TEAM C

PostCardBuddy

System Requirements

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1 System Requirements

1.1 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

1.2 Domain

1.2.1 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.

1.2.2 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.

1.3 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.

1.4 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.

1.5 Data Requirements

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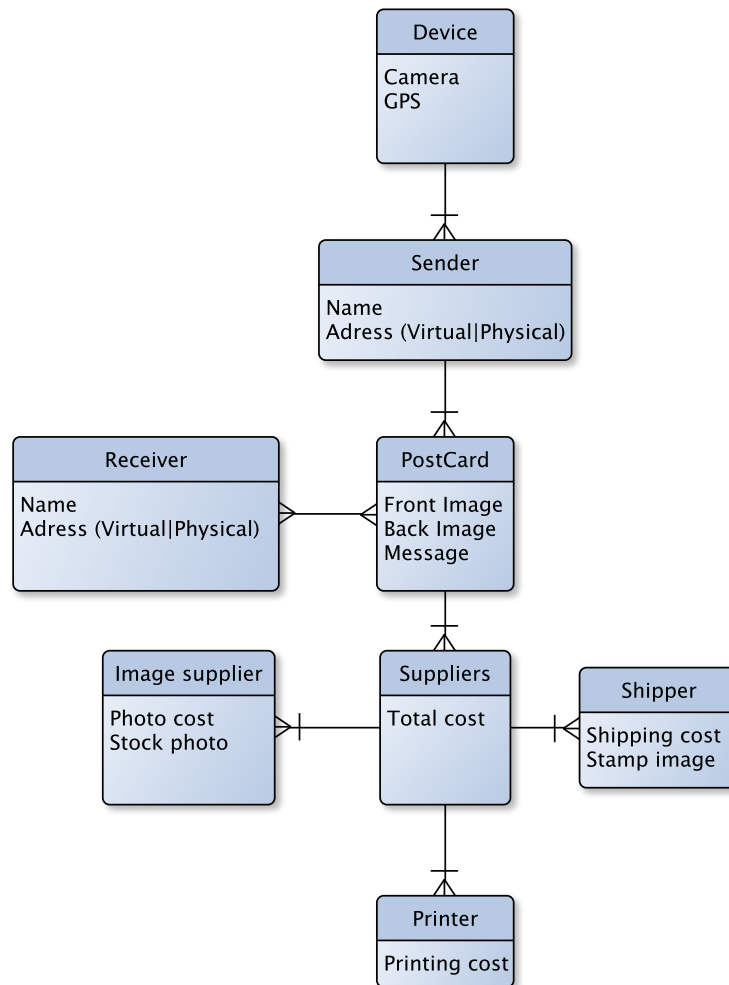

Figure 1: Data model

1.6 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.

1.7 Quality Requirements

1.7.1 Performance

Req 1.7.1.1 Memory usage The application shall adjust its memory usage depending on the device.

Req 1.7.1.2 Speed The user interface shall be considered smooth on devices faster than Nexus 5/iPhone 5 for 8 out of 10 users.

Req 1.7.1.3 Picture quality The camera shall be able to take a picture in the highest hardware supported resolution.

Req 1.7.1.4 Autofocus The camera shall have an autofocus that is comparable to the Android/iOS stock camera.

1.7.2 Availability

1.7.3 Security

Req 1.7.3.1 Store cards The photos shall be stored encrypted.

Req 1.7.3.2 Sending card The photos shall be sent encrypted to back-end.

1.7.4 Maintainability/Portability

Req 1.7.4.1 Language The application shall be developed in a non native language e.g. Java for Android.

Req 1.7.4.2 Device support The application shall work on devices with operating system Android 4.1/iOS 7.0.1 or newer.

1.7.5 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.

2 Specification Techniques

2.1 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.

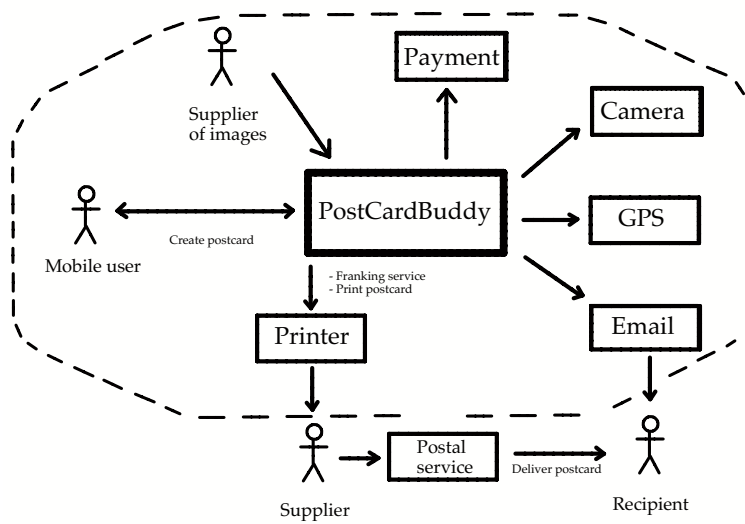### 2.2 Features

2.3 Virtual Windows

2.4 Task Descriptions

3 Release Plan

Figure 2: Context diagram of product.