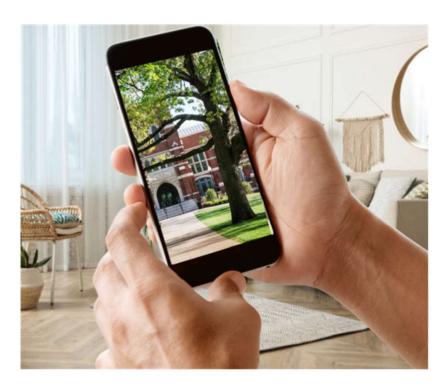
# **Pocket Campus**



Software Requirements Specifications
CSCE 247: Software Engineering
Zechariah Fisher-Coleman, Vigneswaran
Madappan Chinnasami, Drew Dabe, Kyle Akers

**Team Corner** 

January 19th, 2024 Version 1.0.0

## **Table of Contents**

- 2. Stakeholders 4-7
- 3. Constraints 8
- 4. Overall Description 9
- 5. Business Use Cases 10-12
- 6. Functional Requirements 13
- 7. Non-Functional Requirements 13
- 9. Competitive Analysis 14-19

## 1. Introduction

It's estimated 75% of American college students start as undecided or change their major. And on average undergraduates take six years to complete their study. To cut down on time spent in a program and trouble landing on a major, it would help if students had a clear and concise path to achieving their goals. This is where PocketCampus comes in, our goal is to enable and empower students to see how a given major will unfold. That way they can make informed decisions about their future.

Sources:

<u>Undecided/Exploring | Academics | Central College</u>

NSCRC - Time to Degree

## 2. Stakeholders

#### Client

Who the product will be delivered to

#### **Advisors**

Largest demographic of users

#### **Students**

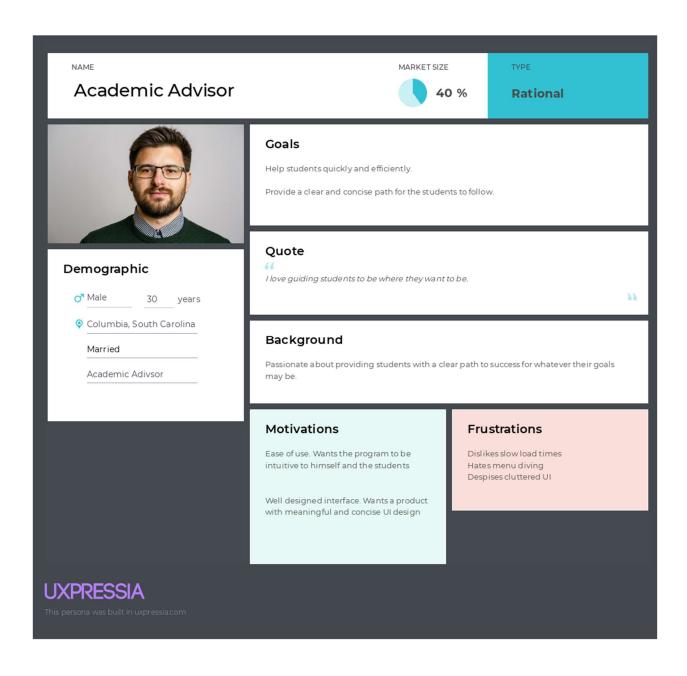
Second largest demographic of users

#### **Parents**

Smallest demographic of users

## Other Facility and staff

Remaining demographic of users



#### MARKET SIZE STUDENT Lindsey Adams 30 % Rational Goals Pass all my classes Maintain above a 3.5 Graduate on time Declare a Major by sophomore year Join Clubs and organizations Quote I can't wait to make new friends and learn more about myself!" Background She grew up in South Carolina and knows she wants to stay and work in South Carolina. She is a sophomore at UofSC and works part-time as a time management-tutor at UofSC. She kept high grades in high school and wants to continue being studious in college. She is very Demographic independent and self-motivated. ,O Female years Motivations Frustrations Unniversity Of South Carolina Independence: She likes being able to do Ease of use: She likes using her time wisely and does not like using sites that what she needs to do without having to Single wait on others are hard to navigate Student Have fun: As a college student she values Compact: She dislikes having to get her free time and wants to ensure she related information from different source keeps her grades up so she can be stress **UXPRESSIA**

