Testing Requirements for Academic Planner

Unit Testing:

Component testing:

All React components (course cards, buttons, popups) were tested manually to ensure they render and behave correctly. Button functionalities like **complete chapter**, **mark complete**, **delete course** work smoothly across different states.

APIs:

Login and Signup APIs were tested with valid and invalid inputs. Course-related APIs (add course, update course, delete course, fetch courses) were thoroughly tested.API calls returned correct responses, tokens, and error handling worked properly.

Business Logic:

Progress calculation (e.g., updating chapter counts) functions correctly. Status updates (like marking a course completed) reflect accurately in UI and database.

Integration Testing

Basic integration testing between frontend components and backend APIs was done manually. After login/signup, the user data and courses are fetched and displayed correctly without page reloads. Navigation between Dashboard, Timetable, Suggestions, Courses, and Calendar works seamlessly.

Test Report :

What Was Tested:

- ◆ All major frontend components and user flows.
- ◆ All authentication flows (Login, Signup).
- ◆ All course-related operations (Create, Update, Delete, Fetch).
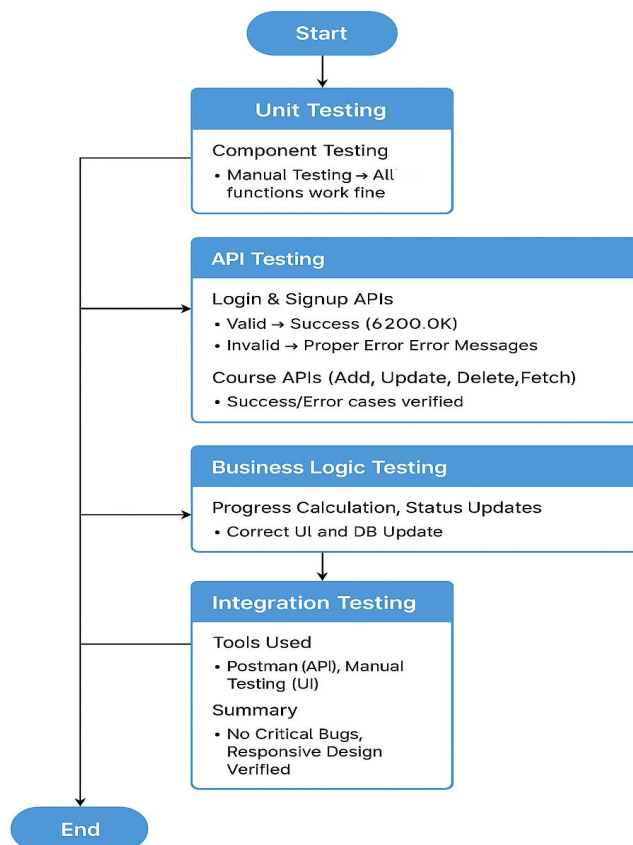- ◆ Responsiveness on different devices (Mobile, Tablet, Desktop).

Tools Used:

Postman for API Testing.

