Module Title:	Mobile Application Development
Module Code:	B8IT120
Module Leader:	Ehtisham Yasin
Stage (if relevant):	8
Assessment Title:	Develop an Android Application
Assessment Number (if relevant):	1
Assessment Type:	Practical
Restrictions on Time/Length : +/- 10%	N/A
Individual/Group:	Individual
Assessment Weighting:	70%
Issue Date:	21/03/2019
Presentations Date:	N/A
Hand In Date:	23/04/2019
Planned Feedback Date:	2 Weeks After Submission
Mode of Submission:	Online via Moodle

Students must submit their assignments on Moodle.

Assignment Objectives:

1. To develop a mobile application using Android
2. To utilise the components discussed in the lectures to complement the functionality of your application
3. To run and debug the application and make sure it's as much error free as possible

Details of assignment brief

We will work on a mobile application whose capability relies on obtaining data from an API. You will be given API links that will enable the login functionality for your application. All various API links should be provided to you during the lecture on the 26th of March. You will implement the login on your applications, store the session in an SQLite database to make sure that a user doesn't have to see the login screen when they are already logged into the system.

You will also have an API link that will provide you with a list of few various modules, this will all be dummy data, but you will present this information either using a listView or a RecyclerView.

Clicking on any of the modules should present you with some resources available on that module. You will have an api link to get this data as well and we will then be able to send just the module code to this api link to get the data back from the API.

You should implement a Broadcast receiver to listen to the network state changes and present the user with a no internet connection message as soon as they lose the internet connection. You might also want to save the state of each session when an application is closed so that the user doesn't get presented with an empty screen when they launch the application when the internet is turned off.

Assessment Task (100 Marks) – Weighting (70%)

Login (25 Marks)

The login should ensure that the login details are used to query the API whether this user exists or not

- You should not present the login screen again until the user decides to log out

   (15 Marks)

- You should also display any error messages from the API if the login fails for any reason

   (10 Marks)

Recycler/ListViews (25 Marks)

- The Recycler/ListView should present you with a list of all the modules. This may also contain information about who is teaching this module. The start and end dates, so that you can classify these based on the term.

   (15 Marks)

- Use appropriate grouping schemes and decide the layout for each individual item, that covers as much information as possible without having to go to the module page

   (10 Marks)

Module Page (10 Marks)

- The module page should have appropriate groups for the data being sent back from the API

   (10 Marks)

Broadcast Receiver (20 Marks)

- The broadcast receiver should notify the user as soon as they lose the internet connection. The message of no internet connection should stay until the user is connected back to the internet

   (20 Marks)

No Internet States (20 Marks)

- You should have the most recent copy of data saved somewhere within the application to ensure that you can present this information if the user launches the application when there is no internet connection. You should ensure this data is updated after each api call to maintain the most recent state. Also remove this data when the user logs out of the application

   (20 Marks)

Instructions for Submission

- Create a folder named with the module code, and include your student number e.g. ModuleCode_StudentNumber

- Include your implementation within the folder
- Compress your folder into .zip and submit using moodle link

General Assessment Submission Requirements for Students:

1. Online assignments must be submitted no later than the stated deadline.

2. All relevant provisions of the Assessment Regulations must be complied with.

3. Extensions to assignment submission deadlines will be not be granted, other than in exceptional circumstances. To apply for an extension please go to http://www.dbs-students.com/Registrar/ and download the Assignment Extension Request Form.

4. Students are required to retain a copy of each assignment submitted, and the submission receipt.

5. Assignments that exceed the word count will be penalised.

6. Students are required to refer to the assessment regulations in their Student Guides and on the Student Website.

7. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying). Please refer to the attached referencing guidelines for information on correct referencing.

What is referencing and why is it necessary?

Please follow this link to the Harvard Style Referencing Guide - all referencing is required in this format.
http://issuu.com/dbslibrary/docs/harvard-referencing-guide/1?mode=a_p
The School of Arts generally use APA Referencing , information is available under DBS library guides on www.library.dbs.ie.