**UXPRESSIA** 

#### NAME MARKET SIZE TYPE Louise Granite 25 % **Artisan** Goals Stay informed about her son's college schedule, classes, exams, and overall academic progress. Aims to contribute to her son's academic success by understanding his GPA trends and offering assistance when needed. Beyond academics, she is concerned about her son's overall well-being, seeking a tool that provides information about extracurricular activities and any additional commitments. Quote I care about the future of the my children. Background Caring and involved mother who wants to actively support her son through his college journey. She values education and is aware of the challenges her son may face in managing his schedule and academic performance. With a genuine interest in her son's well-being, Demographic she seeks tools that can provide insights into his college life. Female years Motivations Frustrations Sumter, SC Peace of Mind: The tool should offer A complex or unintuitive interface could Married peace of mind by keeping her welllead to frustration as the mother informed, reducing worries about missed struggles to navigate through the Manages wood supplies deadlines or academic challenges. application to find the information she needs. Difficulty in locating the GPA Future Planning: The mother is forwardtrends or accessing the schedule planner thinking, interested in tools that not only might result in a less-than-optimal user address current needs but also help plan experience. for her son's future academic and career endeavors.

## 3. Constraints:

#### Financial

We do not have the funds required to support such a product.

#### Schedule

All group members are at least full-time students. A lot of time that could be spent developing will instead be spent at school.

### Shared workplace

We do not have a shared space for developing this product. Meetings would likely need to occur online. Which could introduce its own set of problems such as connectivity issues.

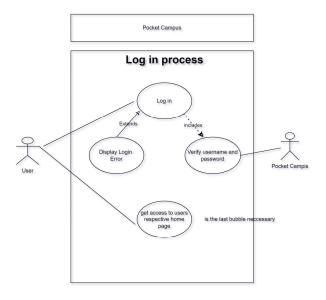
### - Design of product

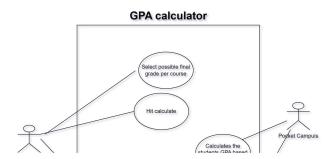
This product would need to be familiar enough in look and feel to existing users of DegreeWorks. They're less likely to use an unfamiliar product. Even with performance or UI improvements an unfamiliar design introduces a learning barrier.

# 4. Overall Description:

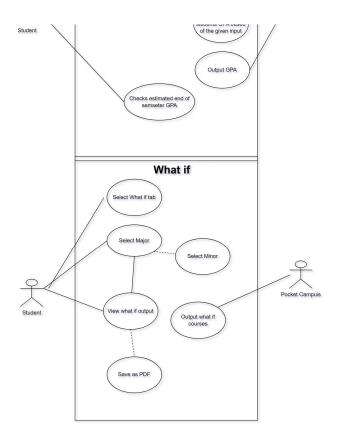
The site will be used by those either working at or attending the University of South Carolina. The site will be catered to those in the college of computer and engineering, however those outside of college will still have access to the site if they need to. For high accessibility, the site can be accessed on both computers and mobile devices. The site will be customizable based on the profile of the person using it, for example, it can look different when an advisor accessed the site versus a student. The site will interface with Mac, IOS, Windows, Microsoft office, and YouTube.

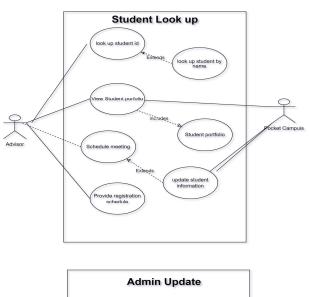
## 5. Business Use Cases

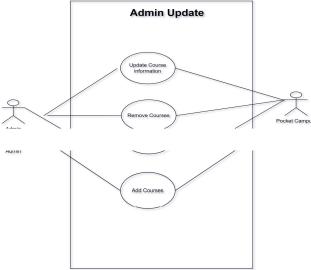




CSCE 247: Software Engineering







### 6. Functional Requirements

### **Requirements**

## 7. Non-functional Requirements

### - UI Requirements

The system's user interface shall share similarities with the current DegreeWorks interface.

### Accessibility Requirements

The system's user interface shall be accessible to those with color blindness.

### Performance Requirements

The system shall meet the average response time for a webpage given implementation restrictions. Average response between 200-1000 milliseconds.

#### Compatibility Requirements

The system shall be compatible with multiple devices (desktop, mobile).

## 9. Competitive Analysis:

#### Degree Works

#### Strengths

Tells the user what requirements there are missing and the classes they can take to satisfy those requirements. This works well with the bar they have that shows how close the student is to completing their degree.

