Barishal University 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