Software Requirements Document

Cards
Copy and Paste Until It Is Done
December 1, 2020

Group Members
Devin O'Brien
Jake Keels
Sage Bonfield

UNCG Honor Code

1 Introduction

Contents

1	Introduction 1						
	1.1	Purpose	3				
	1.2	Document Conventions	3				
	1.3	Intended Audience	3				
	1.4	Definitions/Jargon	3				
	1.5	σ	3				
	1.6	Technical Challenges	3				
		1.6.1 GitHub and Git	3				
	1.7	References	4				
2	Overall Description 4						
	2.1	Product Features	4				
	2.2	User Characteristics	4				
	2.3	Operating Environment	4				
	2.4	Design and Implementation Constraints	4				
	2.5	Assumptions and Dependencies	4				
3	Functional Requirements 4						
	3.1	Primary Functions	4				
	3.2	Secondary Functions	5				
4	Technical Requirements						
	4.1	Operating Systems/Compatibility	5				
	4.2	Interface Requirements	5				
		4.2.1 User Interface	5				
		4.2.2 Hardware Interface	5				
		4.2.3 Software Interface	5				
		4.2.4 Communications Interface	5				
5	Nonfunctional Requirements 6						
	5.1	Performance Requirements	6				
	5.2	Safety/Recovery Requirements	6				
	5.3	Security Requirements	6				
	5.4	Policy Requirements	6				

5.5	Softwa	re Quality Attributes	6
	5.5.1	Availability	6
	5.5.2	Correctness	6
	5.5.3	Maintainability	6
	5.5.4	Re-usability	7
	5.5.5	Portability	7
5.6	Proces	s Requirements	7
	5.6.1	Development Process Used	7
	5.6.2	Time Constraints	7
	5.6.3	Cost and Delivery Date	7

1.1 Purpose

The requirements correspond to the project Tasker that was developed for Fall 2020 Semester CSC 429-01 Software Engineering Course. This document will cover the requirements imposed by the semester project set by Professor Quigley and those imposed by Cut-N-Paste-Until-It-Is-Done group.

1.2 Document Conventions

This document is sectioned as follows LaTeX and may have some irregularities due to this.

1.3 Intended Audience

This SRD is intended for Professor Ike, and the rest of the class.

1.4 Definitions/Jargon

SRD : Software Requirements Document

JRE: Java Runtime Environment

JDK : Java Development Environment

JVM: Java Virtual Machine

1.5 Project Scope

The scope of this project consists of creating cards, creating events, using the google calendar API to store the events externally, and being able to view said events.

1.6 Technical Challenges

JavaFX proved to be tough, along with figuring out the best way to store cards, along with reading and writing to them.

1.6.1 GitHub and Git

GitHub became a challenge in itself as the group hadn't used it before. Figuring out how to make commits, and how to keep the files the same in the group was a continuous challenge.

1.7 References

2 Overall Description

2.1 Product Features

The product allows you to create cards, and in them create divided subsections. You can name the cards, then name the individual subsections within them. You can create events in the cards and they will appear in your Google Calendar. You are also able to view the events you have created through the app in the Calendar view.

2.2 User Characteristics

The user is not required to have any past experience with applications to operate the app. With the exception of remembering to save the card.

2.3 Operating Environment

This software is intended to be used in a relaxed environment where cards can be exchanged, but with minimal load on the external API.

2.4 Design and Implementation Constraints

This software is required to be implemented in Java.

2.5 Assumptions and Dependencies

This product depends on JavaFX and it also depends on the Jsoup library. It comes prepackaged in the app. It is assumed the system running it is capable of running both.

3 Functional Requirements

3.1 Primary Functions

The primary function of the application is to be able to create cards. This feature will always be available as it does not depend on outside sources.

3.2 Secondary Functions

Creating and viewing tasks may not always be available as it relies on an external API.

4 Technical Requirements

4.1 Operating Systems/Compatibility

This software will use libraries that are cross-platform to some extent to be allowed to work on operating systems that run JRE 8.

4.2 Interface Requirements

4.2.1 User Interface

The User Interface must not be cluttered, and needs to be intuitive.

4.2.2 Hardware Interface

The software will not require any special hardware interfaces beyond what is required of a standard Java Desktop Application which includes but not limited to the following:

- A Monitor
- CPU w/ multi threading capabilities
- RAM
- Storage Device

4.2.3 Software Interface

This software will require JRE 8, and some graphical service (like Xorg on linux).

4.2.4 Communications Interface

This software is required to communicate with Google Calendar API.

5 Nonfunctional Requirements

5.1 Performance Requirements

The software is required to be functional in leisurely use.

5.2 Safety/Recovery Requirements

The software will have the following features to protect the user: (1) Use of absolute file paths to prevent damage to the user's machine. (2) Serialization requests to prevent loss of data.

5.3 Security Requirements

The software would normally have security requirements to protect its users. However for this project, it is beyond its scope and will not be worked on.

5.4 Policy Requirements

There are no policy requirements excluding the UNCG honor policy.

5.5 Software Quality Attributes

5.5.1 Availability

This software will have the following feature(s) that will become unavailable without Internet access:

• Google Calendar (Syncing)

5.5.2 Correctness

This software will strive to ensure that data is properly saved to prevent loss of the aforementioned data.

5.5.3 Maintainability

This software will strive to follow the standards for object oriented programming to make it easier to maintain the software.

5.5.4 Re-usability

This software will strive to follow the standards for object oriented programming.

5.5.5 Portability

This software will strive to work cross-platform. This is achieved by using JavaFX and Java with limited dependencies.

5.6 Process Requirements

5.6.1 Development Process Used

This project used an AGILE development process where there were weekly scrums with, where updates on what everyone was working on and discussion on the design of the overall application. This content of the scrums changed as the project progressed, where in the beginning it was strictly discussion of the design aspect while later on it was focused more on implementation of the design.

5.6.2 Time Constraints

There are no time constraints except for the delivery date.

5.6.3 Cost and Delivery Date

The delivery date for the project is **December 1**, **2020**. There is no expected cost for development.