Manual Testing for UI and user experience validation.
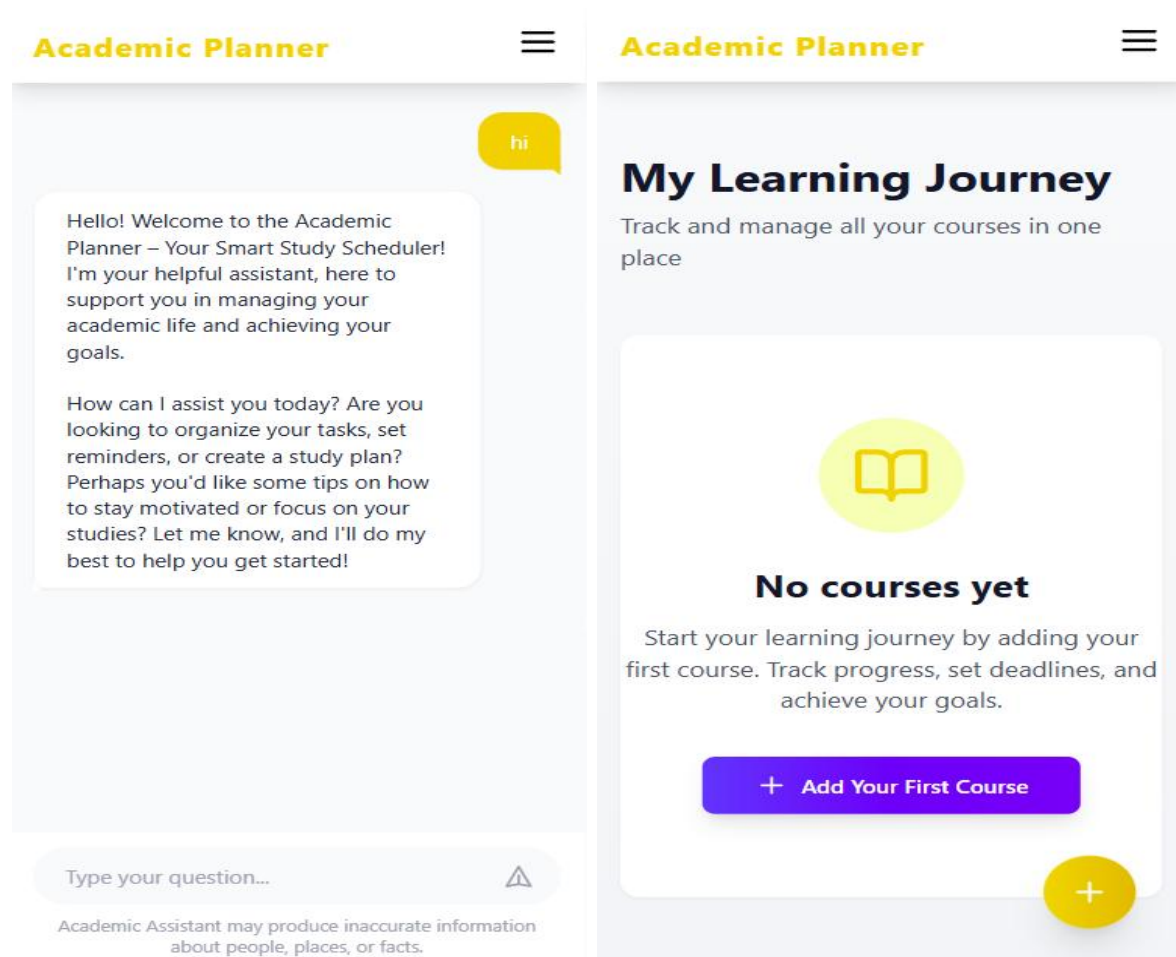
Summary of Results:

◆ All tested components, APIs, and flows worked correctly for valid cases.

◆ Proper error handling was observed for invalid API calls.

◆ No critical bugs found during manual testing.

◆ Responsive behavior and UI rendering confirmed across devices.

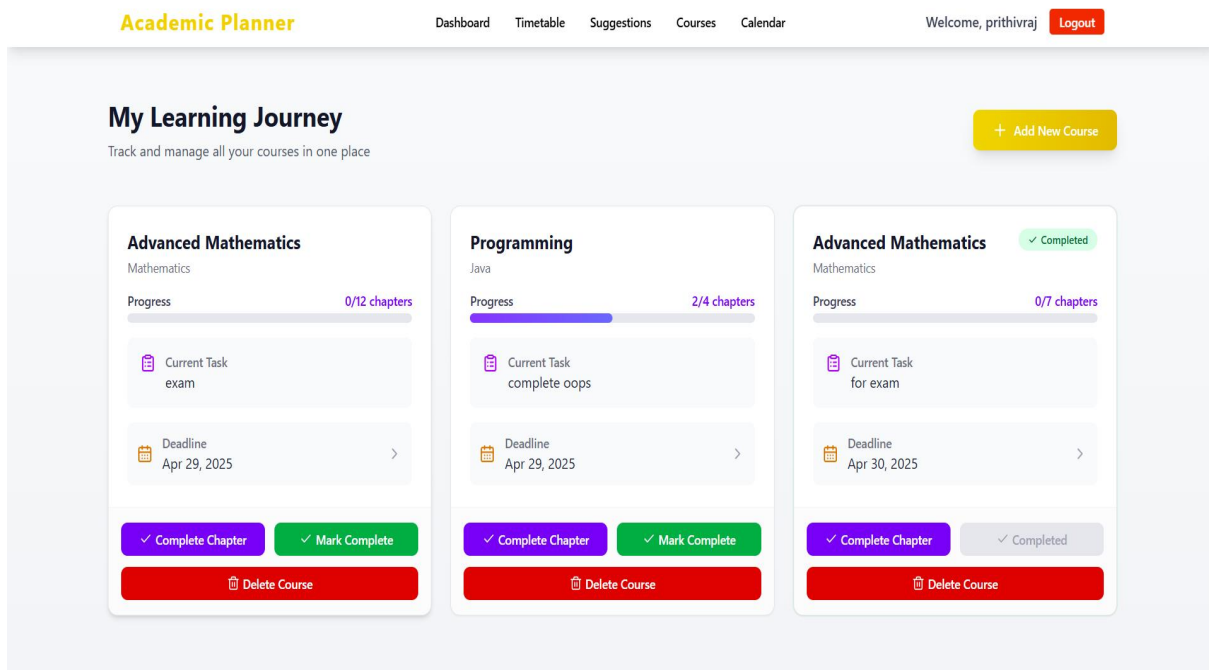◆ Smooth login/signup authentication and consistent course management performance.

