# 17. API Routes Used

The following routes were implemented in the backend to handle different features of the Virtual Labs platform. These routes are organized by functional modules:

## Assignment Routes

|  |  |  |
| --- | --- | --- |
| Method | Endpoint | Description |
| POST | /create | Creates a new assignment. |
| GET | /getAssigment/:id | Fetches assignment details by ID. |

## Authentication Routes

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| --- | --- | --- |
| Method | Endpoint | Description |
| POST | /register | Registers a new user (requires token verification). |
| POST | /login | Logs in an existing user (requires token verification). |
| POST | /verify | Sends a verification link to the user. |

## Classroom Routes

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| --- | --- | --- |
| Method | Endpoint | Description |
| POST | / | Creates a new classroom (token required). |
| GET | /getclassroom/:id | Retrieves a classroom by ID (token required). |

## Invitation Routes

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| --- | --- | --- |
| Method | Endpoint | Description |
| POST | /create | Creates and sends an invitation (token required). |
| GET | /verify | Verifies the validity of an invitation token. |
| POST | /accept | Accepts an invitation and links the user (token required). |

## Code Execution Route

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| --- | --- | --- |
| Method | Endpoint | Description |
| POST | / | Runs code submitted by the user using Docker containers. |

## Test Routes

|  |  |  |
| --- | --- | --- |
| Method | Endpoint | Description |
| POST | /create-test | Creates a new test. |
| GET | / | Lists all tests (optionally filtered by classroom). |
| GET | /getTestById/:id | Fetches a test by its ID along with its questions. |

## User Routes

|  |  |  |
| --- | --- | --- |
| Method | Endpoint | Description |
| GET | /faculty | Retrieves a list of faculty users. |
| POST | / | Creates a new user. |
| GET | /getUser | Retrieves a user by UID. |