

Software Requirements Specification

for

Calculator Application

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1. Introduction

The purpose of this Software Requirements Specification (SRS) document is to provide a detailed outline of the functionalities for the Calculator Application.

1.1 Purpose

During the developmental stages, this SRS document should be referenced to ensure the application meets all the required specifications. New team members should also reference this document to understand all the systems specifications.

1.2 Definitions, Acronyms, and Abbreviations

NFR (Non-Functional Requirements)

Req NF. # (Requirement Non-Functional. Number)

Req F. # (Requirement Functional. Number)

1.3 References

During the creation of this document, I referred to these sources. (List sources)

1.4 Overview

It is important to obey the software requirements defined in this document. Any changes to the requirements should be amended in this document. Before any releases of the application, ensure it meets all of the defined software requirements.

2. Software Requirements

Software Requirements are the descriptions of the functionalities and features that the system must provide. It also defines the limitations for which it must operate under. The requirements will range from a high-level abstract statement to a detailed mathematical functional specification.

2.1 Types of Requirements

In section 2.2 and 2.3, we will define two types of software requirements; non-functional requirements and functional requirements. This will simply give insight to what the two different types of requirements are. A list of the actual requirements for each type can be found in sections 3 and 4.

2.2 Non-Functional Requirement Information

Non-functional requirements define the way the system should work. They describe attributes of the system that are not required features instead they are just required attributes.

2.3 Functional Requirement Information

Functional requirements define the what a system should do. It describes the behavior of the system in relation to the system's functionality. The functional requirements are the specific features which the system must implement.

3. Non-Functional Requirements

3.1 This section contains a table of the calculator's non-functional requirements.

Number	Non-Functional Requirements
Req NF. 1	The application should be developed for iOS in the Xcode IDE with the Swift programming language.
Req NF. 2	Users should be able to simply download the app then perform calculations without any issues.
Req NF. 3	The User Interface should be developed with constraints that will fit all of the different screen sizes.
Req NF. 4	The system must perform calculations in constant time to provide the quickest possible results.
Req NF. 5	The results of all calculations must be accurate. The user should be able to rely on this calculator to provide the correct results for their calculations.
Req NF. 6	Accessibility. Users should be able to download the application to their device.
Req NF. 7	The user interface must be simple and easy to understand.
Req NF. 8	The application should be supported on the latest version of iOS.

More requirements can be added to this table as needed.

4. Functional Requirements

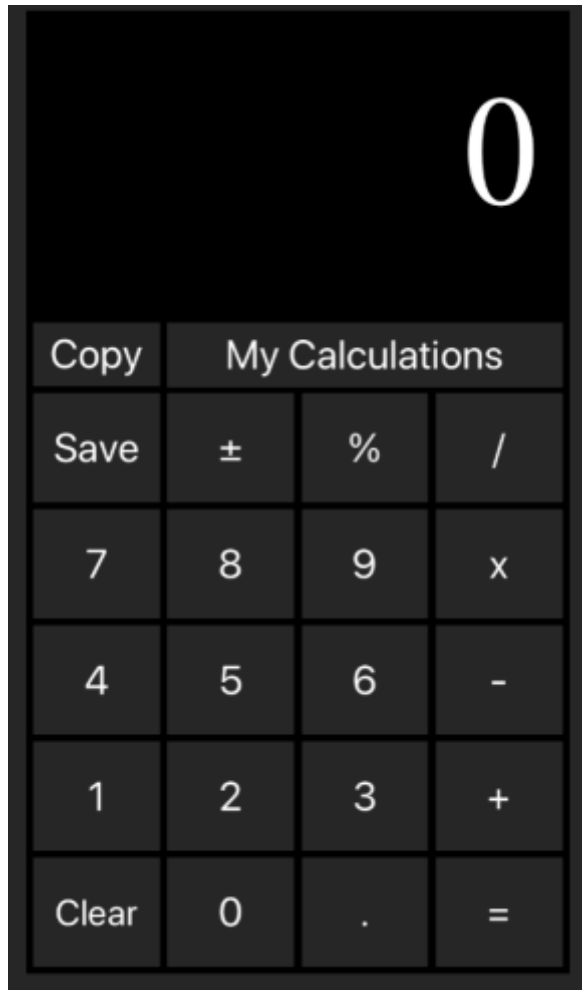
4.1 This section contains a table of the calculator's functional requirements.

Number	Functional Requirements
Req F. 1	The system should provide buttons for each operation as well as necessary calculator tasks such as clearing the current value. Refer to Image 1.0 on page 7.
Req F. 2	The number pad should be designed according to the standard calculator number pad scheme. Refer to Image 1.0 on page 7.
Req F. 3	The number label at the top of the screen should reduce the font size of the number as its length increases and fills more of the screen. Compare Image 2.0 and 2.1 on page 7.
Req F. 4	A user shall be able to search a list of saved calculations each possessing a label created by the user.
Req F. 5	The system must save all saved calculations in the devices long term memory so they can be accessed even after the application has terminated or the device has been rebooted.
Req F. 6	The system should allow the user to copy the current value to their clipboard so they can paste it elsewhere.
Req F. 7	The system should be scalable meaning the support for very large numbers and very small numbers should be available.
Req F. 8	After the user presses the equal button, a new calculation should begin upon them clicking on new numbers otherwise, the calculation should be continued.

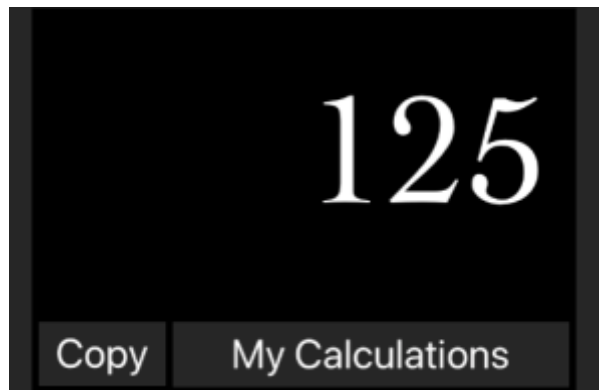
More requirements can be added to this table as needed.

4.2 This section provides pictures of the current user interface which shall be referenced as needed.

(Image 1.0)



(Image 2.0)



(Image 2.1)

