# Software Requirements Specification

# for

# ILLO

Version 1.2 approved

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18 February 2023

Table of Contents

Table of Contents [ii](#__RefHeading___Toc441230970)

Revision History [ii](#__RefHeading___Toc441230971)

1. Introduction [1](#__RefHeading___Toc441230972)

1.1 Purpose [1](#__RefHeading___Toc441230973)

1.2 Document Conventions [1](#__RefHeading___Toc441230974)

1.3 Intended Audience and Reading Suggestions [1](#__RefHeading___Toc441230975)

1.4 Product Scope [1](#__RefHeading___Toc441230976)

1.5 References [1](#__RefHeading___Toc441230977)

2. Overall Description [2](#__RefHeading___Toc441230978)

2.1 Product Perspective [2](#__RefHeading___Toc441230979)

2.2 Product Functions [2](#__RefHeading___Toc441230980)

2.3 User Classes and Characteristics [2](#__RefHeading___Toc441230981)

2.4 Operating Environment [2](#__RefHeading___Toc441230982)

2.5 Design and Implementation Constraints [2](#__RefHeading___Toc441230983)

2.6 User Documentation [2](#__RefHeading___Toc441230984)

2.7 Assumptions and Dependencies [3](#__RefHeading___Toc441230985)

3. External Interface Requirements [3](#__RefHeading___Toc441230986)

3.1 User Interfaces [3](#__RefHeading___Toc441230987)

3.2 Hardware Interfaces [3](#__RefHeading___Toc441230988)

3.3 Software Interfaces [3](#__RefHeading___Toc441230989)

3.4 Communications Interfaces [3](#__RefHeading___Toc441230990)

4. System Features [4](#__RefHeading___Toc441230991)

4.x Functional Requirement x [4](#__RefHeading___Toc441230992)

5. Other Nonfunctional Requirements [4](#__RefHeading___Toc441230994)

5.x Nonfunctional Requirement x [4](#__RefHeading___Toc441230995)

Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Zachary Scott | 18 Feb | Document created and fashioned for assignment’s purposes, | 1.0 |
| Zachary Scott | 18 Feb | 10 Functional requirements added. | 1.1 |
| Zachary Scott | 18 Feb | Sections 1,2,3 filled out. | 1.2 |
|  |  |  |  |

# Introduction

## Purpose

This SRS specifies the requirements for the entire, self-contained, Illo Android App. Features which the initial release version of Illo will contain are specified here.

## Document Conventions

“Pomodoro” – Refers to a period of time which holds a pair of intervals – the productivity interval and the activity interval.

“Productivity Interval” – Refers to the portion of a pomodoro in which the user should be doing something productive – chores, homework, etc. These intervals will take up the majority of a pomodoro, if the user is using the Pomodoro Technique in a traditional manner.

“Activity Interval” – Refer to ths portion of a pomodoro in which the user is presented with an exercise to do. In the traditional use of the Pomodoro Technique, this interval takes a shorter time compared to the productivity interval.

## Intended Audience and Reading Suggestions

This document is intended for developers, testers, and the customer.

For developers, this document details the functional and non-functional requirements that need to be implemented, giving them a benchmark for the first version of the app.

For testers, this document provides the benchmarks to test Illo against, to see if it is fit to the customer’s specifications.

For the customer, this document acts as a reference to the agreed-upon features to be included in the application at release.

## Product Scope

Illo is an Android mobile app which has the functionality of a typical pomodoro timer, with the addition of exercises for the user to do during break periods. Our goal is to make this very customizable, giving users the option to do typical free-weight exercises, in-chair exercises, stretches, meditation exercises, etc. A more extensive description of the product can be found in **RootDigital\_Deliverable\_i\_ProjectDescription.docx**

## References

The Wikipedia page for the Pomodoro Technique provides a detailed description of the typical use of a pomodoro timer -- <https://en.wikipedia.org/wiki/Pomodoro_Technique>

# Overall Description

## Product Perspective

Illo is a standalone app from pre-existing systems, with the goal of storing all data locally (i.e having no need for a server interface).

## Product Functions

* Illo must have the functionality of a typical Pomodoro Timer. That is, customize pomodoros and allow the user to pause/resume the timer at will.
* Illo must also have its distinctive feature – it must provide the user for exercises to do during the activity interval of a pomodoro.
* Illo must also allow the user to customize which exercises appear during activity intervals. Our goal with this regard is two-fold – allow the user to select of set of exercises to be randomly selected from, or allow them to set an order for specific exercises to appear.

These are the key, identifiable functions which Illo must have. See Section 3 for more information.

## User Classes and Characteristics

* Students  
  Students are expected to make up the majority of Illo users, as they are the widest user base of pomodoro timers in general.
* Fitness-oriented people  
  People who make exercise part of their daily routine are expected to use Illo regardless of student status.
* Desk Workers  
  People who are required to sit at their desk for an extended period of time are expected to utilize Illo to improve their neck and back health ala Apple Watches reminding people to stand once in a while.

