UNT Student Tracking System

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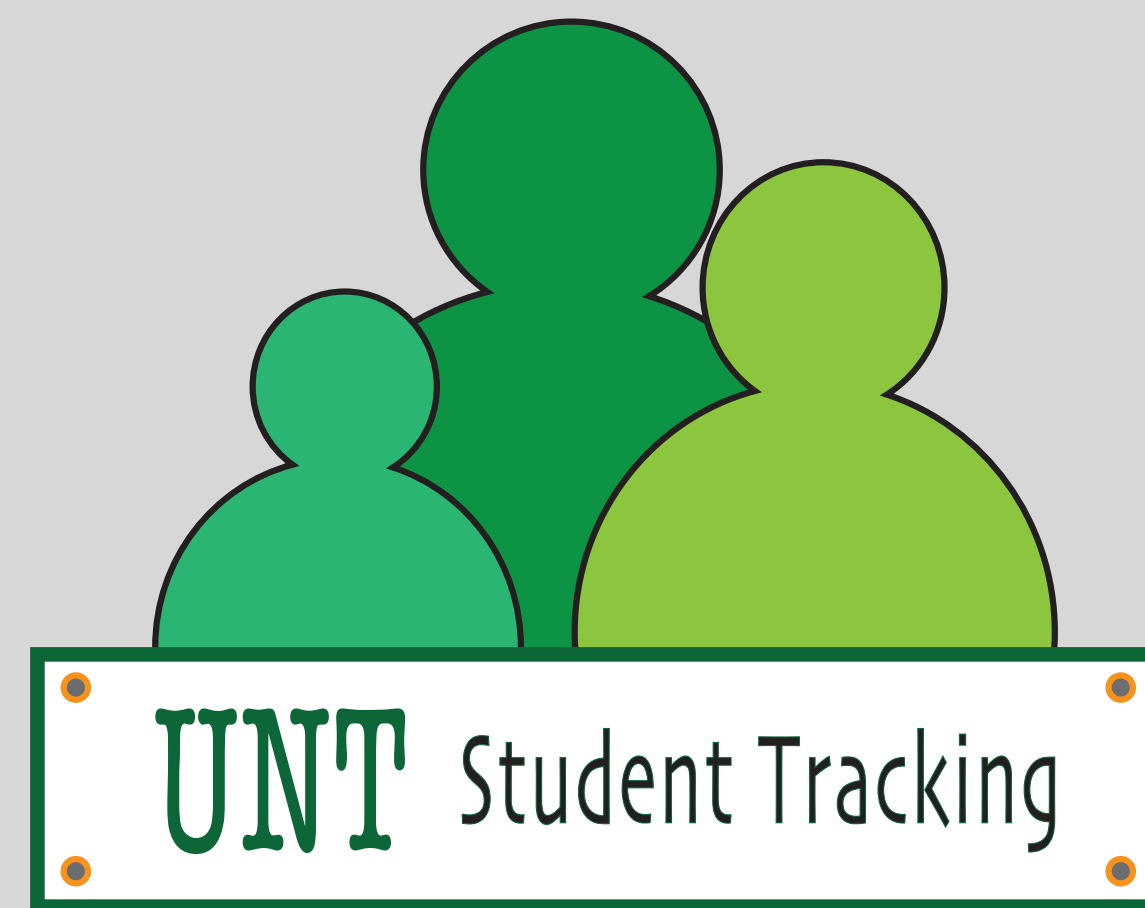**Sponsor: Department of Computer Science and Engineering, University of North Texas**

PENTAGON

PROJECT OVERVIEW

UNT Student Tracking application is designed for the Computer Science and Engineering department of the University of North Texas. The Department is currently using two separate systems, Microsoft Excel and Microsoft Access to manage and track students. As the system is being overwhelmed by too much information and the demand for additional feature is increasing, there is a need for a new customized system.

