**Software Requirements Specifications (SRS)**

*Study application solution*

Client – 45rfew

Developer – SoulBlade172



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**Purpose and audience**

This software requirements specifications (SRS) document is designed to outline the prerequisites of the proposed solution to the client and provide a synopsis of the solution’s development, including information on the requirements as well as constraints and the scope the project is under. In doing this, the client and the developer have a clear idea as to what the projected program will look like and the SRS can serve as a guide during development as well as allowing the client to know what to expect during the development.

This document will act as a binding document between the client and the developer, solidifying the scope and outlook for the solution and locking it in so that no major changes can be made as development goes underway.

**User Characteristics**

The solution will be made with the client in mind as well as the demographic they represent, high school students. They will be referred to ‘user’ throughout the development. The software is not design with only one individual in mind, rather for a wide range of users that fit the demographic.

The solution would be catered towards high school students as they are the demographic that would most likely find the greatest benefit from using the study application. By using the study application it may assist them in their secondary school studies as they can add questions relevant to their studies and upcoming assessments. It will be catered towards English users as the interface will be constructed in English. Given the demographic, it can reasonably be expected that the users will have sufficient technological experience to use the program without a large amount of assistance.

**Environmental Characteristics**

The solution will be developed on Visual Studio utilising the .net framework using the programming language visual basic.

The software will be used on Windows desktop devices and will be compatible with Windows 10. It will be able to run on post 2018 laptop devices with a minimum of 4 GB of RAM.

**Functional requirements**

Through analysis of the data collected through a survey, observation, and interview with the client, the following functional requirements have been determined:

* User can add their own questions
* Multiple question formats (multiple choice, short answer)
* Adding tags to the questions
* Being able to sort the questions by tags
* A ‘score’ system to see which questions were struggled with the most
* Buttons for saving and exporting
* Customisation options for the feature of opening up on boot
* A PIN as a security measure, the user can set up one and it will be used to gain access to the program on boot

**Non-functional requirements**

Through analysis of the data collected through a survey, observation, and interview with the client, the following functional requirements have been determined:

* Easy to use (the user can intuitively use the program within 30 minutes of first using it)
* Efficient; the program works fast (i.e. it takes little time (less than 5 seconds) to start studying with the questions, etc.)
* Robust, can react properly to errors and invalid inputs
* Consumes little resources, can run on low end devices
* Readable UI
* Attractive UI

**Constraints**

The development of the study application will be under the following constraints.

* Economic – development of the solution will be limited to approximately 4 weeks
* Technical – the solution will be solely developed on a low-end laptop that suffers from performance issues, leading to greater time losses, and it will also be exclusive to Windows desktop devices
* Developer experience – the developer in the project will only have less than a years’ experience limited to visual basic and it will be the first time they develop something that is of the nature of the proposed solution
* Resources – the project will have one sole developer and no external entities to assist in the development of the solution

**Scope**

What the solution will do:

* User can add their own questions
* Multiple question formats (multiple choice, short answer)
* Adding tags to the questions
* Being able to sort the questions by tags
* A ‘score’ system to see which questions were struggled with the most
* Buttons for saving and exporting
* Customisation options for the feature of opening up on boot
* A PIN as a security measure, the user can set up one and it will be used to gain access to the program on boot

What the solution will **not** do:

* Internet functionalities
* Syncing capabilities
* Network functionalities
* Encrypting PIN data

**Appendices**

**Context diagram**

**A diagram of a study application

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**Use case diagram**

**A screenshot of a diagram

Description automatically generated with low confidence**

**Data Flow Diagram**

**A picture containing text, diagram, plan, screenshot

Description automatically generated**