
Basement Dwellers

**KAPP Application
Software Requirements Specifications**

Version <1.1>

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upedu_ex_srs	

Revision History

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Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this document is to provide the requirements specifications for our KAPP application. The intended audience of this document includes prospective customers or investors for this application.

1.2 Scope

The software application to be created is called the KAPP Application. The KAPP Application provides information about campus events, classes, and grades to KU students. It will also provide students with an interactive campus map to help students find their way around campus. This product is helpful to allow both incoming and current students to navigate campus and online features the university has to offer.

1.3 Definitions, Acronyms, and Abbreviations

[See Glossary](#)

1.4 References

IEEE Std. 830-1998: IEEE Recommended Practice for Software Requirements Specifications

Course Website: <https://people.eecs.ku.edu/~saiedian/Teaching/448/>

1.5 Overview

The rest of this document gives a general overview of the KAPP application and the specific requirements for the system.

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2. Overall Description

2.1 Product perspective

This application was created to provide students with one location where they can access their grades, schedules, personal information, and view KU-related information including events and a map. Instead of needing to access different applications like Canvas, Blackboard, and Enroll & Pay, users will be able to view all of this information from the KAPP Application.

2.1.1 System Interfaces

KAPP will be contained in a mobile application with all features included.

2.1.2 User Interfaces

There will be a log-in screen for the user to enter their log-in credentials. Next, the home page is displayed. The homepage will display links to the different features of the application.

2.1.3 Hardware Interfaces

The app must be able to execute on a mobile device.

2.1.4 Software Interfaces

The app will mainly be written using the React user-interface library in JavaScript.

2.1.5 Communication Interfaces

KAPP must communicate with KU servers in order to facilitate login and get a list of classes. It also must have permissions to download schedule information onto the user's personal calendar.

2.1.6 Memory Constraints

KAPP's memory is constant, except for the user's list of classes and the number of events on campus.

2.1.7 Operations

KAPP must be intuitive and easy to use for all users.

2.2 Product functions

KAPP will have four main functions: Schedule Builder, GPA Calculator, Events, and Interactive Map. In Schedule Builder, users can build their schedule using KU's course catalog. In GPA Calculator, users can calculate their cumulative and major GPA. In Events, users can see upcoming on-campus and off-campus events. In Interactive Map, an interactive map of KU campus is shown, with building labels and events included.

2.3 User characteristics

Students who attend the University of Kansas, and faculty working at the University of Kansas.

2.4 Constraints

Security to prevent loss or theft of user's data.

2.5 Assumptions and dependencies

Integration of KU single sign-on. Ability to integrate the interactive map. Ability to export schedule onto the user's personal device.

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3. Specific Requirements: Funcationality

3.1 Schedule Builder

3.1.1 *If the User's schedule is empty when they open the schedule builder , they are presented with a list of classes from the KU Course Catalog.*

3.1.2 *The User can select classes and add them to their schedule.*

3.1.3 *The User's schedule will be displayed and can be edited or added to.*

3.1.4 *If the User's schedule is in progress when they open the schedule builder, they are presented with their list of classes, and can edit and/or add classes to the list.*

3.2 GPA Calculator

3.2.1 *The user is presented with an interactive list of classes in their current semester.*

3.2.2 *The user can edit the grade received in the class.*

3.2.3 *Once the user finalizes their grades, their cumulative GPA and major GPA are displayed.*

3.2.4 *The user can add a semester and view previous semesters*

3.3 Events

3.3.1 *A list of upcoming events on-campus is displayed.*

3.3.2 *A list of upcoming events off-campus is displayed.*

3.4 Interactive Map

3.4.1 *The interactive map is displayed. It shows the KU campus including building names and events.*

3.4.2 *The user can scan around the map.*

4. Specific Requirements: Use-Case Speifications

4.1 KU Single Sign On

4.2 Schedule Builder

4.3 Map

4.4 Events

4.5 Contact

4.6 Degree Progress

4.7 GPA Calculator

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5. Classification of Functional Requirements

Functionality	Type
3.1.1 <i>If the User's schedule is empty when they open the schedule builder , they are presented with a list of classes from the KU Course Catalog.</i>	Essential
3.1.2 <i>The User can select classes and add them to their schedule.</i>	Essential
3.1.3 <i>The User's schedule will be displayed and can be edited or added to.</i>	Essential
3.1.4 <i>If the User's schedule is in progress when they open the schedule builder, they are presented with their list of classes, and can edit and/or add classes to the list.</i>	Essential
3.2.1 <i>The user is presented with an interactive list of classes in their current semester.</i>	Essential
3.2.2 <i>The user can edit the grade received in the class.</i>	Essential
3.2.3 <i>Once the user finalizes their grades, their cumulative GPA and major GPA are displayed.</i>	Essential
3.2.4 <i>The user can add a semester and view previous semesters</i>	Desirable
3.3.1 <i>A list of upcoming events on-campus and off-campus is displayed</i>	Desirable
3.3.2 <i>A list of upcoming events off-campus is displayed</i>	Optional
3.4.1 <i>The interactive map is displayed. It shows the KU campus including building names and events.</i>	Essential
3.4.2 <i>The user can scan around the map</i>	Essential

6. Supplementary Requirements

For more details o the supplementary requirements please refer to the supplementary specifications document