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# PostCardBuddy

## System Requirements

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*Authors of this document:*

Emma Albertz  
Caroline Brandberg  
Linnéa Claesson  
Billy Johansson  
Johan Ju  
Jacob Mejvik  
Carl Rynegardh

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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.

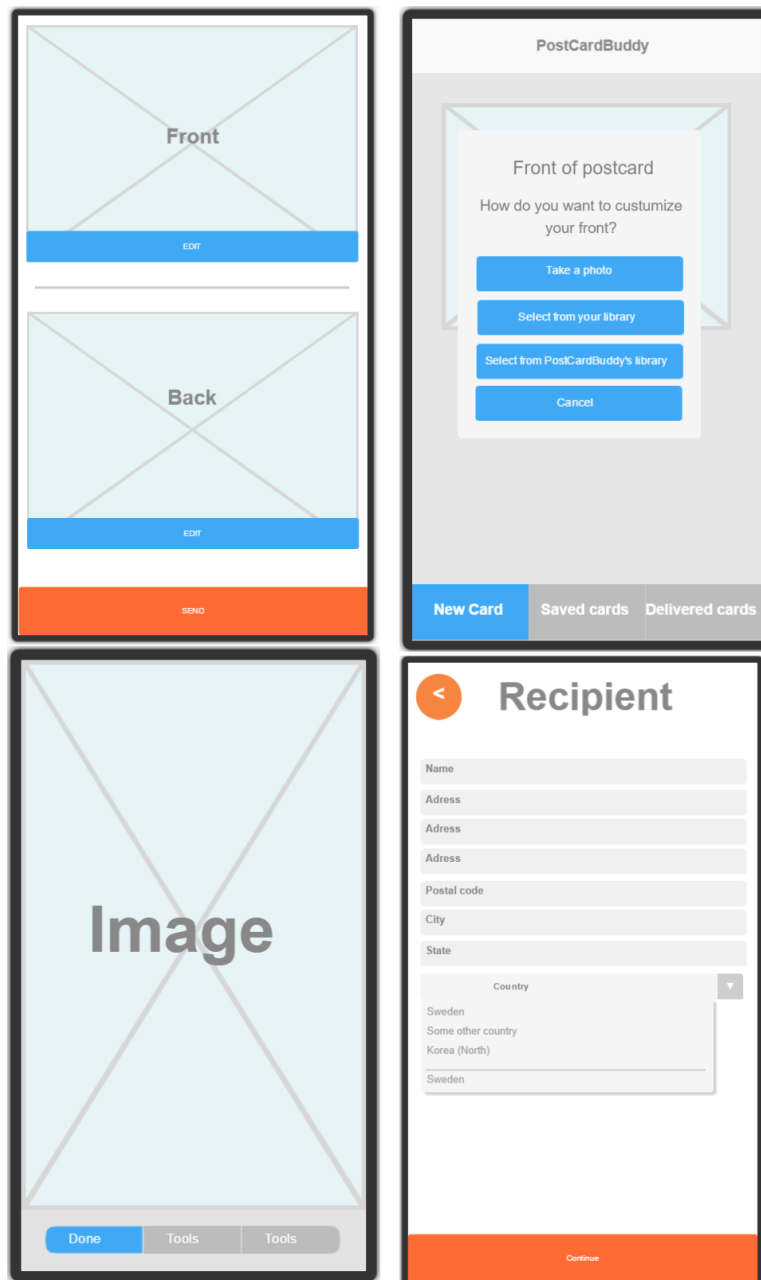


Figure 1: The prototype

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

**Req 2.4.1.5 Start Screen** The application shall start with a screen where its possible to choose front and back image/text figure 1 upper left.

**Req 2.4.1.6 Get image** The application shall let the user choose the image source from a menu 1 upper right.

**Req 2.4.1.7 Edit image** The application shall give the user a basic image editor to customize the image 1 lower left.

**Req 2.4.1.8 Recipient adress** The application shall have an adress input screen with an address-book/contacts (not in image) 1 lower right.

## 2.5 Data Requirements

**Req 1.5.1.1 Data model** The system shall handle the data presented in the data model in figure 2.

## 2.6 Functional Requirements

### 2.6.1 Images

**Req 2.6.1.1 Image from gallery** It shall be possible to choose pictures from the phone gallery for the front of the postcard.

**Req 2.6.1.2 Picture from camera** It shall be possible to take a picture through the camera and use as image for the front of the postcard.

**Req 2.6.1.3 Image and GPS position** It shall be possible to choose images depending on the user's GPS position.

**Req 2.6.1.4 Image editing** The system shall have a function for editing of images.

**Req 2.6.1.5 Image saving** It shall be possible to save images.

### 2.6.2 Greetings

**Req 2.6.2.1 Greetings** It shall be possible to write greetings in the app.

**Req 2.6.2.2 Pictures of handwritten greetings** It shall be possible to choose a picture of a hand-written greeting.

**Req 2.6.2.3 Auto-generated greetings** It shall be possible to choose a template greeting.

**Req 2.6.2.4 GPS based greetings** The system shall be able to generate greetings based on GPS position.

**Req 2.6.2.5 Handwritten greetings on screen** It shall be possible to write a handwritten greetings directly on the screen.

