

Business Requirements Document (BRD)

Project Name: Profile Creation System

1. Project Overview

The purpose of this document is to outline the requirements for implementing a simple system that allows the creation of student profiles while enforcing password policies. The candidate is expected to develop an API that meets the outlined requirements within the provided constraints..

The solution will be implemented using **Python FastAPI** for the backend and **PostgreSQL** as the database.

2. Functional Requirements

1. Profile Creation:

- The system should allow users to create a student profile by entering the following details:
 - Name (Required, String)
 - Email (Required, Valid Email Address)
 - Phone (Optional, Numeric)
 - Password (Required, String, Should meet policy requirements)

2. Password Policy Validation:

- The system must validate the password against the following policies:
 - Must be at least 8 characters long.
 - Must contain at least one uppercase letter (A-Z).
 - Must contain at least one lowercase letter (a-z).
 - Must include at least one numeric digit (0-9).
 - Must include at least one special character (e.g., @, #, \$, %, etc.).

3. System Behavior:

- While creating a profile, If the password does not meet the policies, the system should reject the input and display an appropriate error message indicating the violated policies.
- On successful profile creation, the system should display a success message confirming the profile details.

3. Guidelines

- Don't need to develop authentication mechanisms.
- You need to develop in **Python FastAPI** & database will be **Postgresql**
- Write unit testing for the same
- Write proper documentation.
- Provide clear, user-friendly error messages when validation fails.
- Need to send the zip file with install instruction(if any)
- Need a postman collection with sample input data
- You can use internet resources, chatgpt or similar AI tools for research