Flow Chart:

FIG.NO:1 - WorkFlow Char

Screenshots:

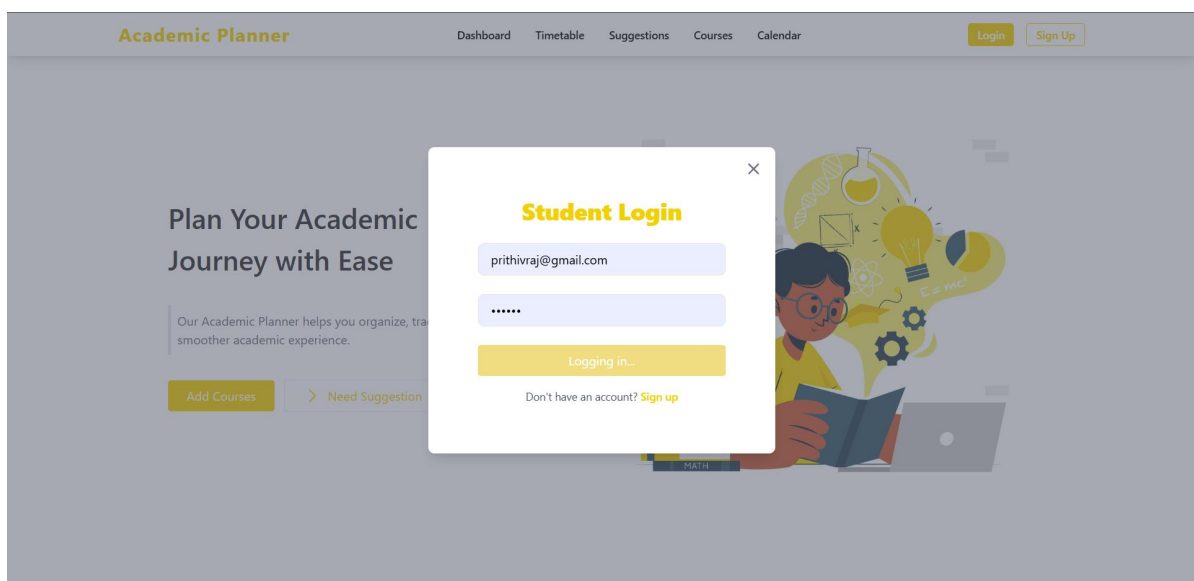

FIG.NO:2 - Suggestion Page

The interface is fully responsive across all devices.Login and signup popups display correctly on mobile, tablet, and desktop.Layouts adjust automatically to different screen sizes without issues. User interactions, AI chats, and suggestions all work smoothly and consistently.
