

COMP 713

Distributed and Mobile System

Deadline: October 02, 2017

The purpose of this assignment is to develop a useful Java ME or Android mobile application that incorporates at least two of messaging, Bluetooth, location-based services, and near field communication. You **MUST** work in a group of TWO or THREE.

The system should include the following components:

Documentation: a brief document describing the software project, its components and features, and brief user documentation so the project can be installed and tested, it should include a UML diagram that shows how the features of the project have been integrated into a useful application in a relevant way. (10 marks)

User Interface and Useful Application: User interface and controlling the application making use of touch events, UI components, intents, multiple Activity launching, graphics and overall usefulness of the application and deployment to real devices. (10 marks)

The project should incorporate at least two of the following four services: (30 marks)

Messaging Service: It utilizes SMS and/or MMS messaging between mobile devices. Your app will provide an appropriate User Interface to send and receive the messages. (15 marks)

Bluetooth Service: A Bluetooth client locates the Bluetooth servers within range that offer the sought service, allows the user to determine which server to utilize and information is communicated via Bluetooth in both directions between client and server. (15 marks)

Location-based Service: A mobile device obtains current location information and user information, uses HTTP to communicate with a server (Google Map Server) using Google MAP API. (15 marks)

Near Field Communication: A mobile device can write to and read from an NDEF tag, payment or ticketing information communicated, and information is persisted on device. (15 marks)