## Operating Environment

Illo is being developed on Android’s API ver. 29. This means that it should work on smartphones running Android 10.0 (Q) or above.

## Design and Implementation Constraints

This product will be constrained by the ability and availability of the developers as they are unpaid students. A lack of funding may also make it difficult to acquire custom graphics for the application.

## User Documentation

An in-app help page will be available to users detailing the Pomodoro Technique and the various functions of the application.

## Assumptions and Dependencies

Illo will be dependent on Android’s API 29 for mobile developers. Since it is written in Java, it may also depend on the user’s version of the JVM, but this is not anticipated to be an issue.

# External Interface Requirements

## User Interfaces

UI mock-up screens are available in the same directory as this document as pdfs whose filenames start with “UI Mockup”. Below is a description of what appears on each screen.

**Screen Indication Bar**  
At the bottom of every screen will be a row of icons which indicate to the user which screen they are on via illuminated icons.

**“UI Mockup – Profile.pdf”**  
This screen will show the user’s chosen screen name and profile picture.  
It will also show user statistics. The mock-up includes a user streak and step-counter, but what will be displayed here is undecided as of SRS version 1.2.   
There will also be a share button below the user statistics that will allow user to share their progress online.

**“UI Mockup – Timer.pdf”**  
This screen will have a field in which users will be shown what activity they are expected to do during the activity interval and inspirational quotes during the productivity interval, including an indication of which interval the user is currently in.   
In the center will be a typical timer which counts down to 0.   
Below the timer is a set of controls that allow the user to pause/resume the timer, as well as controls to navigate between past and future intervals, if desired.

**“UI Mockup – Settings.pdf”**  
This screen will allow the user to customize the app. That is, customize the appearance through provided themes, modify the properties of the timer, and customize the activity pool. There will also be an option to reset to defaults.

# System Features (Functional Requirements)

<This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

## Functional Requirement 1

Illo shall allow the user to toggle playback on the pomodoro timer at will.

## Functional Requirement 2

Illo shall allow the user to let the pomodoro timer repeat indefinitely in “Zen mode.”

## Functional Requirement 3

Illo shall notify the user upon the completion of a timer.

## Functional Requirement 4

Illo shall be able to produce a random exercise for the activity interval of a pomodoro.

## Functional Requirement 5

Illo shall be allow the user to select a set of exercises to randomly select from for the activity interval of a pomodoro.

## Functional Requirement 6

Illo shall allow the user to specify an order of appearance of up to 20 exercises for subsequent activity intervals.

## Functional Requirement 7

Illo shall allow the user to skip an exercise in favor of the exercise that would have appeared in the next activity interval.

## Functional Requirement 8

Illo shall allow the user to specify the length of the productivity interval of a pomodoro.

## Functional Requirement 9

Illo shall provide the user with a randomly selected inspirational quote during the productivity interval of a pomodoro.

## Functional Requirement 10

Illo shall provide visual guides to the exercises presented during the activity interval of a pomodoro.

## Functional Requirement 11

Illo shall keep track of milestones and streaks of daily use.

## Functional Requirement 12

Illo shall allow the user to share milestones and streaks to different social media platforms.

## Functional Requirement 13

Illo shall allow the user to change color themes.

## Functional Requirement 14

Illo shall have a calendar function to help schedule a user’s day.

## Functional Requirement 15

Illo shall let the user choose from different alarm tones.

## Functional Requirement 16

Illo shall let the user opt in and out of notifications.

## Functional Requirement 17

Illo shall have a bug report form

## Functional Requirement 18

Illo shall have the option for the phone to vibrate when the alarm goes off.

## Functional Requirement 19

Illo shall let a user upload their personal workout regiment.

## Functional Requirement 20

Illo shall have a guided meditation feature.

# Other Nonfunctional Requirements

## Nonfunctional Requirement 1

The Illo system shall protect users’ data from unauthorized access 95% of the time.

## Nonfunctional Requirement 2

The Illo system shall abide by the existing privacy regulation laws in the U.S.

## Nonfunctional Requirement 3

The Illo system shall be capable of adapting the screen to display across different mobile screen sizes, 90% of the time.

## Nonfunctional Requirement 4

The Illo system shall be capable of running in the background of users’ devices.

## Nonfunctional Requirement 5

The Illo system shall be capable of generating automatic crash reports, 95% of the time.

## Nonfunctional Requirement 6

The Illo system shall be capable of using Android accessibility features.

## Nonfunctional Requirement 7

The Illo system shall be capable of accessing a database of online accounts.

## Nonfunctional Requirement 8

The Illo system shall be available to use 95% of the time.

## Nonfunctional Requirement 9

The Illo system shall allow the user to load the application within 5 seconds of being opened, 98% of the time.

## Nonfunctional Requirement 10

The Illo system shall have a response time that does not exceed 3 seconds, 98% of the time.