## README

## **SmartLockApp**

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There are five folders in our development folder: dbLayout, entites, ui, local and remote.

In dbLayout package:

It includes four class, which represent dabase CRUD(create, read, update and delete) for all of the activities

In entities package:

It is a business logic layer which includes all of interfaces for local devices. There are AuthenticationInterface, EventInterface, LocksInterface, ProfileInterface and SpaceInterface.

In ui package:

It includes all of the activities which are all corresponding to a xml file in layout folder. These classes implement the interfaces in entities package. Refer to the UML diagram for inheritance relationship. Mainactivity.java will be redirected to login activity directly. AddEvent, CreateProfile, EditProfle, Login, Register, Schedule, Space will call the intent, WrapPostRequest. FutureEvent, GuestLocks, History, HostLocks will call the intent, WrapGetRequest. In WrapGetRequest and WrapPostRequest, they will create a HttpConnection object for sending information to the server.

HttpConnection will handle the Exceptions problems because of the possible disconnection between android device and remote server. It will handle UnknownServiceException and IOException. For such exception, it will try to heal self, e.g. reconnect the server for two more times. If there still a exception, remind the user of the down server.

In local package:

There is a HttpConnection class which is used to build the http connection and communicate between android device and remote server. WrapPostRquest will wrap information to

a post request for sending to the server. WrapGettRquest will wrap information to a get request for sending to the server.

In remote package:

AnalyzeRequest will get the http request and retrieve information from it. DatabaseConnection file will create database and interact with the database. SQL Exceptions are handled in this class.