# **College Admission Management System**

### **System Design**

The system is a web-based College Admission Management platform built with Angular (frontend) and ASP.NET Core Web API (backend), using SQL Server as the database. It has separate modules

for Students and Admins, with secure authentication and role-based access control.

Students can register, upload documents, and track their admission status.

Admins can manage applications, approve/reject documents, and oversee admission workflows.

#### **Data Flow**

- 1. Student registers  $\rightarrow$  Auth API  $\rightarrow$  Database (AspNetUsers).
- 2. Student logs in  $\rightarrow$  JWT issued  $\rightarrow$  Role verified (Student/Admin).
- 3. Student uploads document  $\rightarrow$  Document API  $\rightarrow$  File stored securely, metadata in DB.
- 4. Admin reviews application  $\rightarrow$  Approves/Rejects  $\rightarrow$  Status updated in DB.
- 5. Student dashboard displays latest status via API calls.

#### **UI Prototypes - Template**

- Login & Registration Page (Students, Admins)
- Student Dashboard → Profile, My Documents, Application Status
- Admin Dashboard → Applications Summary, Document Approvals
- Document Upload Page → File input with type & remarks
- Application Status Page → Pending, Approved, Rejected (with remarks)

## **DB** Design

#### Tables:

- 1. AspNetUsers Stores user authentication and account status.
- 2. Student Stores student profile data linked to AspNetUsers.
- 3. Education Stores academic details for each student.
- 4. Document Stores uploaded document metadata and file paths.
- 5. DocumentType Predefined categories of documents.
- 6. Application Tracks admission application progress per student.
- 7. Course List of available courses for admission.
- 8. Admission Records approved admissions.
- 9. StatusMaster Stores status values (Pending, Approved, Rejected).
- 10. RoleMaster Stores system roles (Admin, Student).
- 11. ApprovalHistory Logs admin actions on documents.