
TEST SUITE

for

Online Placement Information Gathering System

Version 1.0

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1 Unit Testing

We followed the following steps for Unit Testing of the software:

- Examination of requirements and specification of the software.
- Equivalence classes are created by considering all possible valid and invalid inputs for various scenarios.
- Proper inputs from each possible equivalence class are designed.
- For each input, the expected output is determined.
- After the implementation would be completed, the expected output would be compared with the actual output.

We test functions of different users separately as shown below.

1.1 Student

We tested the following functionalities for Students:

1.1.1 Student CRUD operations

Input	Expected Output
Create student with all details and check all details	All the details (except password as it is encrypted) as used while creation should be same
Create student without a detail	Failure response
Create student with same email as already used	Failure response
Create student with short password (below 8 characters)	Failure response
GET student details (except password) while logged in as any other type of users	Shall return the same details used while creation
Update student details and GET student details for a student	Shall return updated values
Delete student and try to GET student	Failure response

1.1.2 login()

Input	Expected Output
Login as student client that exists	Should return success response and apply to company shall work
Login as student client that does not exist	Failure response
Login with wrong password	Failure response

1.1.3 signup()

Input	Expected Output
Sign up with existing email	Should return "user exists" error
Sign up as a valid user with valid password and GET the user	Should return the details (except password) of user used to sign up
Sign up with invalid password (less than 8 characters)	Should return "invalid password" error

1.1.4 upload_resume()

Input	Expected Output
Try to upload large file	Should return failure response
Try to upload file with wrong extension	Should return failure response
Upload proper pdf	Should return success response

1.1.5 apply_for_company()

Input	Expected Output
Send apply request with student login to a specific company and query the database for students applied in a company and companies applied by the student and check if the respective entities are present	True for student in students applied to company and True for company in companies applied by the student

1.1.6 view_notifications()

Input	Expected Output
Delete all notification from database	Shall return no notification in http response
Testing incoming notifications by accepting student's apply request by logging in as company	Shall return the list of notifications for the apply request's accepted
Testing the incoming notifications by making announcement from InstituteAdmin side	Shall return the list of notifications for the announcements

1.2 CompanyAdmin

We tested the following functionalities for CompanyAdmin:

1.2.1 CompanyAdmin CRUD operations

Input	Expected Output
Create company admin with all details and check all details	All the details (except password as it is encrypted) as used while creation should be same
Create company admin without a detail	Failure response
Create company admin with same email as already used	Failure response
Create company admin with short password (below 8 characters)	Failure response
GET company admin details (except password) while logged in as any other type of users	Shall return the same details used while creation
Update company admin details and GET company admin details for a company admin	Shall return updated values
Delete company admin and try to GET company admin	Failure response

1.2.2 login()

Input	Expected Output
Login as company client that exists and try to accept a students application request	Should return success response and application request acceptance should work
Login as company client that does not exist	Failure response
Login with wrong password	Failure response

1.2.3 signup()

Input	Expected Output
Sign up with existing email	Should return "user exists" error
Sign up as a valid user with valid password and GET the user	Should return the details (except password) of user used to sign up
Sign up with invalid password (less than 8 characters)	Should return "invalid password" error

1.2.4 view_resume()

Input	Expected Output
'GET request' for student's resume for a student in its applied list	Should return success response
Accept student resume and check database whether the Student has been marked Accepted	Should return true for the acceptance status of student
Reject student resume and check database whether the Student has been marked rejected	Should return false for the acceptance status of student

1.2.5 post_recruitment()

Input	Expected Output
Create a new recruitment while logged in as Company and query the database for the recruitment	Should return a recruitment with the same details

1.2.6 view_notifications()

Input	Expected Output
Delete all notification from database	Shall return no notification in http response
Testing the incoming application of a student by sending apply request from a student to the company	Shall return the list of notifications for the students who applied
Testing the incoming notifications by making announcement from InstituteAdmin side	Shall return the list of notifications for the announcements

1.3 Alumni

We tested the following functionalities for Alumni

1.3.1 Alumni CRUD operations

Input	Expected Output
Create alumnus with all details and check all details	All the details (except password as it is encrypted) as used while creation should be same
Create alumnus without a detail	Failure response
Create alumnus with same email as already used	Failure response
Create alumnus with short password (below 8 characters)	Failure response
GET company admin details (except password) while logged in as any other type of users	Shall return the same details used while creation
Update alumnus details and GET details for an alumnus	Shall return updated values
Delete alumnus and try to GET alumnus	Failure response

1.3.2 login()

Input	Expected Output
Login as alumnus client that exists	Should return success response
Login as alumnus client that does not exist	Failure response
Login with wrong password	Failure response

1.3.3 signup()

Input	Expected Output
Sign up with existing email	Should return "user exists" error
Sign up as a valid user with valid password and GET the user	Should return the details (except password) of user used to sign up
Sign up with invalid password (less than 8 characters)	Should return "invalid password" error

1.3.4 give_feedback()

Input	Expected Output
Add feedback (test) to a company he/she worked	Feedback should be updated

1.3.5 view_notifications()

Input	Expected Output
Delete all notification from database	Shall return no notification in http response
Testing the incoming notifications by making announcement from InstituteAdmin side	Shall return the list of notifications for the announcements

1.4 InstituteAdmin

1.4.1 login()

Input	Expected Output
Login as administration client that exists	Should return success response
Login as administration client that does not exist	Failure response
Login with wrong password	Failure response

1.4.2 signup()

Input	Expected Output
Sign up with existing email	Should return "user exists" error
Sign up as a valid user with valid password and GET the user	Should return the details (except password) of user used to sign up
Sign up with invalid password (less than 8 characters)	Should return "invalid password" error

1.4.3 verify_company()

Input	Expected Output
Verify and accept a company which tried to signup	Should return success response and company shall get access to the platform
Verify and reject a company which tried to signup	Should return success response and company shall get a notification about rejection and shall not be get access to any other features on the platform

1.4.4 post_announcements()

Input	Expected Output
Post some announcements and GET the announcements from database	Should return announcements with the same details as posted