

WhatsUp Development Introduction

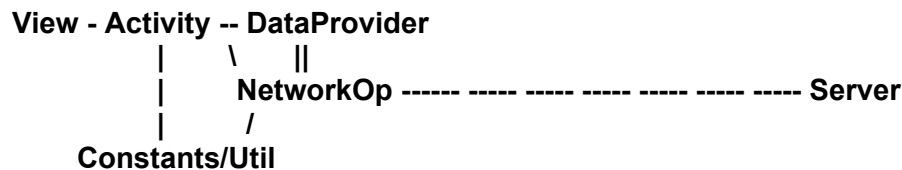
1. Fetch the git repository from <https://github.com/sebastianjunggren/WhatsUp>
2. Make sure you have the Android SDK, an Android (Virtual) Device and Java 6 SE development environment.
3. The test project is integrated inside the main project. In e.g. Eclipse you have to import it separately.

The package structure is designed after class type (activities in the activity package and so on) and not necessarily module separation. The classes concerning user interaction and near application logic such as the SessionHandler are grouped in .activity, .model, .constants and .util. The model package consists (with few exceptions) only of data containing types and nearly no logic.

The .balloon and .android.os packages contain slightly modified classes not fit to be imported from external libraries, but are considered thus. .network and .service are separated modules for the DataProvider and network layers.

Layer structure

The WhatsUp service (the whole application) is layered by the following model:



Three layers: App, DataProvider, Server

The app

The application layer adopts the standard design pattern for Android Activities who take care of input/output logic and transitions between activities. Any real content to be shown is fetched from the DataProvider as far as any activity is concerned. The SessionHandler is considered part of this layer and handles login/logout with direct network calls.

DataProvider

This layer provides all content to the activities. It contains an SQLite database for local data and serves data from the DB or from the server over network calls.

The network package is considered part of the data provider but is actually a utility module which sends HTTPRequests and parses JSON responses into indigenous objects. The content pushed to the activities may come from either the internal database or from a network request. The responsibility of deciding where the data should come from lies within the DataProvider, the app couldn't care less.

Server

The server layer is not really part of the WhatsUp Android Project, but a large part of the WhatsUp service as such. It stores all global content (Annotations and comments) and serves any Android client with the information via JSON responses on HTTPRequests. The server also has a web interface and keeps the user database with authentication information.

Any feature a user may use is available in the web application, and should be accessible through the Android client as well.