

MMIL Recruitment Website — Backend Documentation

Purpose of Backend

- 1 The backend system acts as an Applicant Tracking System (ATS) for the MMIL Society Recruitment Portal.
- 2 It manages candidate accounts, tracks recruitment rounds, stores technical submissions, resumes, and GitHub links, and allows admins to shortlist candidates.

Recruitment Flow Logic

- 1 Aptitude Round: Conducted on an external platform (Unstop). Admin updates result in system.
- 2 Technical Round: Candidates submit project, GitHub, and resume on the website.
- 3 HR Round: Conducted offline. Admin updates final decision.

Backend Folder Structure

- 1 config/ - Database configuration
- 2 controllers/ - Route logic
- 3 middleware/ - Authentication and file upload middlewares
- 4 models/ - MongoDB schemas
- 5 routes/ - API route definitions
- 6 uploads/ - Stores resumes
- 7 utils/ - Utility functions
- 8 server.js - Entry point

Database Design - User Model Fields

- 1 name, email, password, role
- 2 githubLink, resume
- 3 aptitudeStatus, technicalStatus, hrStatus

Database Design - Technical Submission Fields

- 1 userId, projectTitle, projectDescription
- 2 projectLink, githubRepo, submittedAt

Authentication APIs

- 1 POST /api/auth/register
- 2 POST /api/auth/login

Candidate APIs

- 1 GET /api/user/profile
- 2 PUT /api/user/profile

Technical Round API

- 1 POST /api/round/technical

Admin APIs

- 1 PUT /api/admin/aptitude/:id
- 2 PUT /api/admin/technical/:id
- 3 PUT /api/admin/hr/:id

System Workflow

- 1 1. Candidate registers
- 2 2. Candidate logs in
- 3 3. Candidate uploads resume and GitHub
- 4 4. Candidate attempts aptitude
- 5 5. Admin updates aptitude result
- 6 6. Qualified candidates submit technical project
- 7 7. Admin shortlists for HR
- 8 8. HR interview offline
- 9 9. Admin marks final result

How to Run Backend

- 1 npm install
- 2 npm run dev
- 3 Environment variables required: PORT, MONGO_URI, JWT_SECRET