The purpose of this software is to develop an integrated system for the department to ease record keeping, editing and viewing. The goal is to build clean and interactive user interface with additional features as required while keeping the features provided by Excel and Access intact. The project was carried out by following agile methodology using a python framework, Django for backend, HTML, CSS and Bootstrap for front end and SQLite for database.
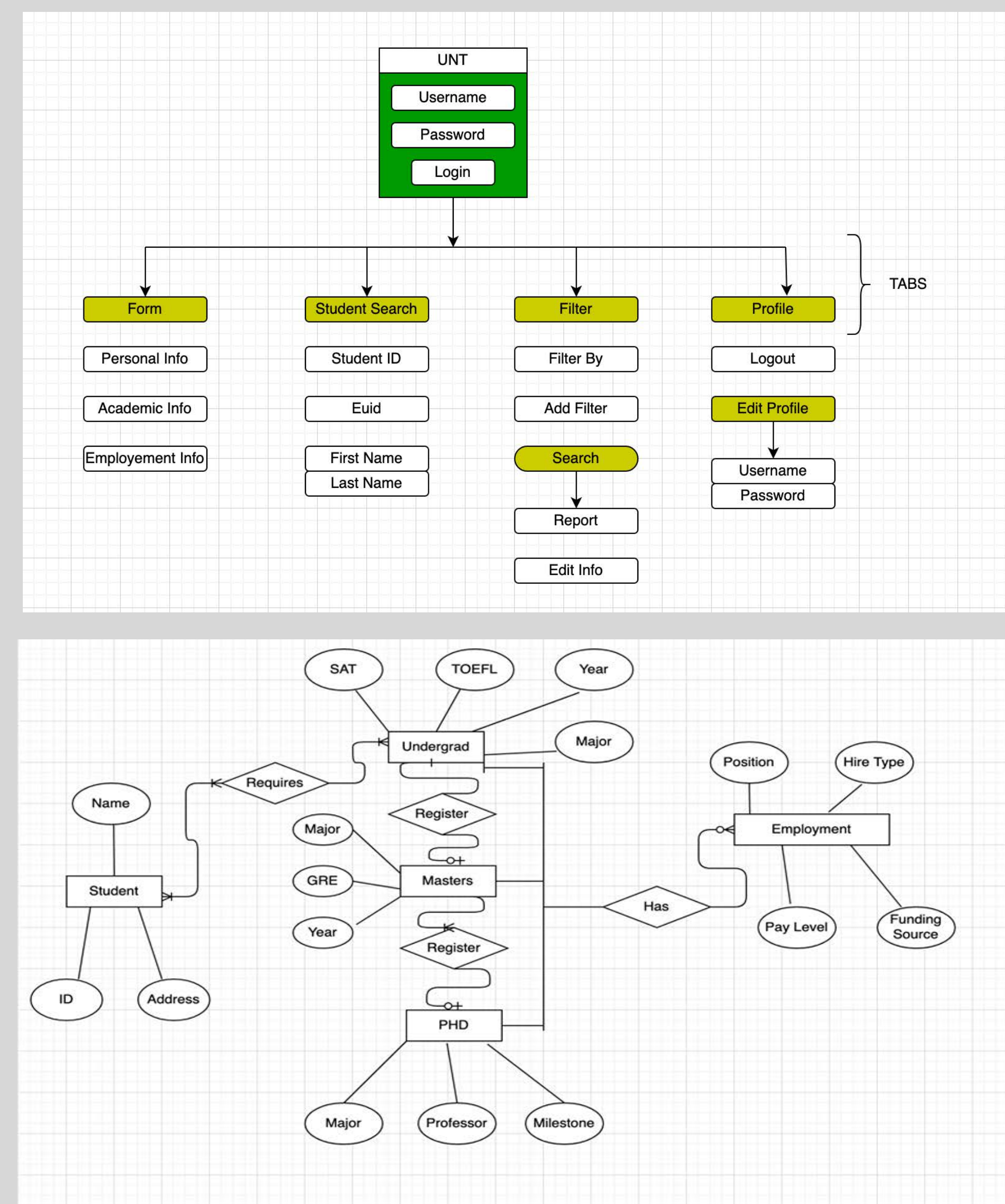

UNT Student Tracking

FEATURES

- Ability to login and logout of the system
- Ability to add student's personal information
- Ability to add student's educational history
- Ability to add files related to each student
- Ability to add notes to each student
- Ability to search student based on their ID number, first name or last name