Includes a GPA calculator for the current semester the student is in. This is helpful if students to keep tracking of their GPA in regards of scholarships.

The student can use the notes sections to review any notes left by their advisor.

These platforms often streamline the admissions process, making it more efficient for both applicants and admissions staff.

#### Weakness

The site tells students possible classes they may need to complete their degree but does not include an option to register for those classes.

No form of schedule planner.

High latency at times. Prone to shutting down during periods of high traffic such as class registration.

Provides an overwhelming amount of data, and no clear way to condense down into a more compact and readable form.

Lacks an intuitive user interface with no real demo on how to navigate and properly use the site.

#### CSCE 247: Software Engineering

Focus	Focus on giving the student access to everything they might need if they could not reach their advisors themselves. Allows the student to explore all their options, and plan for themselves if they needed to,						
Achieve							
Strengths	The efficiency, convenience, customization, centralized information, and data analytics of the Achieve system.  Achieve not only provides a great scheduling and documentation tool for students, but it also gives advisors and others quick access to information of student like the current and past courses a student has taken.						

#### CSCE 247: Software Engineering

Weakness	The front-end interface used by students is great, but the interface used by advisors looks outdated when compared to the student front end.				
	There are a lot of duplicate buttons, room for improvement in features and functionality.				
Focus	An end-to-end platform for higher education to recruit, retain, and graduate more students on time.				
	Goal is to enable student services to do more with technology while helping higher education to retain and graduate more students.				
Workspace Student					

#### CSCE 247: Software Engineering

#### Strengths

Geared towards the student experience. They leverage the fact that most students use their phones as their main source of information to drive up engagement. Their app provides the same amount of information as their website while also notifying the students of necessary information through their phone.

They are aware that most other colleges and universities are using legacy software, and as a result, put a lot of effort into making their site look modern and to be more user-friendly.

They package a lot into the service, they made it so students could access their schedule, bill, advisor, as well as other school resource directly from the app.

They made their service extremely flexible so each user can have their own tailored experience and curated content.

#### Weakness

In their endeavor to captivity the younger audience of students they seem to have lost the older, less technologically adept audience. The site is not incredibly intuitive, and there does not seem to be anything robust in place to help ease users into using the service.

With the service being so compact and providing so much it can leave the users overwhelmed, especially those who only use the service for certain things. Those same people also have issues navigating the site as there are a lot of ways to get lost due to the sheer number of things provided by the service.

The workplace lacks integration with outside applications. For example, it allows the users to plan their schedule and things to their calendar but there does not seem to be an effortless way to export that Calander to IOS or Google Calander.

Focus	Heavily student-focused, with emphasis on mobile phone usage, and meant to provide, encourage more engagement by having everything you'd need in one place.

## Summary

Platforms	Strengths	Weakness	Focus
Degree Works	Allows the student to plan their course without the need of their advisor.	Overwhelming number of options when it comes to course that fulfil the similar requirements.	Gives the student everything they need to make an informed choice about their class schedule.
Achieve	Efficiency, convenience, customization, centralized information, and data analytics.	Front-end interface used by advisors looks outdated, and there's room for improvement in features and functionality.	An end-to-end platform for higher education to recruit, retain, and graduate more students on time.
Workspace student	Geared towards enhancing the student experience by leveraging mobile phone usage, providing comprehensive access to schedules, bills, advisors, and school resources through a user-friendly app	May face challenges in usability for older, less technologically adept users due to a less intuitive design. Additionally, the service's extensive features may lead to user overwhelm, particularly for those with specific use cases	Heavily student-focused with a strong emphasis on mobile phone usage, aiming to encourage engagement by consolidating essential information in one accessible place.

In crafting our platform for your project, we conducted a comprehensive analysis of three prominent platforms in the education technology space: Degree Works, Achieve, and Workspace student. Our approach involved a thorough examination of their strengths, weaknesses, and focus areas to inform the design and development of a superior solution.

Our platform development strategy integrates the strengths of Degree works, Achieve, and Workspace student while addressing their weaknesses. We prioritize seamless implementation, usability, and customization, ensuring a visually appealing and intuitive interface. Innovation and scalability are key, offering cutting-edge features and catering to diverse institutions. Our comprehensive approach supports the entire student lifecycle, transforming the way educational institutions engage with prospects, students, and alumni.