# 17. API Routes Used

The following routes were implemented in the backend to handle various features of the Virtual Labs platform. This table provides a consolidated view of all routes used, along with their HTTP methods, endpoints, and purposes.

|  |  |  |  |
| --- | --- | --- | --- |
| Module | Method | Endpoint | Description |
| Assignment Routes | POST | /create | Creates a new assignment. |
| Assignment Routes | GET | /getAssigment/:id | Fetches assignment details by ID. |
| Authentication Routes | POST | /register | Registers a new user (requires token verification). |
| Authentication Routes | POST | /login | Logs in an existing user (requires token verification). |
| Authentication Routes | POST | /verify | Sends a verification link to the user. |
| Classroom Routes | POST | / | Creates a new classroom (token required). |
| Classroom Routes | GET | /getclassroom/:id | Retrieves a classroom by ID (token required). |
| Invitation Routes | POST | /create | Creates and sends an invitation (token required). |
| Invitation Routes | GET | /verify | Verifies the validity of an invitation token. |
| Invitation Routes | POST | /accept | Accepts an invitation and links the user (token required). |
| Code Execution Route | POST | / | Runs code submitted by the user using Docker containers. |
| Test Routes | POST | /create-test | Creates a new test. |
| Test Routes | GET | / | Lists all tests (optionally filtered by classroom). |
| Test Routes | GET | /getTestById/:id | Fetches a test by its ID along with its questions. |
| User Routes | GET | /faculty | Retrieves a list of faculty users. |
| User Routes | POST | / | Creates a new user. |
| User Routes | GET | /getUser | Retrieves a user by UID. |