## 3. Functional Requirements

### 3.1 System Functional Overview

#### d. Non-Screen Functions

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| --- | --- | --- | --- |
| **#** | **Feature** | **System Function** | **Description** |
| 1 | Web API | Web API | A web server or a web browser, knows as web development concept, usually limited to a web application's client-side, and thus usually does not include web server or browser implementation details. |
| 2 | Service | Architectural pattern | Applied within the service-orientation design paradigm, which aims to organize the services, within a service inventory, into a set of logical layers. Services that are categorized into a particular layer share functionality. |
| 3 | Recommendation | Clarifai API | Uses machine learning and deep neural networks to identify and analyze images. |
| 4 | Image Censorship | Google Cloud's Vision API | Assign labels to images and quickly classify them into millions of predefined categories. Detect objects and faces, read printed and handwritten text, and build valuable metadata into your image catalog. |

## 4. Non-Functional Requirements

### 4.1 External Interfaces

#### a. User Interfaces

UI-1: The SOFA application on smartphone is used entirely by touch and swipe.

UI-2: The SOFA application always includes a status bar at the bottom of the page to navigate between the application's features.

UI-3: The Management System conforms to the Dashboard Design User Experience Guidelines.

UI-4: The Management System in browser permits complete navigation by using the mouse alone, in addition to using mouse and keyboard combinations.

#### b. Software Interfaces

SI-1: Image Censorship System

SI-1.1: After the photo is uploaded from the user's phone through the SOFA app, it will be sent through the image censorship system, while waiting for the censorship, the photo is only viewed as a preview.

SI-1.2: Through Vision AI, the system will evaluate and make a decision about whether a photo is suitable or not.

SI-1.3: When a posted photo is determined to be invalid, it is immediately removed from the preview interface.

SI-2: Recommendation System

SI-2.1: The Recommendation System collects information from photos posted from users.

SI-2.2: After collecting information, based on information about the user's body, the system will give suggestions on suitable outfits to the user through the recommendation page.

SI-3: User Balance Management System

SI-3.1: To allow users to top up the system

SI-3.2: To allows users to pay for advertising posts.

#### c. Hardware Interfaces

No hardware interfaces have been identified.

#### d. Communications Interfaces

CI-1: The system sends an email to the user to confirm transactions (top up, advertise) in the system.

CI-2: The system sends an email to the user to confirm login password regeneration.