

## Basic Requirements:

### 1. Basic Project Requirement:

App supports multiple users via individual user accounts

### 2. Basic Project Requirement:

App contains at least one user facing function available only to authenticated users

### 3. Basic Project Requirement:

App comprises at least 1 instance of each of at least 2 of the following 4 fundamental Android components:

- Activity
- BroadcastReceiver
- Service
- ContentProvider

### 4. Basic Project Requirement:

App interacts with at least one remotely-hosted Java Spring-based service

### 5. Basic Project Requirement:

App interacts over the network via HTTP

### 6. Basic Project Requirement:

App allows users to navigate between 3 or more user interface screens at runtime

### 7. Basic Project Requirement:

App uses at least one advanced capability or API from the following list (covered in the MoCCA Specialization): multimedia capture, multimedia playback, touch gestures, sensors, animation.\*\*

\*\*Learners are welcome to use ADDITIONAL other advanced capabilities (e.g., BlueTooth, Wifi-Direct networking, push notifications, search), but must also use at least one from the MoCCA list.

### 8. Basic Project Requirement:

App supports at least one operation that is performed off the UI Thread in one or more background Threads of Thread pool.

## Functional Requirements:

### 1. Functional Description and App Requirement:

App defines a *Gift* as a unit of data containing an image, a title, and optional accompanying text.

### 2. Functional Description and App Requirement:

A *User* can create a Gift by taking a picture (or optionally by selecting an image already stored on the device), entering a title, and optionally typing in accompanying text.

### 3a. Functional Description and App Requirement:

Once the Gift is complete the User can post the Gift to a *Gift Chain* (which is one or more related Gifts).

### 3b. Functional Description and App Requirement:

Gift data is stored to and retrieved from a web-based service accessible in the cloud.

### 3c. Functional Description and App Requirement:

The post operation used to store Gift data requires an authenticated user account

### 4. Functional Description and App Requirement:

Users can view Gifts that have been posted.

### 5a. Functional Description and App Requirement:

Users can do text searches for Gifts performed only on the Gift's title.

### 5b. Functional Description and App Requirement:

Gifts matching the search criterion are returned for user viewing.

### 6a. Functional Description and App Requirement:

Users can indicate that they were *touched* by a Gift, at most once per Gift (i.e., double touching is not allowed)

### 6b. Functional Description and App Requirement:

Users can flag Gifts as being obscene or inappropriate. Users can set a preference that prevents the display of Gifts flagged as obscene or inappropriate.

### 7a. Functional Description and App Requirement:

Touched counts are displayed with each Gift

### 7b. Functional Description and App Requirement:

Touched counts can be periodically updated in accordance with a user-specified preference (e.g., Touched counts are updated every 1, 5 or 60 minutes) or updated via push

notifications for continuous updates.

**8. Functional Description and App Requirement:**

App can display information about the top “Gift givers,” i.e., those whose Gifts have touched the most people.