

TopperUni Management Project

Functional Requirements:

1. Authentication

a. Student

- i. Students can log in and log out securely.
- ii. Students can update their password.

b. Faculty

- i. Faculty can log in and log out securely.
- ii. Faculty can update their password.

c. Admin:

- i. Admin can log in and log out securely.
- ii. Admin can update their password.

2. Profile Management:

a. Student

- i. Students can manage and update their profile.
- ii. Students can update certain fields.

b. Faculty:

- i. Faculty can manage and update their profile.
- ii. Faculty can update certain fields.

c. Admin:

- i. Admin can manage and update their profile.
- ii. Admin can update certain fields.

3. Academic Process:

a. Student:

- i. Students can enroll in offered courses for a specific semester.
- ii. Students can view their class schedule.
- iii. Students can see their grades.
- iv. Students can view notice boards and events.

b. Faculty:

- i. Faculty can manage student grades.

- ii. Faculty can access student's personal and academic information.
- c. Admin:
 - i. Admin can manage multiple processes:
 - 1. Semester.
 - 2. Course.
 - 3. Offered Course.
 - 4. Section.
 - 5. Room.
 - 6. Building.

4. User Management:

- a. Admin:
 - i. Admins can manage multiple accounts.
 - ii. Admin can block/unblock users.
 - iii. Admin can change user passwords.

Data Model

User:

- `_id`
- `id` (generated)
- `password`
- `needsPasswordChange`
- `role`
- `status`
- `isDeleted`
- `createdAt`
- `updatedAt`

Student:

- `_id`
- `id` (generated)
- `name`
- `gender`
- `dateOfBirth`
- `email`
- `contactNo`
- `emergencyContactNo`
- `presentAddress`
- `permanentAddress`
- `guardian`
- `localGuardian`
- `profileImage`
- `admissionSemester`
- `isDeleted`
- `createdAt`
- `updatedAt`

Faculty:

- _id
- id (generated)
- designation
- name
- gender
- dateOfBirth
- email
- contactNo
- emergencyContactNo
- presentAddress
- permanentAddress
- profileImage
- academicFaculty
- academicDepartment
- isDeleted
- createdAt
- updatedAt

Admin:

- _id
- id (generated)
- designation
- name
- gender
- dateOfBirth
- email
- contactNo
- emergencyContactNo
- presentAddress
- permanentAddress
- profileImage
- managementDepartment

- isDeleted
- createdAt
- updatedAt

Academic Semester:

- _id
- name
- year
- code
- startMonth
- endMonth
- createdAt
- updatedAt

Academic Faculty:

- _id
- name
- createdAt
- updatedAt

Academic Department:

- _id
- name
- academicFaculty
- createdAt
- updatedAt

API Endpoints

User:

- users/create-student (POST)
- users/create-faculty (POST)
- users/create-admin (POST)

Student:

- students (GET)
- students/:id (GET)
- students/:id (PATCH)
- students/:id (DELETE)
- students/my-profile

Faculty:

- faculties(GET)
- faculties/:id (GET)
- faculties/:id (PATCH)
- faculties/:id (DELETE)
- faculties/my-profile

Admin:

- admins (GET)
- admins /:id (GET)
- admins /:id (PATCH)
- admins /:id (DELETE)
- admins /my-profile

Auth:

- auth/login
- auth/refresh-token
- auth/change-password

- `auth/forgot-password`
- `auth/reset-password`