**Req 2.6.2.6 Saving greetings** It shall be possible to save a greeting.

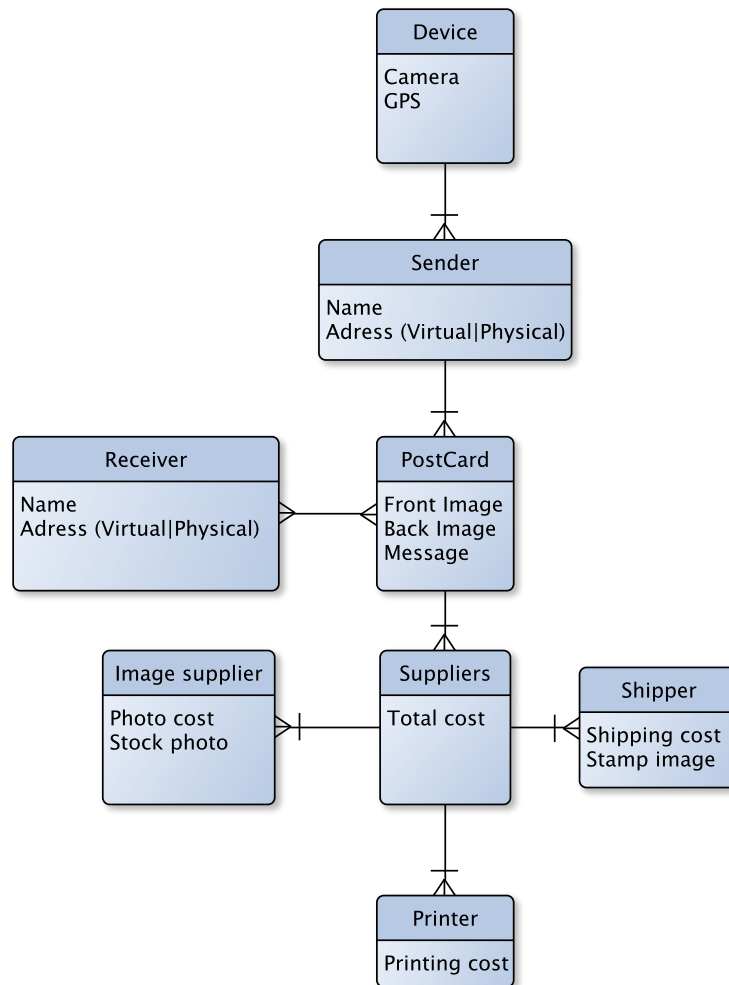


Figure 2: Data model

### 2.6.3 Recipients

**Req 2.6.3.1 Enter recipients** It shall be possible to enter recipients manually.

**Req 2.6.3.2 Phone book recipients** It shall be possible to choose recipients through the phone book.

**Req 2.6.3.3 Multiple recipients** The system shall be able to handle multiple recipients for one postcard.

**Req 2.6.3.4 Favourite recipients** It shall be possible to save recipients as favourites.

**Req 2.6.3.5 Frequent recipients** The system shall show frequently used recipients as favourite recipients.

## **2.6.4 Postcard**

**Req 2.6.4.1 Saving postcards** It shall be possible to save postcards.

**Req 2.6.4.2 Reuse postcards** It shall be possible to reuse saved postcards.

**Req 2.6.4.3 Digital postcard** It shall be possible to send digital postcards.

**Req 2.6.4.4 Physical postcards** It shall be possible to send physical postcards.

**Req 2.6.4.5 Postcard size** It shall be possible to choose the size of the physical postcard.

**Req 2.6.4.6 Quality of physical postcard** It shall be possible to choose the print quality of physical postcards.

**Req 2.6.4.7 History** It shall be possible to display 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 a 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 non native language e.g. Java for Android.

**Req 2.7.4.2 Device support** The application shall work on devices with newer operating systems than Android 4.1 / iOS 7.0.1

### **2.7.5 Usability**

**Req 2.7.5.1 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 3 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.

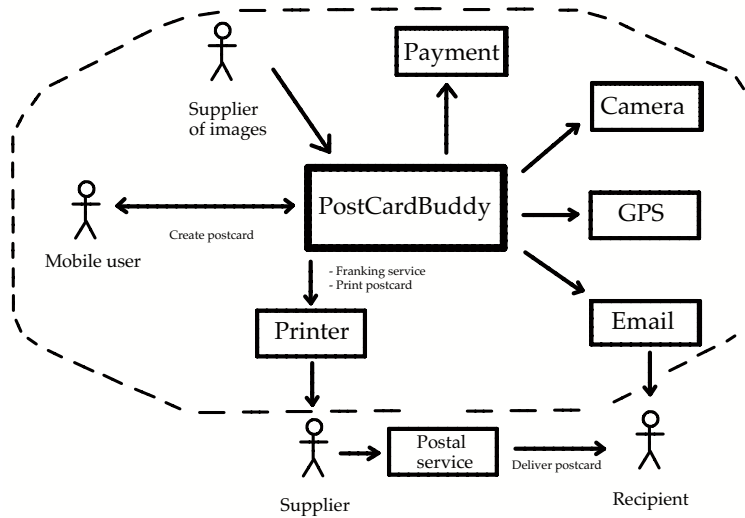


Figure 3: Context diagram of product.

### 3.2 Features

### 3.3 Virtual Windows

### 3.4 Task Descriptions

## 4 Release Plan