

# Testing Documentation for EduAssess

Project: Dependency Aware Assessment Generator

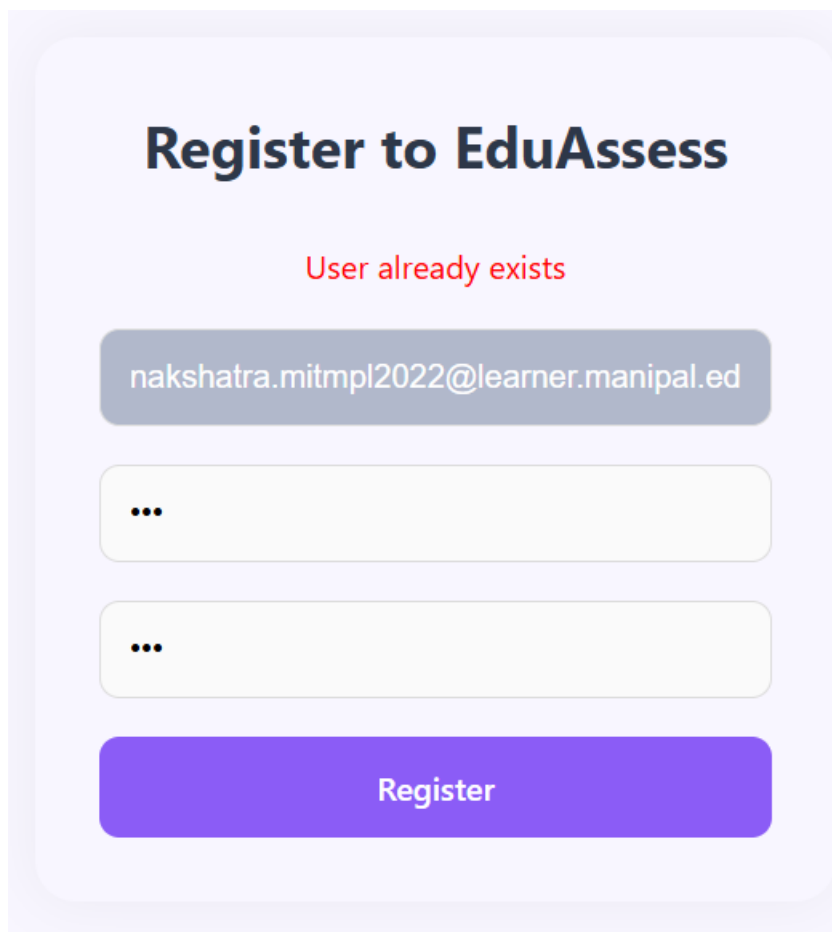
Component: New user Registration

## *Normal user Registration*

Working in light and dark mode, displays an alert on the top of the screen stating new user registered. However, after an error, the message does not go away after correct user registration.

## *Using a mail ID that already exists:*

User already exists message is displayed at the top of the component in light and dark mode



The screenshot shows a registration form titled "Register to EduAssess". Below the title, a red error message "User already exists" is displayed. The form contains three input fields: a text field with the email address "nakshatra.mitmpl2022@learner.manipal.ed", a password field with three dots, and a second password field with three dots. At the bottom of the form is a purple "Register" button.

## *If the password does not match*

A message is shown stating the password does not match in light and dark mode.

The image shows a registration form titled "Register to EduAssess". It features three input fields: the first contains the email "nakshtra.bhandary@gmail.com", the second contains two dots "••", and the third contains three dots "•••". A red error message "Passwords do not match." is displayed above the password fields. At the bottom is a purple "Register" button.

*Using a mail ID that already exists and password is not the same:*

Displays a message saying the mail ID already exists, because that is at higher priority than the passwords do not match message.

### Component: Login

*Wrong password*

Displays error message stating invalid credentials

**Login to Edu Access**

nakshatra.mitmpl2022@learner.manipal.ed

.....

Invalid credentials

Login

[Forgot Password?](#)

Don't have an account? [Register here](#)

#### *Wrong user email*

Gives the same error message stating invalid credentials.