FEATURES

- Ability to edit the recorded information
- Ability to filter students and generate report
- Ability to add new user
- Ability to add new degree to the system
- Ability to add new program to the system
- Ability to add milestones of PhD students
- Ability to import existing data from Excel and Access
- Ability to run with multiple user at the same time
- Ability to run locally on a desired machine, thus keeping student data secure from outside threats
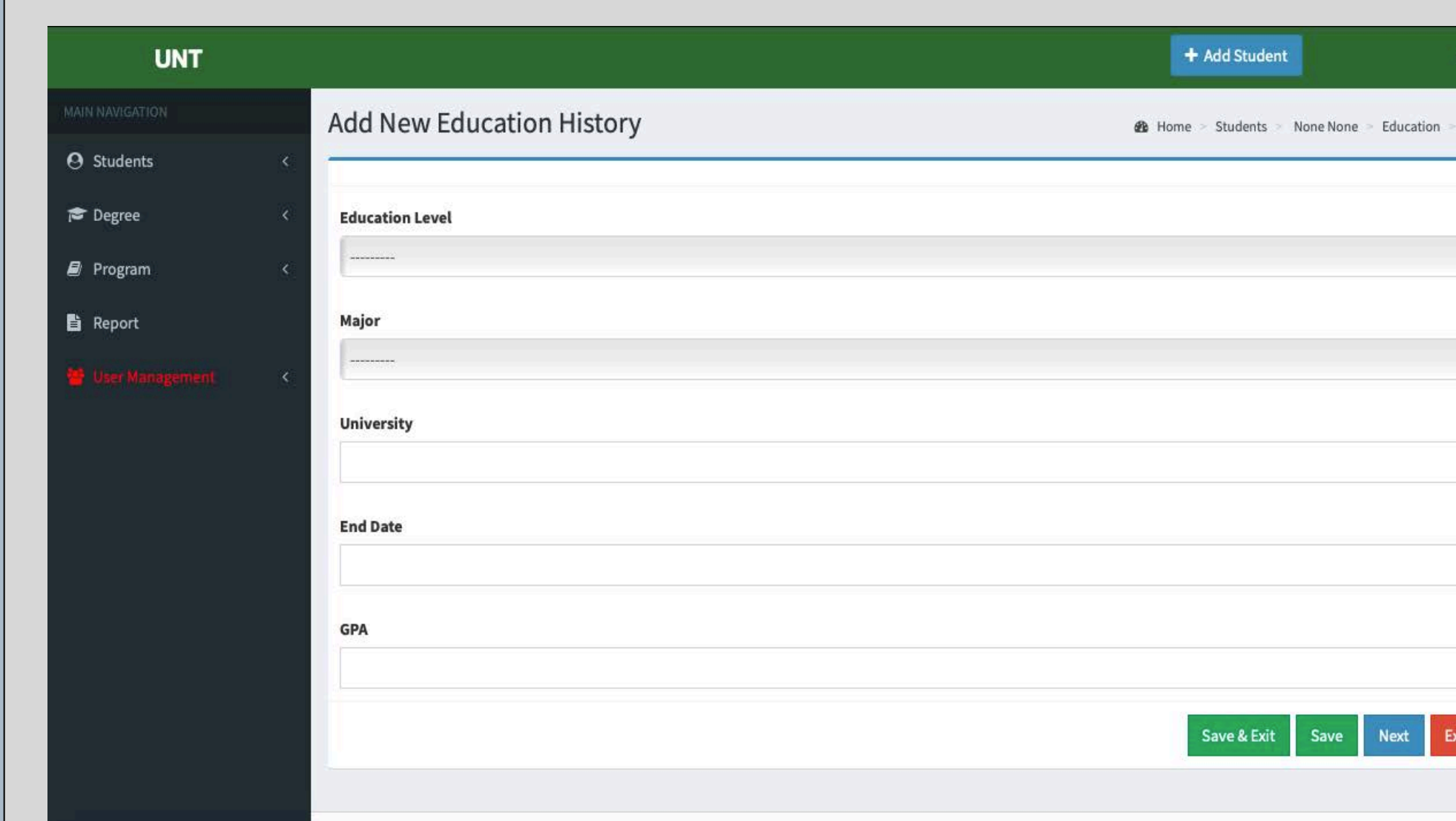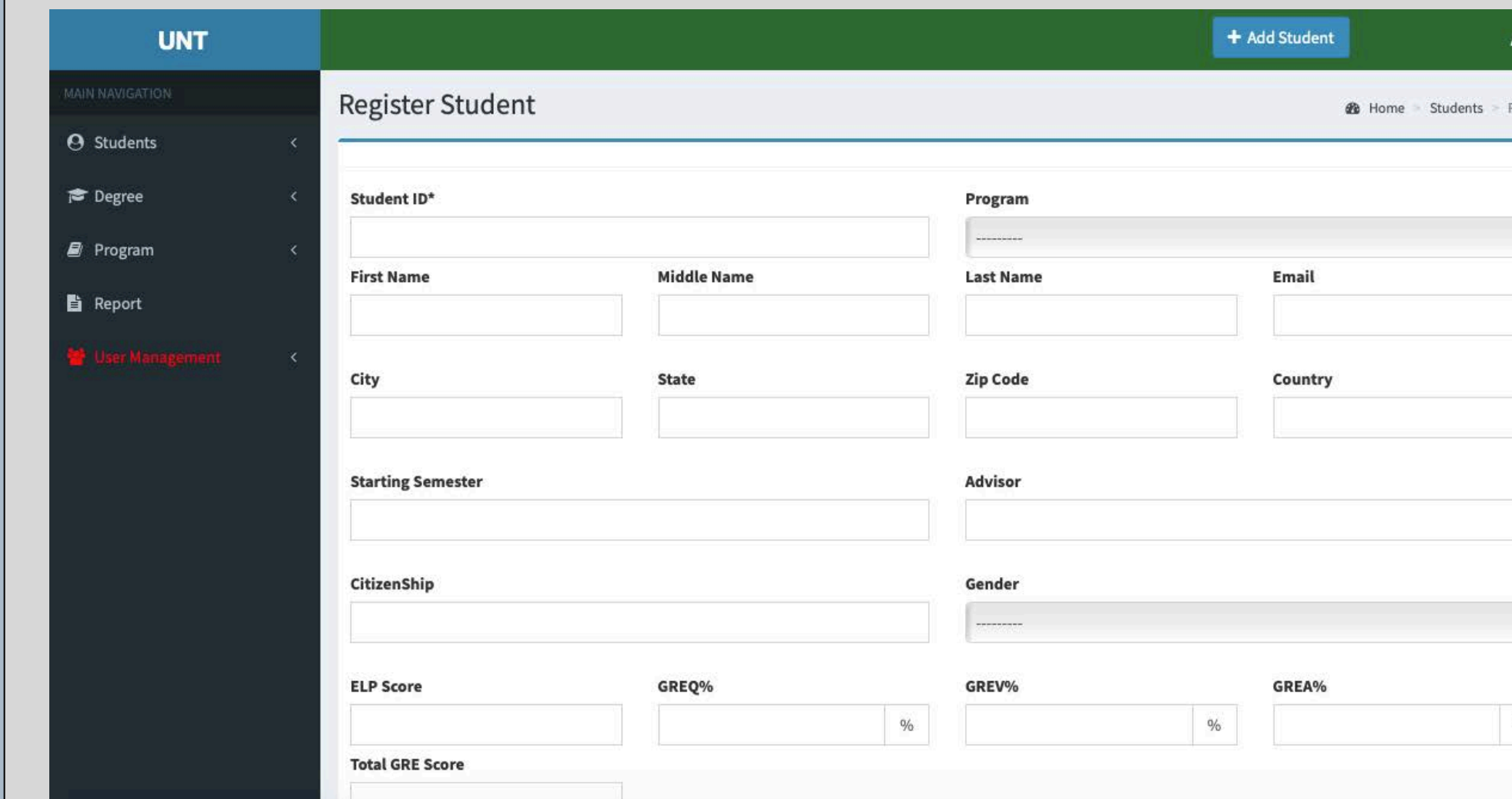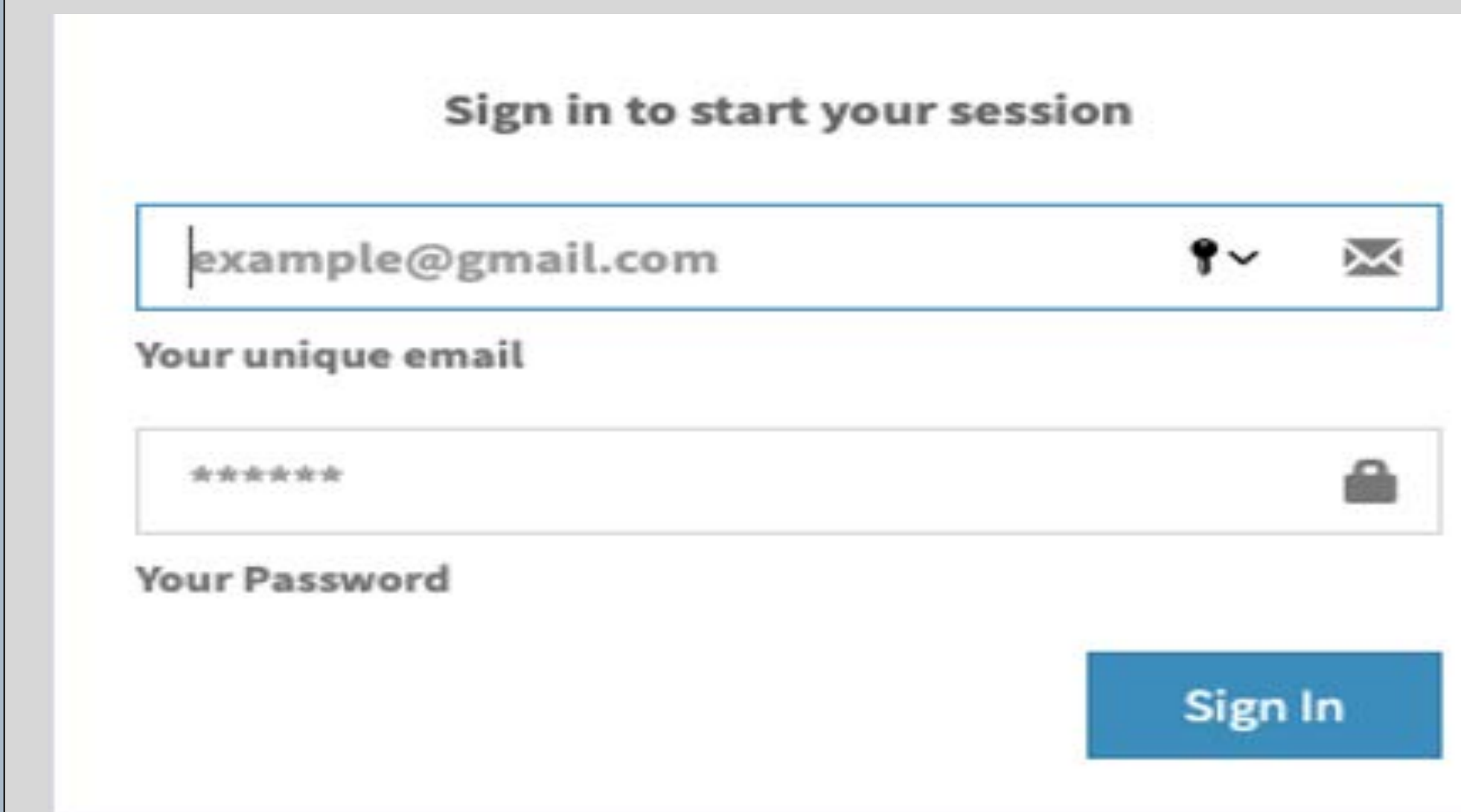
DESIGN

