlog < Total Backlog condition not satisfied.

After Fixing: CPI criteria will be the same as mentioned. Backlog condition satisfied.

Register/ Deregister for a job:

Suppose a job posting by a company has criteria of 7 cpi and is open for only B.Tech program students.

Equivalence Partition	Expected Output	Displayed Output
The student has greater than or equal to 7 cpi and is from B.Tech.	System should allow the student to register for that job.	The student is able to register for that job.
The student has greater than or equal to 7 cpi and is from B.Tech but the job is not scheduled yet.	System should not allow the student to register for that job.	A disabled button which shows Not Started.

The student has less than 7 cpi and is from B.Tech.	System should not allow the student to register for that job.	A disabled button which shows CPI.
The student has greater than or equal to 7 cpi and is from M.Tech/M.Sc.	System should not allow the student to register for that job.	A disabled button which shows Branch.
The student has less than 7 cpi and is from M.Tech/M.Sc.	System should not allow the student to register for that job.	A disabled button which shows Branch.
The student has been Placed	System should not allow the student to register for that job.	A disabled button which shows Placed.
The deadline for registration is passed.	System should not allow the student to register for that job.	A disabled button which shows Ended.

Filter Company:

The student is able to filter the jobs using the options given and the system is showing the correct and efficient results.

Add Job/Edit Job:

The Company can post the jobs by filling out the form and editing it before verifying. The CPI criteria will follow the same test cases mentioned in the student register scenario.

If job is not verified two options are displayed: (Edit Job, Delete Job)

Edit Job option redirect to Edit Job form.

Error: In the Edit Job section, CPI criteria takes any value.

Job is posted without selecting any branch.

Delete Job option deletes the particular job from the database.

After Fixing Error:

CPI criteria works with all test cases mentioned earlier.

Equivalence Partition (for Branch selection)	Expected Output	Displayed Output
At least one branch is selected	The job will get posted	The job is posted

No branch selected	Error Message	Error Message (Message: Please Enter Branch)
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Student List (For Company):

A list of students who have applied for that job is displayed.

It has a hire button, pressing that button will place that student in that particular company. The information is displayed in the student's profile, the company's student list and the admin's student list. Can unhire if you want.

Verify Students:

Admin can either accept or reject only once.

Equivalence Partition	Expected Output	Displayed Output
Accept option selected	The student will be verified and able to apply for jobs.	The student is verified and able to apply for jobs.
Reject option Selected	The student will not be able to apply for jobs.	The student is not verified and (s)he is not able to apply for jobs.

Schedule Jobs:

Error: Able to enter any type of date.

Verify Jobs:

Admin can either accept or reject only once.

Equivalence Partition	Expected Output	Displayed Output
Accept option selected	The student will be able to apply for that job.	The job is verified and students are able to apply for that job.
Reject option Selected	The job will not get posted.	The job is not verified and the company can delete it if they want.

Verify Company:

Clicking on 'Click Here' option redirects to the company's website.
Admin can either accept or reject only once.

Equivalence Partition	Expected Output	Displayed Output
Accept option selected	The company will be verified and able to post jobs.	The company is verified and able to post jobs.
Reject option Selected	The company will not be able to post jobs.	The company is not verified and is not able to post jobs.

Student List:

The complete list of registered students is displayed. Clicking on a row displays the detail of that particular student.

View Resume option redirects to resume link.

Company List:

The complete list of registered companies is displayed. Clicking on a row displays the detail of that particular company.

Job List:

The complete list of posted jobs is displayed. Clicking on a row displays the detail of that particular job.

Datasheet:

Downloads the datasheet of the details of the students who are not placed yet.