#### *Correct credentials*

Allows login in light mode and dark mode and gives an alert.

### Component: Logout

#### *Logout*

When yes is clicked it successfully logs out and prevents users from accessing the dashboard.

Works in light and dark modes.

### Component: Search for target topic in dropdown

#### *Normal search*

Works fine, the topics are listed in order of difficulty, not alphabetically based on the search term.

#### *Incorrect term*

A message stating no topic found is displayed.

### Component: Listing prerequisites and changing topic

Works well, the change topic clears all previously listed prerequisites and re lists them correctly based on topic chosen.

The screenshot shows a web interface with a light purple background. At the top, a large heading reads "What's your target topic?". Below this, a paragraph states: "I'm your learning assistant. Select a topic you've studied or want to be assessed on, and I'll generate an intelligent assessment for you." Underneath, the section "Target Topic" is displayed. It features a light purple button labeled "Backpropagation" and a darker purple button labeled "Change Topic". Below the "Target Topic" section, the heading "All Prerequisites" is shown. Under this heading, there are five light purple buttons arranged in two rows: "Chain Rule", "Matrix Multiplication", "Derivatives" in the first row, and "Matrix Operations", "Vectors" in the second row. At the bottom of the interface is a large, dark purple button labeled "Generate Assessment".

### Component: Generate Assessment

*When no topic is chosen*

The button does not function or display anything.

*When a topic is chosen and changed without clicking generate assessment*

The questions are displayed based on the latest topic chosen

*When the topic is changed after clicking generate assessment before clicking submit assessment*

Timer resets and new set of questions are displayed.

*When the topic is changed after clicking generate assessment after clicking submit assessment*

The new set of questions is generated with roughly that same average time.

### Component: Quiz

The questions generated are of appropriate mixed difficulty levels based on the target topic and its prerequisites.

### Component: Submit assessment, try again, download report

All work as expected.

### Component: Timer

Generates time correctly based on number of questions

Counts down at the correct pace.

When the timer hits zero: An alert is displayed to let the user know they have run out of time.

### Component: Chabot

The chatbot answers questions regarding the navigation of the websites appropriately.

However, the answers are unnecessarily long and it does not always answer the question asked appropriately.

It answers questions which are out of bounds.

### Component: Forgot Password

The overall flow of the forgot password component works as expected. The user mail ID is entered and compared to the database, the email containing OTP is sent and verified. In case any of these steps fail appropriate error, messages are displayed.

The UI can also be improved, currently it does not suit the page and the modal is in an awkward position.

Also, the mail usually goes to spam. In outlook it gets quarantined. So, when it goes into production a legitimate mail ID needs to be used. The mail ID used also needs to be a Gmail ID.

May need to add an admin panel to be allowed to change the mail ID associated with the forgot password mail

Future scope involves adding phone number verification.

## Other

1. It works for multiple users simultaneously as checked using two browsers.
2. Low latency while generating questions, time taken is under the required threshold specified in the SRS.
3. Submit assessment works correctly for multiple repeated assignments.

## Potential Improvements

1. Create a feature for the user to delete their account and profile.
2. The White colour of the text boxes on the login and registration pages are very bright, would be better to shift it to a cream colour.
3. Add role-based access for teachers to enrol their students to the platform and monitor their progress.
4. Sometimes (1 in 20 cases) the questions generated do not have a correct answer. It is a small bug which can be fixed by finetuning the prompt.
5. When no topic is chosen and the user clicks generate assessment, we can add a user-friendly message that says no topic chosen.
6. We can add anti-cheating mechanism to trigger alerts when the user tried to access the chatbot or switch tabs.
7. Cannot deselect an option in the quiz once selected, it can only be changed. We could add a clear button to clear the selection.
8. When the questions in the quiz are displayed, they sometimes contain random asterisks. These need to be formatted better.
9. We can add an automatic submit to the timer so that it submits the assessment when it becomes zero.
10. The LLM response includes expected time taken per question, we can generate the total time using that rather than estimating 1 minute per question.
11. The chatbot is unnecessarily verbose for simple questions. This can be improved by improving its prompt.
12. Improvement to forgot password has been mentioned in the component itself.