DOCUMENTATION

The framework has been provided as two libraries :

frameworkServer : This library needs to be included at the server side of the project.
frameworkmobile : This library needs to be included at the client side android application of the project.

The frameworkServer has the following major classes that need to be used to use the framework :

1. **Framework** - This class is a thread that runs the framework server to which the various clients connect to. Functions of this class are used to set the callback object and namespace lock as per requirements before starting the thread which starts the server.

2. **DatabaseHelper** - This class provides the various APIs that are provided by the framework for database access.

The frameworkmobile has the following major classes that need to be used to use the framework :

1. **Config** – This class has various methods which are used to get/set certain parameters that are used by the framework to run. The parameters need to be set before starting the FrameworkService.

2. **FrameworkService** – This class is a service that carries out the synchronization between the client and the server. It needs to be started to start the framework.

3. **Helper** – This class provides the various APIs that are provided by the framework for database access and locking/unlocking of namespaces.

The following are the various permissions that need to be present in the manifest file of the android application project so as to use the framework :

- *android.permission.READ_SMS"*
- *android.permission.WRITE_SMS"*
- *android.permission.READ_PHONE_STATE"*
- *android.permission.WAKE_LOCK"*
- *android.permission.WRITE_EXTERNAL_STORAGE"*
- *android.permission.RECEIVE_BOOT_COMPLETED"*
- *android.permission.INTERNET"*
- *android.permission.CHANGE_NETWORK_STATE"*
- *android.permission.ACCESS_NETWORK_STATE"*
- *android.permission.SEND_SMS"*
- *android.permission.RECEIVE_SMS"*

Documentation of the various classes are available in the Docs folder. One should go through the documentation to know how to use the objects of these classes and their associated functions while writing code that uses the framework.

Some important points :

- When namespace locking mechanism is used, a dongle, which has a SIM card whose phone number is set using Config on the mobile, should be attached to the device on which the server is run.
- The server code of the application using the framework should be run with sudo permissions.
- sqlite-jdbc-3.7.2.jar needs to be included at the server side of the project.