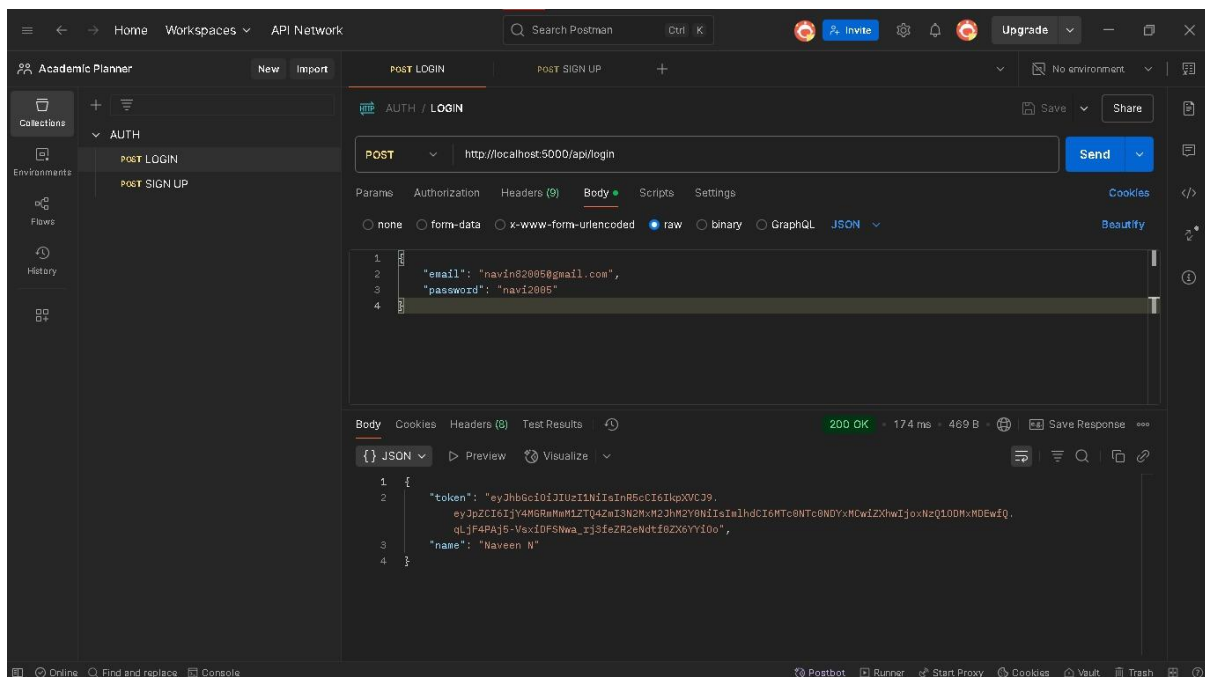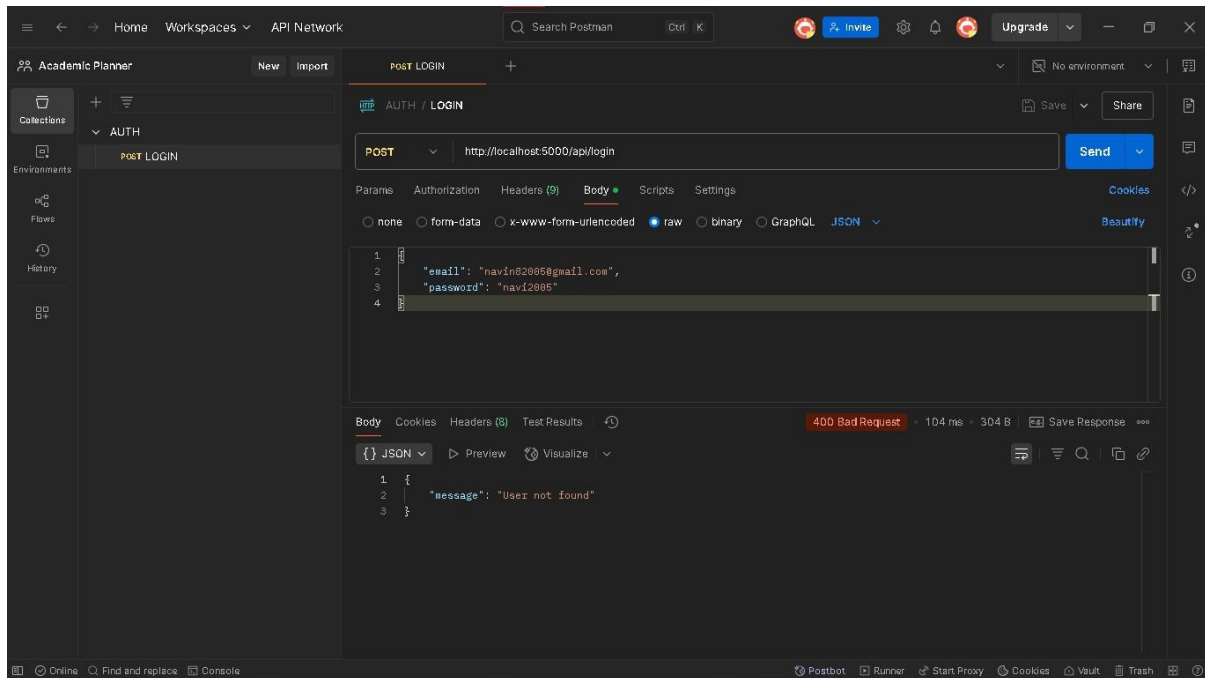
FIG NO: 3 - Course Page

All buttons and functionalities are working fine. Actions like updating progress, completing courses, and deleting courses work correctly. Navigation between different sections is smooth and error-free. Overall, the system is responsive, and all operations perform as expected.

