

1. User Authentication APIs

- **Register User:**
 - **Endpoint:** `POST /api/auth/register/`
 - **Purpose:** Create a new user account with provided credentials and profile information.
- **Login User:**
 - **Endpoint:** `POST /api/auth/login/`
 - **Purpose:** Authenticate users and provide authentication tokens (e.g., JWT).
- **Logout User:**
 - **Endpoint:** `POST /api/auth/logout/`
 - **Purpose:** Invalidate user sessions and tokens.
- **Password Reset:**
 - **Endpoint:** `POST /api/auth/password-reset/`
 - **Purpose:** Initiate password reset process by sending reset links to the user's email.
- **Password Reset Confirmation:**
 - **Endpoint:** `POST /api/auth/password-reset-confirm/`
 - **Purpose:** Confirm and set a new password using the reset token.

2. User Profile APIs

- **Retrieve User Profile:**
 - **Endpoint:** `GET /api/users/{id}/`
 - **Purpose:** Fetch detailed information about a specific user.
- **Update User Profile:**
 - **Endpoint:** `PUT /api/users/{id}/`
 - **Purpose:** Update comprehensive user profile information.
- **Partial Update User Profile:**
 - **Endpoint:** `PATCH /api/users/{id}/`
 - **Purpose:** Partially update user profile fields.

3. Dashboard Data APIs

- **Upcoming Study Sessions:**
 - **Endpoint:** `GET /api/sessions/upcoming/`
 - **Purpose:** Retrieve a list of the user's upcoming study sessions.
- **Recent Messages:**
 - **Endpoint:** `GET /api/messages/recent/`
 - **Purpose:** Fetch the latest messages from study groups or direct communications.
- **Task Summary:**
 - **Endpoint:** `GET /api/tasks/summary/`
 - **Purpose:** Get an overview of pending and completed tasks.
- **Recent Activity:**
 - **Endpoint:** `GET /api/activity/recent/`
 - **Purpose:** Retrieve recent user activities within the platform.
- **Personal Achievements:**
 - **Endpoint:** `GET /api/achievements/`

- **Purpose:** Fetch the user's achievements and earned badges.

4. Study Group APIs

- **List Study Groups:**
 - **Endpoint:** `GET /api/groups/`
 - **Purpose:** Retrieve a list of all available study groups based on filters and sort options.
- **Create Study Group:**
 - **Endpoint:** `POST /api/groups/`
 - **Purpose:** Create a new study group with specified details.
- **Retrieve Study Group Details:**
 - **Endpoint:** `GET /api/groups/{id}/`
 - **Purpose:** Fetch detailed information about a specific study group.
- **Update Study Group:**
 - **Endpoint:** `PUT /api/groups/{id}/`
 - **Purpose:** Update all details of a specific study group.
- **Delete Study Group:**
 - **Endpoint:** `DELETE /api/groups/{id}/`
 - **Purpose:** Remove a study group from the platform.
- **Join Study Group:**
 - **Endpoint:** `POST /api/groups/{id}/join/`
 - **Purpose:** Allow users to join a study group, subject to group privacy settings.
- **Leave Study Group:**
 - **Endpoint:** `POST /api/groups/{id}/leave/`
 - **Purpose:** Enable users to leave a study group they are part of.

5. Messaging APIs

- **Retrieve Group Messages:**
 - **Endpoint:** `GET /api/messages/{group_id}/`
 - **Purpose:** Fetch all messages within a specific study group.
- **Send Group Message:**
 - **Endpoint:** `POST /api/messages/{group_id}/`
 - **Purpose:** Send a new message to a study group.

6. Task Management APIs

- **List Tasks:**
 - **Endpoint:** `GET /api/tasks/`
 - **Purpose:** Retrieve all tasks assigned to the user.
- **Create Task:**
 - **Endpoint:** `POST /api/tasks/`
 - **Purpose:** Create a new task or study goal.
- **Update Task:**
 - **Endpoint:** `PUT /api/tasks/{id}/`
 - **Purpose:** Update all details of a specific task.
- **Partial Update Task:**

- **Endpoint:** `PATCH /api/tasks/{id}/`
 - **Purpose:** Partially update fields of a specific task.
- **Delete Task:**
 - **Endpoint:** `DELETE /api/tasks/{id}/`
 - **Purpose:** Remove a task from the platform.

7. Notifications API

- **Retrieve Notifications:**
 - **Endpoint:** `GET /api/notifications/`
 - **Purpose:** Fetch all notifications relevant to the user.
- **Mark Notification as Read:**
 - **Endpoint:** `PUT /api/notifications/{id}/read/`
 - **Purpose:** Mark a specific notification as read.

8. Calendar Integration APIs

- **Connect External Calendars:**
 - **Endpoint:** `POST /api/calendar/connect/`
 - **Purpose:** Initiate connection with external calendar services (e.g., Google Calendar, Outlook).
- **Sync Events:**
 - **Endpoint:** `POST /api/calendar/events/`
 - **Purpose:** Sync platform events with external calendars.
- **Retrieve Calendar Events:**
 - **Endpoint:** `GET /api/calendar/events/`
 - **Purpose:** Fetch events from connected external calendars.

9. Reminders APIs

- **Create Reminder:**
 - **Endpoint:** `POST /api/reminders/`
 - **Purpose:** Set a new reminder for a specific event or deadline.
- **List Reminders:**
 - **Endpoint:** `GET /api/reminders/`
 - **Purpose:** Retrieve all reminders set by the user.
- **Update Reminder:**
 - **Endpoint:** `PUT /api/reminders/{id}/`
 - **Purpose:** Update the details of a specific reminder.
- **Delete Reminder:**
 - **Endpoint:** `DELETE /api/reminders/{id}/`
 - **Purpose:** Remove a reminder from the platform.