High Level Interaction Diagram

Apps

NFC

(Used to identify hardware devices)

Geo-fencing and Panic Button are supported by Parse.com

Patient

Caretaker

Panic Button

(Used for the patient to send an emergency message to the caretaker)

Geo-fencing

(Used for the caretaker to identify an approximate location of the patient)

Common

Common

Library/API

**Caretaker**

Caretaker

Access the verified token (MainActivity) and create Person objects (MainActivity, MapActivity, NfcActivity)

Patient

Common

Initialize by an API key and client key. Then, get the current installation

(Application.java)

After initialization, the notification system will be available.

Connect with the patient through NFC (NfcActivity)

**Patient**

Patient

Initialize by an API key and client key. Then, get the current installation

(Application.java)

Send messages to the caretaker (NotificationMessage.java /PanicButtonActivity)

**Common**

Connected with the patient from the Caretaker class

Access the verified token (MainActivity), obtain the API keys (PanicButtonActivity) and create Person objects (MainActivity, PatientService, TokenSenderActivity)

Caretaker

Common

Common

Caretaker

**Parse.com**

Create Parse objects (PatientLocation.java and Person.java)

Patient

Accessed for the verified token (Caretaker/Patient), the API keys (Patient) and creating Person class (Caretaker/Patient)

Caretaker

Patient

Messages will be sent to the patient/caretaker via Parse.com.

Common class (shared library) accesses it for creating Parse objects inside PatientLocation.java and Person.java

Common

Caretaker’s Application.java and MainActivity, Patient’s Application.java, NotificationMessage.java and PanicButtonActivity access Parse.com. After initialization, the notification system between the caretaker and patient will be activated

Caretaker

Patient