

Title

Subject

- send message
 - new messages
 - contacts, reachable
-
- UI and Activity
 - Service, message sending, ping
 - bluetooth

```
abstract LowerClass{
//device to user
//directedly connected devices
abstract onNewNeighbor(User user);
abstract onNeighborLeaving(User user);
abstract onReceivingData(Data data);
sendData(Device device, Data data);
connectivity(); //onNewNeighbor and onNeighborLeaving should be called inside
connect(Device device);
disconnect(Device device);
getAllConnectedDevices();
dataListener(); // onReceivingData should be called inside
}
```

```
abstract MiddleClass extends LowerClass{
//find out all the reachable users
abstract onNewUser(List<User> users);
abstract onUserDisconnect(List<User> users);
//these two, called inside onNewNeighbor, onNeighborLeaving
abstract onMessage(Message message); //called inside onReceivingData
getAllUsers();
sendMessage(User user, Message);
}
UpperClass extends MiddleClass{
    onMessage();
    onNewUser();
    onUserDisconnect();
}
```