Software Requirements Specification (SRS) Template

Items that are intended to stay in as part of your document are in **bold**; explanatory comments are in *italic* text. Plain text is used where you might insert wording about your project.

The document in this file is an annotated outline for specifying software requirements, adapted from the IEEE Guide to Software Requirements Specifications (Std 830-1993).

Tailor this to your needs, removing explanatory comments as you go along. Where you decide to omit a section, keep the header, but insert a comment saying why you omit the data.

Stay clear and short, yet complete.

Suiter
(Team Name and Number)
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Software Requirements Specification

Document

Version: (n) **Date: (mm/dd/yyyy)**

Table of Contents

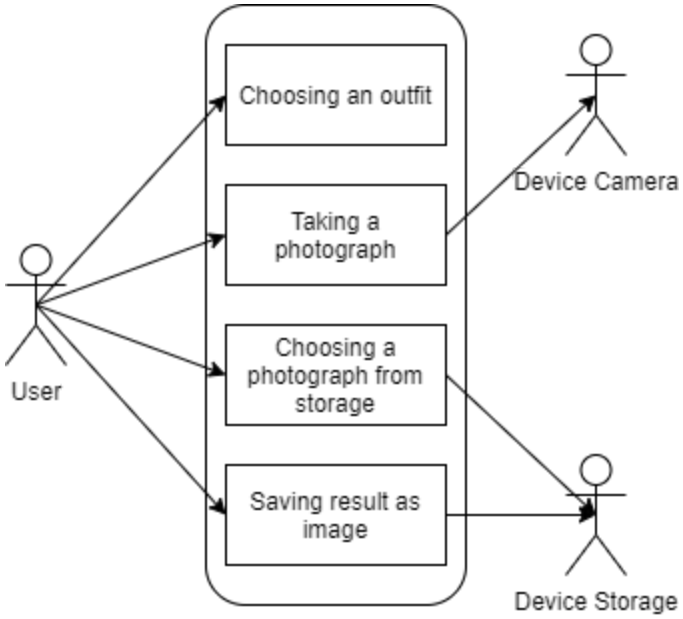
1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description about the requirements needed to successfully complete the "Suiter" mobile application. Throughout this document we will provide a general description of the project, the functional, interface, and performance requirements for the application, a list of other relevant application attributes, application usage scenarios, and use case diagrams.

1.2 Scope

The software product to be produced is a mobile application called "Suiter".
The software will allow the user to choose a suit by selecting a color for each clothing item(trousers, shirt, jacket, tie/bowtie...) and then after taking a photograph of himself or selecting a photograph from the device's gallery the software will visualize the suit on the person in the given photograph.
The application of the software is to help people decide what kind of suit they should get. The benefits are that a person could use our software to decide what suit suits him best instead of having to go to a store and try them on.



1.3 Definitions, Acronyms, and Abbreviations.

Term	Defenition
User	Someone who interacts with the mobile phone application

1.4 References // Links to papers

In this subsection:

(1) Provide a complete list of all documents referenced elsewhere in the SRS
(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 can be provided by reference to an appendix or to another document. If your application uses specific protocols or RFC's, then reference them here so designers know where to find them.

1.5 Overview

The remainder of this document includes two chapters. The second chapter provides an overview of the system functionality, system interaction with other systems and a description of the different system interfaces. Further, the chapter also mentions the system constraints and assumptions about the product. The third chapter provides the requirements specification in detailed terms. Different specification techniques are used in order to specify the requirements more precisely for different audiences.

2. The Overall Description

This section will give an overview of the whole system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it. It will also describe what type of stakeholders that will use the system and what functionality is available for each type. At last, the constraints and assumptions for the system will be presented.

2.1 Product Perspective

Similar Products:
Many similar products on the google play store where your face gets placed behind a static image of a suit, it doesn't warp the suit to match your body.

Related research:
Down to the Last Detail: Virtual Try-on with Detail Carving
(Jiahang Wang, Wei Zhang, Weizhong Liu, Tao Mei)
ClothFlow: A Flow-Based Model for Clothed Person Generation
(Xintong Han, Xiaojun Hu, Weilin Huang, Matthew R. Scott)
The IEEE International Conference on Computer Vision (ICCV), 2019, pp. 10471-10480

2.1.1 System Interfaces

Our systems interfaces with the device's camera and photo gallery. We need to call the camera or the gallery to get a photograph of the person which we will put the suit on.
We also interface with the gallery to save the final result to the user's device.

2.1.2 Interfaces

The user will interact with the device's camera and gallery first using the GUI of our application to transfer him to the decive's default GUI for the camera and gallery.

2.1.3 Hardware Interfaces

The system has no hardware interface requirements.

2.1.4 Software Interfaces

The only required software product is the Android operating system which the application will be built for.

2.1.5 Communications Interfaces

Irrelevant.

2.1.6 Memory Constraints

Need system to work on smartphone's which usually have 8 GB's of RAM.
The APK file size limit on the android app store is 100MB, so the application shouldn't be bigger than that.

2.1.7 Operations

The system will need to process the photo given by the user.

2.1.8 Site Adaptation Requirements

The user may need to purchase a newer smartphone if his current one isn't powerful enough (not enough RAM, weak CPU, unsupported OS version...).

2.2 Product Functions

Should be able to change the person in the photograph's clothes to the chosen suit.
Should be able to change each item's color in real time.

2.3 User Characteristics

The application should be accessible to people of all ages, genders, educational level and technical expertise. The potential user base is made up of people who want to choose a suit for themselves - it's a very broad group.
So the application should be intuitive and simple, so even people with little technological expertise could use it.

2.4 Constraints

1. The application will use neural networks so it's size may be very big.
2. Also because it will use deep learning algorithms it may be very slow.

2.5 Assumptions and Dependencies

We don't know yet how the main algorithms of the application will work, whether we will need to use a database, and if we would need to use any other API's.

2.6 Apportioning of Requirements.

Irrelevant.

3. Specific Requirements

3.2 Functions

3.2.1
The system shall allow the user to create an outfit by choosing a color for each of the 7 clothing items (Trousers, Shirt, Shoes, Belt, Tie, Bow Tie, Jacket).

3.2.2
The system shall allow the user to choose a tie or a bow tie or neither, but not both at the same time.

3.2.3
The system should allow the user to save the result as a picture to the device's storage.

3.4 Logical Database Requirements

No Logical Database Requirements

3.5 Design Constraints

The amount of ram of the users device, the CPU of the device and the limit on application size.

3.6 Software System Attributes

No Security requirements.
All application that go on the google play store are first checked by google to make sure they are safe.

3.7 Organizing the Specific Requirements

3.7.1 System Mode

3.7.2 User Class

3.7.3 Objects

3.7.4 Feature

3.7.5 Stimulus

3. 7.6 Response

3.7.7 Functional Hierarchy

3.8 Additional Comments

4. Document Approvals

[YOUR SUPERVISOR]

Identify the approvers of the SRS document. Approver name, signature, and date should be used

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---------- [END OF RELEVANT PARTS]----------