

Internship Placement Manager API

1.0 Introduction

The Internship Placement Manager is a robust RESTful API designed to streamline the process of managing student internships. Developed using **FastAPI** and **SQLModel**, this application provides a centralized system for students, mentors, and employers to manage placements and evaluations, ensuring a transparent and efficient internship process.

2.0 Purpose and Scope

The primary purpose of this API is to facilitate the connection between educational institutions, industry employers, and students seeking internships. Its core functionality includes:

- **User Management:** Provides the ability to create, retrieve, update, and delete profiles for students, mentors, and employers.
- **Placement Management:** Enables the creation and tracking of internship placements, associating them with the relevant parties.
- **Evaluation System:** Allows for the submission and viewing of performance evaluations.
- **Authentication:** Secures all endpoints using a token-based authentication system to ensure that only authorized users can access resources.

The scope of this project is limited to the backend API functionality, which serves as a foundational layer for a potential front-end application.

3.0 Technologies Used

- **FastAPI:** A modern, high-performance web framework for building APIs with Python.
- **SQLModel:** A library that simplifies the interaction between Python objects and the database.
- **PostgreSQL:** An open-source relational database used for data storage.
- **Docker & Docker Compose:** Tools for containerization, ensuring the application and its database run consistently across different environments.
- **Pytest:** A testing framework for Python used to write and execute tests.