

PROJECT 1

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1. Problem Statement

College students applying for internships often manage dozens of applications across multiple companies and job platforms simultaneously. Without a structured system, it becomes easy to miss deadlines, forget interview times, or lose track of where each application stands. This database tracks the full lifecycle of an internship application from the moment a student submits their materials to a final hiring decision.

2. Business Rules

- A student has a profile with their name, university, major, and graduation year.
- A student can submit many applications, but each application belongs to exactly one student.
- Each application targets exactly one job posting at a company.
- A company can have many job postings, but each posting belongs to exactly one company.
- Each job posting has a title, location (remote/onsite/hybrid), and job type (internship/co-op/part-time).
- An application has a submission date, current status (Applied, Online Assessment(OA), Interviewing, Offer, Rejected, Withdrawn), and optional notes.
- A student may go through multiple interview rounds for the same application (e.g., phone screen, technical, behavioral, final).
- Each interview round has a scheduled date, interview type, and outcome (Pending, Passed, Failed).
- A student can store contacts at a company (e.g., recruiters, hiring managers) and associate them with an application.
- A student can tag an application with one or more tags (e.g., "Dream Company", "Referral", "High Priority") for personal organization.
- An application can have at most one offer record, which stores compensation details and an offer deadline.

3. Nouns

- Student
- Company
- Application
- Interview
- Tag
- Application Tag

4. Actions

- Submits
- Targets
- Schedules
- Tags