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# PostCardBuddy

## System Requirements

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# 1 Background

## 2 System Requirements

### 2.1 Goal

The product aims to increase the amount of postcards sent and shall achieve this through the following goals:

- Simplify the process of sending postcards
- Enable user to send personalized postcards
- It shall be possible to generate revenue through the system

### 2.2 Domain

#### 2.2.1 Supported systems

**Req 1.2.1.1** The system shall support iOS.

**Req 1.2.1.2** The system shall support Android.

**Req 1.2.1.3** The system shall support a mobile payment solution.

#### 2.2.2 Interfaces

**Req 1.2.2.1** The interface connecting PostCardBuddy and the printed postcards is an off-the-shelf printer.

**Req 1.2.2.2** The system sends image files to a printer.

### 2.3 Product

**Req 1.3.1.1 Success notification** The user shall be notified when an order is sent from a device.

**Req 1.3.1.2 Fail notification** The user shall be notified when an order fails to be sent from a device.

**Req 1.3.1.3 No internet** If the user places an order on a device that is not connected to the internet, the order shall be stored and sent the next time the device receives internet connection.

### 2.4 Design

**Req 1.4.1.1 Front page** The front of the postcard shall be a field containing an image.

**Req 1.4.1.2 Text field** The back of the postcard shall contain a text field.

**Req 1.4.1.3 Address field** The back of the postcard shall contain an address field.

**Req 1.4.1.4 Postage field** The back of the postcard shall contain a postage field.

**Req 1.4.1.5 Postage print** The postage shall be printed in the top right corner on the back of the postcard.

## 2.5 Data Requirements

**Req 1.5.1.1 Data model** The system shall handle the data presented in the data model in figure 1.

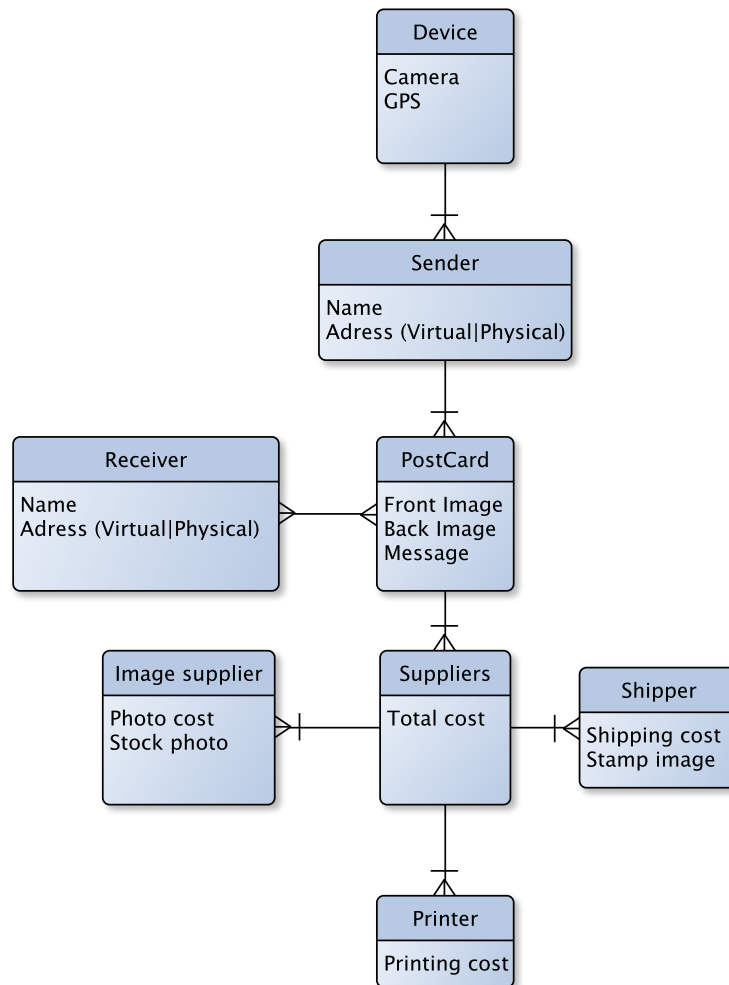


Figure 1: Data model

## 2.6 Functional Requirements

**Req 1.6.1.1 Image from gallery** Feature for choosing pictures from the phone gallery for the front of the postcard.

**Req 1.6.1.2 Picture from camera** Feature for taking a picture through the camera and use as image for the front of the postcard.

