Lab 2: Requirements & Specifications Section (Individual Portion)

Team Gold – KnowTime

Kyle Munoz

CS 411W

Professor Thomas Kennedy

25 November 2024

Version 2

Table of Contents

1 Introduction

1.1 Purpose

The purpose of a Software Requirements Specification (SRS) is to clearly explain what a software system should do and any limitations it has. It acts as a contract between everyone involved, such as developers, project managers, and clients, to make sure everyone understands what is expected from the software. The SRS helps prevent misunderstandings and keeps the project on track. It also provides a guide for checking that the software works as intended and helps with updates in the future. Overall, the SRS is important for making sure the software is developed and delivered successfully.

1.2 Scope

The Knowtime project helps students manage their time and build good study habits through an easy-to-use web application. It includes tools like a Pomodoro timer, customizable study sessions, and a task board to help students stay organized and be more productive. With features like a grade tracker and a point system for rewards, students can track their progress and gain confidence in their schoolwork. Knowtime also creates a supportive community where students can connect and help each other, reducing stress and preventing burnout. Overall, Knowtime gives students the resources they need to do well in school.

1.3 Definitions, Acronyms, and Abbreviations

Grade Tracker: Grade tracking will be based on user-inputted grades. It will look at their grades, and the time spent studying, which may be entered by the student or automatically generated if the task was completed during a study session within the website.
It will then generate a graph correlating time spent studying with the grade they received. They will also be able to filter this graph by tags. This will allow students to view a particular class to determine how they can improve. The student will set a goal for the grade and view how they are progressing over time.

Pomodoro Timer: The Pomodoro timer technique was created by Francesco Cirillo in the 1980s while he was a university student. To follow this technique, the student sets a timer for 25 minutes to complete a task. Once the timer goes off, the student takes a 5-minute break and then continues to work again for another 25 mins. After four sessions, the student takes a 15–30-minute break (Scroggs 2022).

Study Plan: A study plan will be generated based on various factors that will be entered by the student. Examples of information entered that will be considered are assignment due dates, exam dates, and times that the student has specified they are busy. Study plans also consider time spent on similarly tagged tasks and the need for breaks between tasks.

Task: A Task is any assignment that the student needs to complete, whether that be a homework assignment, an exam, or just making time to study or gather materials. Tasks can have multiple tags and are created by the student in the web application.

1.4 References

Alves, S. (2023, October 29). Unlock Your Full Productivity Potential: Beating Burnout
  with the Pomodoro Technique. Retrieved February 14, 2024, from www.linkedin.com
  website: https://www.linkedin.com/pulse/unlock-your-full-productivity-potential-beating-
  burnout-samuel-alves-5yltf/

Ariella, S. (2022, November 14). *22 Time Management Statistics [2022] – Zippia*. Zippia.
  https://www.zippia.com/advice/time-management-statistics/

Evernote. (2019). Best Note Taking App | Organize Your Notes with Evernote. Retrieved
  February 13, 2024, from Evernote website: https://evernote.com/

Forest. (2016). Forest. Retrieved February 13, 2024, from Forestapp.cc website:
  https://www.forestapp.cc/

iStudiez Team. (n.d.). iStudiez Pro for iOS - Best App for Students. Retrieved February 13,
  2024, from istudentpro.com website: https://istudentpro.com/

Kennedy, T. (n.d.). Support. Www.cs.odu.edu. Retrieved February 20, 2024, from
  https://www.cs.odu.edu/~tkennedy/cs410/latest/Public/support/

MyStudyLife. (2021, March 27). My Study Life- Online Student Planner. Retrieved February 13,
  2024, from MyStudyLife website: https://mystudylife.com/

Notion. (2019). Notion – The all-in-one workspace for your notes, tasks, wikis, and databases.
  Retrieved February 13, 2024, from Notion website: https://www.notion.so/

Remember The Milk Inc. (2020). Remember The Milk: Online to-do list and task management.
  Retrieved February 13, 2024, from Rememberthemilk.com website:
  https://www.rememberthemilk.com/

Scroggs, L. (2022). The Pomodoro Technique – Why It Works & How To Do It. Retrieved
  February 14, 2024, from Todoist website: https://todoist.com/productivity-
  methods/pomodoro-technique

Team Gold. (2024, October 09). Lab 1 – KnowTime Product Description. Retrieved October 26,
  2024 form Labs tab from website: https://github.com/lkeat003/cs411-pages-gold

Where has the time gone? (n.d.). Retrieved February 27, 2024, from College Success Plan
  website: https://collegesuccessplan.com/blog/where-has-the-time-gone

https://www.rememberthemilk.com/

1.5 Overview

The remaining sections of the Software Requirements Specification (SRS) for the Knowtime web app will explain the app's features, who will use it, and any limitations or assumptions. The Product Functions section will describe important features like a customizable Pomodoro timer, tools for tracking tasks and progress, a points system for rewards, and a grade tracker. It will also cover the ability to import school calendars, send reminders, connect with others in a community forum, create personalized study plans, and provide academic resources. The User Characteristics section will identify students as the main users and explain the administrator's role in managing the app and supporting users. The Constraints and Assumptions and Dependencies sections will outline any limitations.

2 Overall Description

2.1 Product Perspective

We are creating a web app to help students manage their time better and reduce stress. The app will have features like a community forum, calendars, task tracking, grade tracking, a points system, and personalized study plans to support students.

Key features include a design that works on different devices, a customizable Pomodoro timer to manage study and break times, and tools to track progress and organize tasks. Students can earn points for completing study sessions, which they can use to unlock fun avatars, and they can use a grade tracker to see their performance over time.

The app will let users import calendars from platforms like Canvas or Blackboard and send reminders for upcoming deadlines. The community forum will help students connect with each other and share tips, while personalized study plans will be created based on their needs.

Knowtime is special because of its community support and customized study plans, along with a points system to keep students motivated. Overall, the app aims to help students build better study habits, stay organized, and reduce burnout.

2.2 Product Functions

Pomodoro Timer & Customizable Study Sessions

- A customizable timer that can be modified to fit students' needs. Pomodoro timer technique has student set a desired amount of time to study and an amount of time to take a break. After four study sessions, the student takes a longer break.

Progress and Task Tracking

- Track your progress over time and keep your tasks organized.

Points System

- Earn points for completed sessions to unlock sessions to unlock fun avatars.

Grade Tracker

- Students will be able to input and monitor grades over time with our graphing system.

Import School Calendars

- Import calendars from apps like Canvas or Blackboard

Calendar with Reminders

- Receive reminders about upcoming due dates.

Community Forum

- Chat with other people who have similar struggles or have advice.

Study Plan Generation

- Have a personalized study plan automatically generated for you.

Provide Study and Mental Health Resources

- We will direct students to academic, mental, and academic support.

2.3 User Characteristics

The primary user of the Knowtime web application are students. Students will utilize the web application to enhance their study habits and manage their academic responsibilities. Another user would be an admin role. The admin role involves overseeing the Knowtime application, managing user interactions, and ensuring a positive environment for all users.

2.4 Constraints

N/A

2.5 Assumptions and Dependencies

N/A