FIG.NO:4 - Home Page

Login popup opens and functions correctly. Signup popup opens and completes registration successfully. Form validations for login and signup work as expected. Both login and signup processes are smooth and error-free.
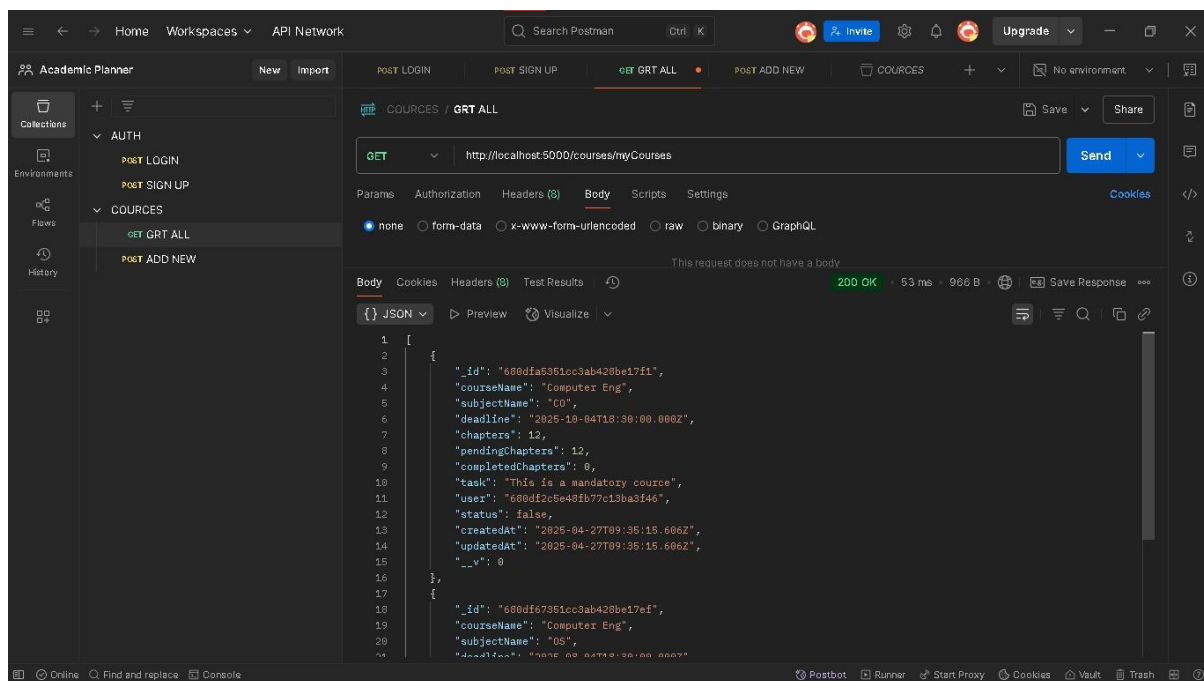

FIG.NO: 5 - Testing 1

API Testing Documentation for Login and Signup

The Login and Signup APIs were tested with valid data, returning the correct response and status code 200 OK. Invalid submission attempts (e.g., wrong credentials or missing fields) triggered the expected error responses.

Both valid and invalid scenarios were thoroughly checked to ensure proper authentication handling.Error responses, such as invalid credentials or user already exists, were received as expected for invalid submissions.

FIG.NO: 5 - Testing 2

All course-related API calls were tested using Postman and performed as expected. Valid requests for creating, fetching, updating, and deleting courses returned the correct success status codes (200/201). Invalid submissions (e.g., missing fields or invalid IDs) triggered the appropriate error responses with relevant status codes. Both success and error scenarios were verified to ensure robust course management functionality.

Conclusion:

Testing was successful. The Academic Planner project meets the functional, responsiveness, and user interaction requirements without major issues.