

1: Introduction

1.1 **Purpose:** This project aims to build a working student registry system that allows students to track their current classes, class time, current hours, and courses they have already completed. Additionally, the student will be able to see their GPA. The data associated with each student and staff member will be saved to a file.

1.2 **Scope:** The registry will be built using visual studio, the WPF framework, and saved using an XML file. The application will give students the ability to edit current classes, keep a record of their total hours, and keep track of class times.

2: Positioning

2.1 **Business opportunity:** All students and universities require a way to keep track of a student's class data. The application will allow students to keep track of their classes, majors, and total hours in an easy-to-use interface. It will also enable professors and advisors to check a student's current and past enrolled classes, total hours, and GPA.

2.2 **Problem statement:** The issue of storing and sorting through students' data is a problem that affects all universities and students in some way, including both of us. The impact of this issue is that all schools use different software, for example d2l, to solve this issue. A successful solution must include persisting data, editing the classes a student takes and has taken, and calculating GPA.

3: Stakeholder and user descriptions

3.1 Stakeholder summary:

Brandon Sitz

- Student
- Developer

Weston Abner

- Student
- Developer

3.2 User summary

Students

- The primary intended audience will use it to keep track of their school records and current classes.

Professors

- The secondary intended audience will use it to keep track of their student's information and help students select their classes.

University staff

- The secondary intended audience will use it to track student information for university records.

4: Product overview

4.1 Summary of capabilities:

Customer benefits	Supporting features
User sign-up form	Store user information
User login	Authenticate user based on stored username and password
Allow students to keep track of their classes	A list of all classes a student is currently taking
Allow professors to keep track of students	A search function to search for a specific student and display their information
Allow students to keep track of their completed courses	A list of all courses a student has taken
Allow students to view their GPA	Calculate GPA based on completed courses
Allow students to declare their major	Store selected major
Allow students to view class times	Display the time for each course the student is currently enrolled in
Allow students to view the location of their class	Display the location associated with each course
Allow students to view the current date/time	Display the current date/time
Allow students to view the dates their class meets	Display the dates of each class

4.2 Assumptions and dependencies

Assumption: We may need to change what file we use to save everything.

Dependencies: Windows 10

5: Constraints

Limited experience with User Interfaces (UI) and Windows Presentation Foundation (WPF) on behalf of the developers. The project will only run on Windows 10.

6: Other product requirements

6.1 **Applicable standards:** Windows platform compliance standards.

6.2 **System requirements:**

- Processor: 1 gigahertz (GHz) or faster processor or SoC
- RAM: 1 gigabyte (GB) for 32-bit or 2 GB for 64-bit
- Hard disk space: 16 GB for 32-bit OS or 20 GB for 64-bit OS
- Graphics card: DirectX 9 or later with WDDM 1.0 driver
- Display: 800 x 600

6.3 **Performance requirements:** None

6.4 **Environmental requirements:** Windows 10