Mobile Application Development
COSC2309/2347 Semester 1, 2013
Social Organiser/MeetUp App

Assignment 1 (20 marks)

You are to implement a simple Social Organiser/MeetUp app to create and schedule events and invite attendees. In this first assignment, you will implement the basic user interface for event creation, modification and calendar viewing. This will be extended in Assignment 2 to provide a full application complete with storage and networking behaviour.

At the core of the functional requirements of this application is the following entity:

Event: An *event* is an activity that occurs at a specific date and time and has a number of attendees. It must (at a minimum) maintain the following information:

- **Title**: The title of the event (e.g. "Video game night")
- **Date:** the date and time of an Event (e.g. April 12, 2013, 7.30PM-Late)
- **Venue:** the location of the event (e.g. "Kassahun's House")
- **Note**: Additional information about the event (e.g. "BYOD, costume and snacks!")
- **Attendees**: List of email addresses identifying individuals who are invited to this event (as picked from the user's contacts list).
- **Id**: A randomly generated combination of numbers and letters, which uniquely identifies an event (not visible to the user).

Functional Requirements
Your application must provide the following functionalities and meet the non-functional requirements stated under the "Other Requirements" section below.

- **Schedule and Unschedule Event:** The application should allow the creation of an unbounded set of events. For simplicity, you can ignore duplicate entries or events with overlapping times (we will make sure test data does not overlap when assessing your assignment).
- **Edit Event Details:** Users should be able to edit details as well as add or remove invitees (using appropriate system activities and APIs).
- **View Events:** Users should be able to display a list of events where each element in the list will be a synoptic view (summary) of the Event e.g. title, date and number of invitees. The list should be sorted according to date.
- **View Calendar:** Users should be able to view the entries in a calendar like layout, based on a week view (you can look at the calendar app on an

Android device or emulator for ideas but are free to be creative with your layout). **IMPORTANT NOTE:** You must create your own Activity using standard layouts i.e. you cannot just use a standard or third party Calendar activity or widget.

- **Selection/Editing:** In the two view modes described above users should be able to add or edit items via direct manipulation (e.g. long press)

Other Requirements:

- In assignment 1 you are not expected to persist data either locally or remotely (e.g. via a server) however your data must not be limited to the lifetime of any specific activity. For simplicity you can also hard code test data (but put it in a separate class for cohesion and code readability).
- Your User Interface must support all of the functionalities presented under "functional requirements" above.
- Your implementation must make efficient use of common values (such as Strings, Dimensions or Colors) by (re)using values from the appropriate XML resource file. i.e. do not hardcode such values into your layout files or your application.
- Your Target Android Version should be 2.3.3 (API Level 10) or higher
- You can write your application in the single Activity per screen phone style however you may choose to write a tablet version using Fragments (although this adds complexity and is not covered until later in the semester once the basics have been covered).
- You should use the Model View Controller approach to assist in writing modular and cohesive code.
- You may want to consider branding, business models, distribution frameworks, 3rd party integration (maps, navigation, social media sites) etc. and how this impact on your app design although you will not be assessed on these features.

Advanced Functionality (Bonus Marks 2+2)

To receive these bonus marks you can provide the following two additional functionalities:

1) SMS a newly created Event to all the invitees. Your app should also intercept incoming SMS's to determine whether it is a new event from another person. If so, your application should allow the user to either decline or accept and add the event accordingly.

2) Attach a recorded voice note as an additional data item for each event.

Submission Instructions

Your project should be implemented using Eclipse ADT and your project exported as a compressed .zip archive before uploading to Weblearn. **Do not** use any other compression formats - use of other formats (e.g. tar.gz, RAR, etc.) may lead to delays in marking and/or a deduction of assignment marks.

Important Regulations

- You are free to refer to textbooks and notes, and discuss the design issues (and associated general solutions) with your fellow members on Blackboard; however, the assignment should be your own individual work.
- Where you do make use of other references, please cite them in your work. Note that you will only be assessed on your own work so the use of third party designs and APIs (beyond the standard Android libraries) is discouraged.