
Software Requirements Specification

for

OT mobile

Version 0.1

Prepared by

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Date: 03/05/2020

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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
0.1	Manuel Martin Rico	First template.	03/05/20

Introduction

The project “OT mobile” is an app with cognitive exercise oriented to the occupational therapy that will help to the elderly in times of isolation. This project is being marked with the human centered design methodology.

This section is the introduction of the software requirements specification and It will help to give an overview of the project and the different functionalities (and non functionalities). Also it will help with the understanding of the different aspectos not only of the documento, but also with the project.

Document Purpose

The purpose of this document is to specify the functional and nonfunctional requirements, as well as the constraints of the mobile app “OT mobile”. This is the first revision of the document. Version 0.1.

Product Scope

The “OT mobile” app is an application that will help to the elderly with different exercise and progression levels. The purpose of this app is to give and extra therapy and entertaining to the old adults in time of isolation.

This app could give special benefits to the adults as:

- avoid cognitive problems
- Avoid lack of interaction in the brain
- Hobby
- Practice and familiarization with cell phones

The principal objective of the project is to be useful and had a high usability. In other words it need to be “easy to use” for the main users. (for more information, look at the non functional requirements).

Intended Audience and Document Overview

This documents is aimed to the developers of the team and the different readers that could be interesting in the requirements documentation. Also, as the document has a academic purpose, it is oriented to the different evaluators of the subject.

After the introduction, you will see an overall of the document and then you will see the requirements specification.

Overall Description

Product Overview

The product will be an app (android/ios) that will have different games and activities that are part of the occupational therapy for an old adult. The app will have a very high usability and it will be done with an interface oriented to the main users. This app is going to be connected to a database only for persistence data related to the user and to the progress of the game.



Product Functionality

- The product must have a login that works with both the cell phone number and the user's email.
- The product must have a list of games and activities available to the user.
- Activities must have different levels of difficulty.
- The product must persist the information of the levels in the user's account.
- Each game will be measured according to the amount of time it is completed.
- The games will have different ways of use (drag and drop, one touch, etc.)

Design and Implementation Constraints

This software is prototyping following general rules as gestalt principles but princil we follow the "Principles of design of applications for mobile devices" by google.

Specific Requirements

External Interface Requirements

User Interfaces

The principal interface for the project is the touch screen of the mobile, all the interaction between the app and the user will be in that.

The login will have a simple form that will deploy a touch keyboard. After a success login, the app must deploy “cards” with the information about the games, and the user could select only with one touch.

The action of the games are not defined yet.

Hardware Interfaces

This application is oriented to mobile apps.

Software Interfaces

The system is going to have connection with a database.

Functional Requirements

About the login

F1: The system must have a login.

F2: The login must be performed by the user via cellphone.

F3: The user must log in using his cellphone number.

F4: The system must have a section used to recover the password.

F5: The system must show an alert message when the login fails.

F6: The system must send an SMS to the user's cellphone when they initiate the password recovery.

F7: The system must go back to the login page after the password recovery process ends.

About the main menu

F8: The system must show a message welcoming the user by name.

F9: The system must show the name of each exercise, the current level and the icon of each exercise.

F10: The system must have a section with user information and configuration options.

F11: When a game is select the system must show it's information.

F12: The user will be able to select which level they want to play of that particular game.

About the user information menu

F13: The information menu must have an option to modify the style of the application.

F14: The information menu must have an option to edit user information.

F15: The information menu must have and option to see all the highscores and records.

About the games

F16: The games need to have a time limit.

F17: The user will pass a level when complete a game before the limit time ends.

F18: The system must contain a tangram in the games list.

F19: The system must contain a "memorama".

F20: The system must contain an alphabet soup in the game list.

F21: The system must contain a puzzle in the game list.

F22: The system must contain Symmetry activities in the game list.

F23: The system must contain a form sentences activity in the game list.

F24: The system must contain a "searching objects" activity in the game list.

About the tangram

F25: The system must show the shape of the exercise.

F26: The user should be able to create different shapes with the objects that the game gave to him.

F27: The game must finish only when the user successfully copied the shape of the exercise using the objects.

About the memorama

F28: The system must show all the icons of the cards, but won't start the timer.

F29: The game will start with all the cards upside down.

F30: The user must select two cards and see the result.

F31: If the cards have the same icon, they will stay face up.

F32: If the cards do not have the same icon, they will return to be upside down.

F33: The game will end when all the cards are face up.

About the alphabet soup

F34: The game will start with the alphabet soup in the screen.

F35: The game will end when the user finds all the words.

About the puzzle

F36: The game will start with all the pieces of the puzzle scrambled.

F37: The game will end when the user places all the pieces in order.

About the symmetry game

F38: The game will start with a middle draw exercise in the screen.

F39: The user will need to draw the other half of the exercise to complete the level.

About the form sentences activity

F40: The game will start with the a set of scrambled words.

F41: The user will need to make a coherent sentence with the words to follow to the next one.

F42: Each level must have 10 of this activity.

F43: The game will end when the user completes all 10 tasks.

F44: Every time that the user begins a game, the order of the 10 tasks will change.

About the searching objects activity

F45: The game will start with a set of scrambled objects and the instructions of what object the user must search for.

F46: The user must select the items in the screen.

F47: Each level must have 10 of this activity.

F48: The game will end when the user completes all 10 tasks.

Other Non-functional Requirements

Usability Requirements

Learnability

UR001: The user should be able to use the main functions of the app by reading the user manual.

Efficiency

UR003: The user should find what they want (or see that it is not available) as fast as possible.

UR004: The user should start a game level in as few interactions as possible (Starting from the main menu).

Errors

UR006: The user should know whenever they make a mistake when navigating the app.

UR007: The user should choose the right option between “login” and “registry” as much as possible.

Satisfaction

UR008: The user should be able to customize the interface in different colors as fast as possible.

UR009: The most users should rate the tool interface as good looking.

Performance Requirements

The user will need the best performance for the app, the shortest response time possible. Unfortunately, right now is not possible to test this.

Software Quality Attributes

not applicable

Relation between functional and nonfunctional requirements

Functional requirement	Non functional requirement
F9: The system must show the name of each exercise, the current level and the icon of each exercise.	UR003: The user should find what they want (or see that it is not available) as fast as possible.
F9: The system must show the name of each exercise, the current level and the icon of each exercise. F11: When a game is select the system must show it's information. F12: The user will be able to select which level they want to play of that particular game.	UR004: The user should start a game level in as few interactions as possible (Starting from the main menu).
F5: The system must show an alert message when the login fails.	UR006: The user should know whenever they make a mistake when navigating the app.
F1: The system must have a login. F2: The login must be performed by the user via cellphone. F3: The user must log in using his cellphone number. F5: The system must show an alert message when the login fails.	UR007: The user should choose the right option between "login" and "registry" as much as possible.
UR008: The user should be able to customize the interface in different colors as fast as possible.	F10: The system must have a section with user information and configuration options. F13: The information menu must have an option to modify the style of the application.

Other Requirements

Future requirements

The requirements could change depending of the number of activities in the app.