**Req 1.6.1.3 Image and GPS position** Feature for choosing images depending on the user's GPS position.

**Req 1.6.1.4 Image editing** Feature for simple editing of images.

**Req 1.6.1.5 Image saving** Feature for saving images.

**Req 1.6.1.6 Greetings** Feature for writing greetings in the app.

**Req 1.6.1.7 Pictures of handwritten greetings** Feature for choosing hand-written greetings.

**Req 1.6.1.8 Auto-generated greetings** Feature for choosing auto-generated greetings.

**Req 1.6.1.9 GPS based greetings** Feature for choosing greetings based on GPS location.

**Req 1.6.2.0 Handwritten greetings on screen** Feature for writing handwritten greetings directly on the screen.

**Req 1.6.2.1 Saving greetings** Feature for saving greetings.

**Req 1.6.2.2 Saving postcards** Feature for saving postcards.

**Req 1.6.2.3 Reuse postcards** Possible to reuse saved postcards.

**Req 1.6.2.4 Postcard size** Feature for choosing the size of the postcard.

**Req 1.6.2.5 Physical postcards** Feature for sending physical postcards.

**Req 1.6.2.6 Quality of physical postcard** Feature for choosing the quality of physical postcards.

**Req 1.6.2.7 Fee** Sending a physical postcard requires a fee.

**Req 1.6.2.8 Payment** Feature for payment within application.

**Req 1.6.2.9 Confirmation of order** Feature for confirmation of order.

**Req 1.6.3.1 Digital postcard** Feature for sending digital postcards.

**Req 1.6.3.2 Enter recipients** Feature for entering recipients manually.

**Req 1.6.3.3 Phonebook recipients** Feature for choosing recipients through the phonebook.

**Req 1.6.3.4 Multiple recipients** A postcard can have multiple recipients.

**Req 1.6.3.5 Favourite recipients** Feature for saving favourite recipients.

**Req 1.6.3.6 Frequent recipients** Frequently used recipients shall be shown as favourite recipients.

**Req 1.6.3.7 History** Feature for seeing the history of sent postcards.

**Req 1.6.3.8 Social media** Feature for sharing postcards on social media.

## 2.7 Quality Requirements

### 2.7.1 Performance

**Req 2.7.1.1 Memory usage** The application shall adjust its memory usage depending on the device.

**Req 2.7.1.2 Speed** The user interface shall be considered smooth on devices faster than Nexus 5/iPhone 5 for 8 out of 10 users.

**Req 2.7.1.3 Picture quality** The camera shall be able to take a picture in the highest hardware supported resolution.

**Req 2.7.1.4 Autofocus** The camera shall have an autofocus that is comparable to the Android/iOS stock camera.

### 2.7.2 Availability

### 2.7.3 Security

**Req 2.7.3.1 Store cards** The photos shall be stored encrypted.

**Req 2.7.3.2 Sending card** The photos shall be sent encrypted to back-end.

### 2.7.4 Maintainability/Portability

**Req 2.7.4.1 Language** The application shall be developed in a non native language e.g. Java for Android.

**Req 2.7.4.2 Device support** The application shall work on devices with operating system Android 4.1/iOS 7.0.1 or newer.

### 2.7.5 Usability

**Req 1.7.5.1 User friendly** 9 out of 10 users shall be able to use the system after a five minute instruction.

## 3 Specification Techniques

### 3.1 Context Diagrams

Figure 2 shows the context diagram. This diagram shows the interface that the application PostCardBuddy will interact with and the stakeholders who will interact with the application.

### 3.2 Features

### 3.3 Virtual Windows

### 3.4 Task Descriptions

## 4 Release Plan

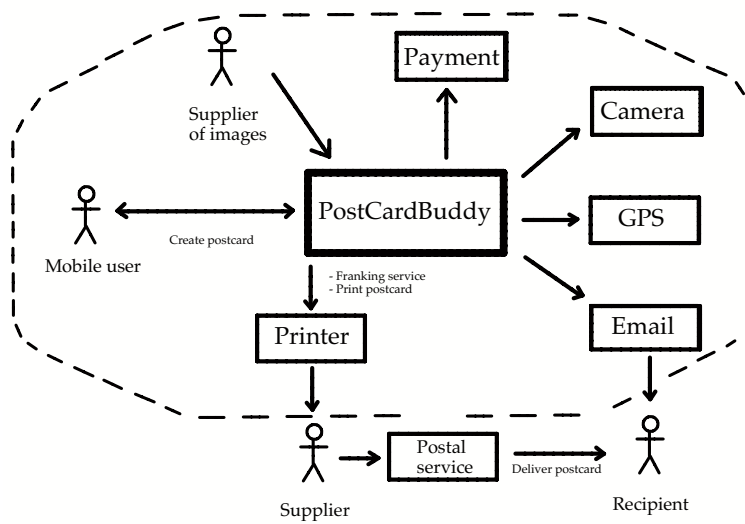


Figure 2: Context diagram of product.