Initial design, and relationships:
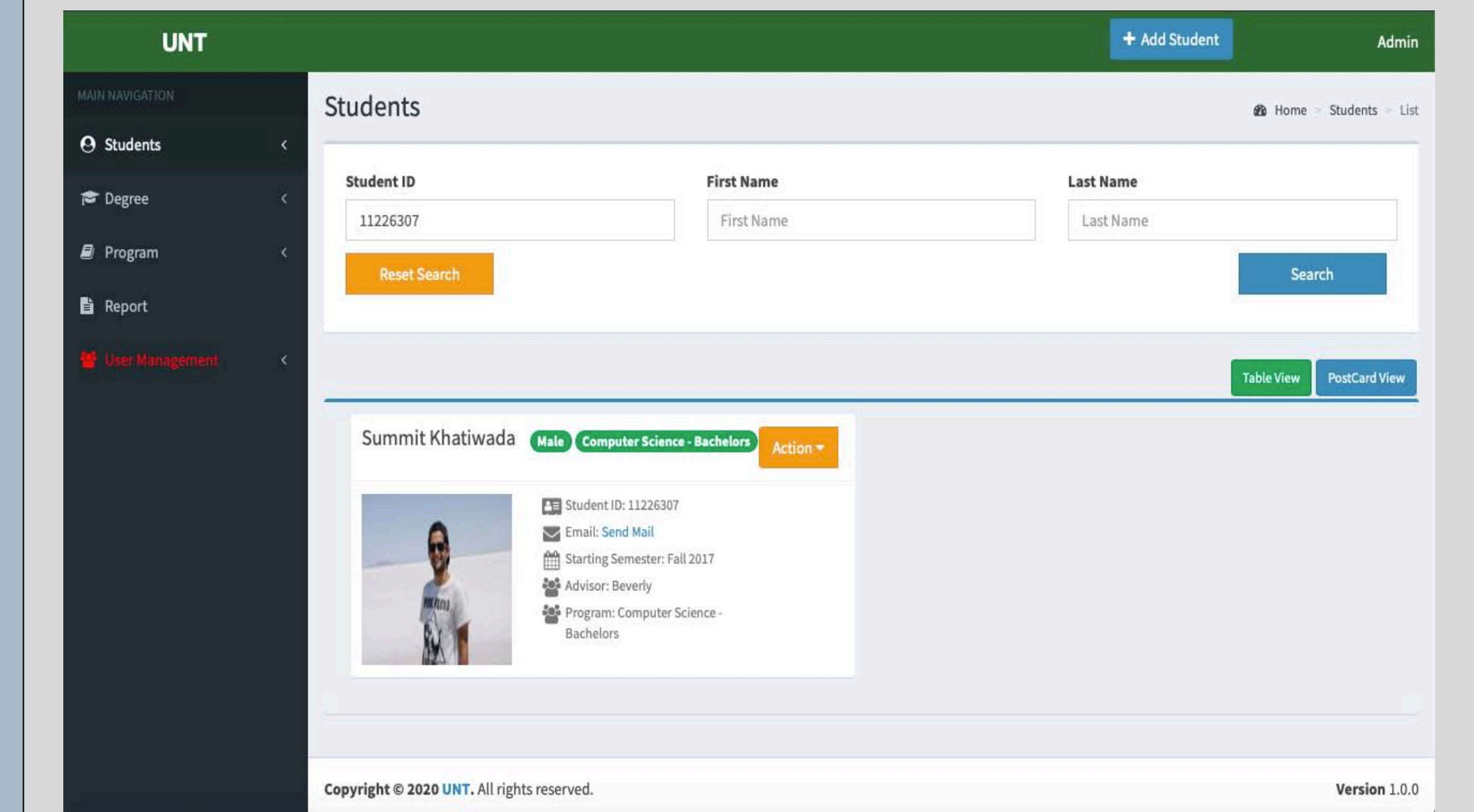

DESIGN

Technologies Used:
HTML, CSS, Bootstrap, JQuery, Python, Django, SQLite

User Interface:

DESIGN

MIGRATION

The unique challenge associated with this web application is to migrate data from MS Excel and Access to the web application. The fields in the MS Excel and Access are different than the fields that we have created for our web application and the database system is different.

We are implementing Storage Migration to transfer the existing data into the new application. In order to mitigate the risk of data loss and incompatibility, the existing data will be extracted and cloned into a CSV format to make it compatible with the new database and data backup will be done to protect against data loss. After the integration of data into the new system, all data will be tested and validated with the existing system to ensure the integrity and successful move of data. This extensive process will be carried out with adequate planning and resources so that the migration is smooth and error-free.

HTML · Bootstrap · django · SQLite · python