**SC2006 Software Engineering**

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**Lab#4 Deliverables**

Lab Group A29

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# 1.0 Source Code

Please go to link to see full source code:

<https://github.com/KayTeo/JobQuest/tree/main/jobquest>

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# 2.0 Test Cases

## 2.1 Black Box Testing

Black Box testing is used to test equivalences classes and boundary value testing.

Test Case 1: Creating Account

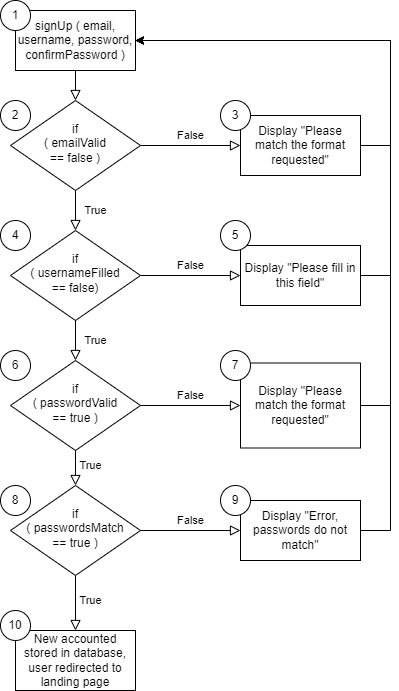
Checking if all the user details that a user inputs is valid before signing the user up and creating a new account in the database.

| Email | Username | Password | Confirm Password | Expected Output | Actual Output (Log == Oracle) |
| --- | --- | --- | --- | --- | --- |
| No Entry | Keith | Password1! | Password1! | (Please fill in this field) Email is required | Pass |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Email already exists) | Keith | Password1! | Password1! | 404 | Fail |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Assuming email not yet used for sign up) | Empty | Password1! | Password1! | (Please fill in this field) Username is required | Pass |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Assuming email not yet used for sign up) | Keith | Empty | Password1! | (Please fill in this field) Password is required | Pass |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Assuming email not yet used for sign up) | Keith | Password1! | Empty | (Please fill in this field) Confirm password is required | Pass |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Assuming email not yet used for sign up) | Keith | Password1! | Password2! | 404 | Fail |
| [KTEO024@e.ntu.edu.sg](mailto:KTEO024@e.ntu.edu.sg) (Assuming email not yet used for sign up) | Keith | Password1! | Password1! | Sign up successful | Pass |

## 2.2 White Box Testing

White box testing was done to ensure that the flow of our application is correct as well as to check for alternative flows in our application.

## 2.2.1 Sign Up White Box Testing



Test Cases:

1. User creates an account with email not taken, username not taken, password meets requirements and both passwords match.

Execution path: 1, 2, 4, 6, 8, 10

1. User creates an account with email taken, username not taken, password meets requirements and both passwords match.

Execution path: 1, 2, 3

1. User creates an account with email not taken, username taken, password meets requirements and both passwords match.

Execution path: 1, 2, 4, 5

1. User creates an account with email taken, username not taken, password does not meet requirements and both passwords match.

Execution path: 1, 2, 4, 6, 7

1. User creates an account with email not taken, username not taken, password meets requirements and both passwords do not match.

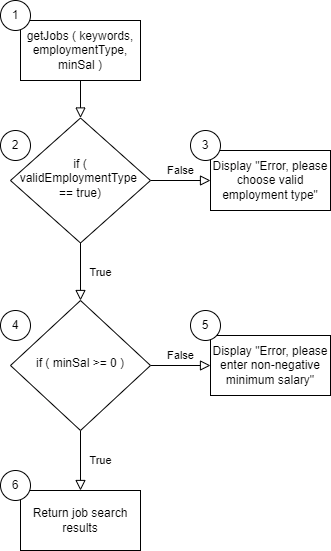
Execution path: 1, 2, 4, 6, 8, 9

Cyclomatic Complexity:

[Edges - Nodes] + 2 = [9 - 6] + 2 = 3

[Conditions] + 1 = 4 + 1 = 5

## 2.2.2 getJobs White Box Testing



Test Cases:

1. User sends job request with keywords, valid employment type and non-negative minimum salary.

Execution path: 1, 2, 4, 6

1. User sends job request with keywords, invalid employment type and non-negative minimum salary.

Execution path: 1, 2, 3

1. User sends job request with keywords, valid employment type and negative minimum salary.

Execution path: 1, 2, 4, 5

Cyclomatic Complexity:

[Edges - Nodes] + 2 = [5 - 4] + 2 = 3

[Conditions] + 1 = 2 + 1 = 3

# 3.0 Demo Script

## 3. JobQuest DemoScript

Hello and welcome to JobQuest, the ultimate job tracking and finding application. With JobQuest, you can easily keep track of all your job applications, find new job opportunities, and connect with others in the job search community. Today, I'm going to give you a demonstration of the app's key features.

SIGNING UP:

To get started with JobQuest, you can either login with an existing Gmail account or sign up for an account. If you choose to sign up for a new account, you'll be asked to provide some basic information, such as your name and email address. Once you've created your account, you can log in and start exploring the app.

TRACKING YOUR JOB APPLICATIONS:

One of the most useful features of JobQuest is the ability to track your job applications. To do this, simply click on the "Applications" tab. Here, you'll see a list of all the jobs you've applied for, along with their current status. You can update the status of each application as you move through the hiring process, from "Applied" to "Interview Scheduled" to "Offer Received" and beyond.

FINDING NEW JOBS:

Of course, JobQuest isn't just about tracking your existing applications. We also want to help you search for new job opportunities. To do this, click on the "Searcher" tab. Here, you'll see a list of job postings that match your user job profile and search terms. You can filter in a number of ways, including minimum salary and employment type. When you find a job that interests you, simply click on it to learn more and apply. You can also add it to your “Wishlist”, a list of jobs that you are watching but have not applied to yet.

JOINING THE JOB SEARCH COMMUNITY:

Finally, JobQuest has a forum where you can connect with others in the job search community. To access the forum, click on the "Forum" tab. Here, you'll be able to start and join discussions about job search strategies, resume tips, interview techniques, and more. You can also ask questions and get advice from other members of the community.

CONCLUSION:

Thank you for taking the time to learn about JobQuest. We believe our app is the best tool for tracking and finding jobs, and we hope you'll give it a try. Sign up today and see how easy it can be to take control of your job search!