

Tutorial 6

QR Code and Internet

IS3261

Due date: 25th Oct 2018 (Thursday) 2359 hrs

Semester 1, AY18/19, School of Computing, National University of Singapore

IMPORTANT:

For this tutorial, you are supposed to submit your project file to IVLE.

Instruction for submission:

- Submit your project in a **single zip file** to IVLE. Name your zip file using the following convention:

StudentNumber_yourName_Tut#.zip

For example, if your student number is A1234567B, and your name is Chow Yuen Fatt, for this tutorial, your file name should be A1234567B_ChowYuenFatt_Tut6.zip

QR Code and Internet

1. Introduction

This tutorial will let you do the following:

- Learn how to Create QR Code
- Write Android codes to use camera to scan QR Code
- Learn how to access internet using Android codes
- Learn how to parse JSON data downloaded from internet

2. Requirements

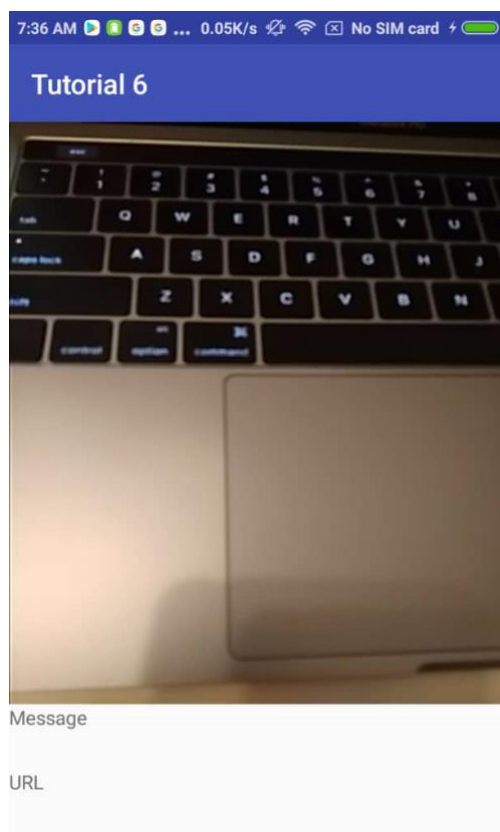
2.1 Create a QR code that represents the following String:

`http://jsonplaceholder.typicode.com/users`

2.2 Create a project with the Launching Activity that looks like Fig.1(a).

2.3 Write codes to do the following:

- When the camera points to the QR Code generated in Step 2.1, the Android device will automatically access the site represented by the QR Code
- Parse the JSON data returned by the site
- Display the “id”, “name”, “email”, “username” of the last record returned by the JSON data, as well as the web site address (Fig.1b)



(a)



(b)

Fig.1 (a) The launching activity of the app. (b) when the camera points to a QR code representing the url “`http://jsonplaceholder.typicode.com/users`”, the id, name, email, username of the last record as well as the url will be displayed in the TextView below.