Online IQ & English Test

Software Requirements Specification

1.0

Date

<Your Name>

Lead Software Engineer

Prepared for

WSU-TC CptS 322—Software Engineering Principles I

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# 

# Revision History

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# Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

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| --- | --- | --- | --- |
| **Signature** | **Printed Name** | **Title** | **Date** |
|  | <Your Name> |  |  |
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# 1. Introduction

This web application is designed to provide an IQ and English exams, it allows a number of examinee to take the exams and show the score at the end of each exam.

The administrator has the privilege to see the information of every user and their exam score.

The user needs to register and login to take the exams.

## 1.1 Purpose

*What is the purpose of this SRS and the (intended) audience for which it is written.*

## 1.2 Scope

*The scope of this app is very broad compared to a paper system examination:*

*(1) it can be used in both educational institutions and corporate world*

*(2) it can be used as an online examination or can be used in a controlled environment on a local network*

*(3)it saves time by showing the results after each exam and creating a sheet collecting the information of every examinee for the administrator.*

## 1.3 Definitions, Acronyms, and Abbreviations

*This subsection should provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS. This information may be provided by reference to one or more appendixes in the SRS or by reference to other documents.*

## 1.4 References

*This subsection should:*

*(1) Provide a complete list of all documents referenced elsewhere in the SRS, or in a separate, specified document.*

*(2) Identify each document by title, report number - if applicable - date, and publishing organization.*

*(3) Specify the sources from which the references can be obtained.*

*This information may be provided by reference to an appendix or to another document.*

# 2. General Description

*This section of the SRS should describe the general factors that affect 'the product and its requirements. It should be made clear that this section does not state specific requirements; it only makes those requirements easier to understand.*

## 2.1 Product Functions

This subsection of the SRS should provide a summary of the functions that the software will perform.

## 2.2 Assumptions and Dependencies

This subsection of the SRS should list each of the factors that affect the requirements stated in the SRS. These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS. For example, an assumption might be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

# 3. Specific Requirements

This will be the largest and most important section of the SRS. The customer requirements will be embodied within Section 2, but this section will give the D-requirements that are used to guide the project’s software design, implementation, and testing.

Each requirement in this section should be:

* Correct
* Traceable (both forward and backward to prior/future artifacts)
* Unambiguous
* Verifiable (i.e., testable)
* Prioritized (with respect to importance and/or stability)
* Complete
* Consistent
* Uniquely identifiable (usually via numbering like 3.4.5.6)

Attention should be paid to the carefuly organize the requirements presented in this section so that they may easily accessed and understood. Furthermore, this SRS is not the software design document, therefore one should avoid the tendency to over-constrain (and therefore design) the software project within this SRS.

## 3.1 External Interface Requirements

### 3.1.1 User Interfaces

### 3.1.2 Hardware Interfaces

### 3.1.3 Software Interfaces

### 3.1.4 Communications Interfaces

## 3.2 Functional Requirements

1. *Examinee must sign up using their email, username and password.*
2. *Sign in process should use username and password.*
3. *When logged in the examinee can choose which exam to take.*
4. *The exam will be MCQ with options represented in radio buttons*
5. *The result is shown after finishing each exam*
6. *A detailed report will be sent by email showing his/her performance in the exam*
7. *A database will be updated with the score of each examinee and his/her information for the administrator.*

## 3.3 Non-Functional Requirements

1. *The username must be unique, the password must be of minimum 8 characters and it must include letters and numbers.*
2. *In case the examinees forgets their password a new one will be sent to their email account which is connected to their account.*
3. *When an exam is chosen a 30-minute timer will start.*
4. *The examinee can mark a question for later revision.*
5. *Alert examinee of non-answered questions at the end of the exam.*
6. *Alert the examinee every 10 minutes.*

## 3.4 Other Requirements

Catchall section for any additional requirements.

# 4. Analysis Models

List all analysis models used in developing specific requirements previously given in this SRS. Each model should include an introduction and a narrative description. Furthermore, each model should be traceable the SRS’s requirements.

## 4.1 Sequence Diagrams

## 4.3 Data Flow Diagrams (DFD)

## 4.2 State-Transition Diagrams (STD)

# 5. Change Management Process

Identify and describe the process that will be used to update the SRS, as needed, when project scope or requirements change. Who can submit changes and by what means, and how will these changes be approved.

# A. Appendices

Appendices may be used to provide additional (and hopefully helpful) information. If present, the SRS should explicitly state whether the information contained within an appendix is to be considered as a part of the SRS’s overall set of requirements.

*Example Appendices could include (initial) conceptual documents for the software project, marketing materials, minutes of meetings with the customer(s), etc.*

## A.1 Appendix 1

## A.2 Appendix 2