**MODE 4201**

Mobile Architecture and Develoipment Tool

***Lab 2 – Individual work***

**Note:**

* **Individual Submission** 
  + **Submit the web link for Q1 and Q3**
  + **Q2 – Demo (week 02 / week 03)**
* Evaluation

|  |  |  |
| --- | --- | --- |
| **S/N** | **Comments** | **Marks Assigned** |
| Q1 | Web Hosting (Registration and Setup) | 35% |
| Q2 | Third Party Emulator (Installation and Testing) | 30% |
| Q3 | Mobile Application Development Tool | 35% |

1. **Web Hosting (Registration and Setup)**

**(Submit the web link for evaluation.)**

As you all know, it will be a good idea to have a website of your own.

**A. Free Web Hosting sites outside the college**

* <https://cloud.google.com/solutions/>
* GitHub pages : Simply create a github repository with the name: <username>.github.io and you are able to visit the site, for example: <https://dregimbal.github.io/>

<https://pages.github.com/>

This is a great free option as it allows you to use git to have a local and live version of your site.

* <https://www.biz.nf/>
* [**c9.io**](https://c9.io/login) is a great site for testing cause it allows you to work directly in the terminal, pull in your github projects as well as provides an http/https url for browsing.
* <http://www.hostingadvice.com/how-to/free-web-hosting/>
* <https://www.sitebuilder.com/>
* <https://www.000webhost.com/>
* <http://www.wix.com/>
* [http://www.x10hosting.com](http://www.x10hosting.com/)  or  [http://www.x10host.com](http://www.x10host.com/)
* [http://www.byethost.com](http://www.byethost.com/)
* [http://www.bibaloon.com](http://www.bibaloon.com/)

Please register to any free website so we can post information. You can experiment yourself or research what it is best site for your needs.

**B. Welcome page (Follow your own format)**

* Create a welcome page with the following features:
  + Personal details (don’t post confidential information)
  + Course Details: MODE 4201

**C. Course page**

* + Classworks
  + Labs
    - Lab 2 – Mobile Application Development Tool (explain here under different headings)
  + Projects

**Note: You can do in your own format in building the website.**

1. **Third Party Android Emulator Installation and Testing**

**(Demo in class to get the marks)**

<http://www.androidauthority.com/best-android-emulators-for-pc-655308/>

**A. Install Android Emulator other than from Android Studio.**

**B. Download an .apk file from Lab2 (DC Connect 🡪 content 🡪 Labs)**

**C. Test the .apk file using the Emulator**

**D. Test the .apk file using your smart phone**

**E. Download second .apk file from Internet. (any)**

**F. Test the .apk file using the Emulator**

**G. Test the .apk file using your smart phone**

**Note: You will be testing two .apk files**

1. **Mobile Application Development Tool**

**(Publish The document as a web page on the server setup in Q1)**

The three main architectures in developing Mobile apps are Native Apps, Web Apps and Hybrid (cross-platform) apps. Each architecture allows the apps to be developed for iOS, Android, Windows Phone, etc. platforms.

Your task is to select a **development tool** (Android Studio, MIT App Inventor, Basic for Android, XAMARIN, Cardova Phonegap, etc.) to develop apps for any architecture. Explain about the tool in terms of:

1. Tool Name : Name, version or revision
2. Platform (explain the architecture – example iOS, android, windows Phone (one or multiple)
3. Application Development Type : indicate the
   1. Type (Native App, Web App, Cross-platform)
   2. Advantages
   3. Disadvantages
4. Website : provide the link
5. Developers : Indicate the developers (original and current if different)
6. Release Date
7. License
8. Price
9. Programming Language(s) : list all the languages used to develop an app
10. Features
11. Debugger
12. Built-in Emulator
13. Host machine requirements in terms of hardware (processor, main memory, hard drive storage, etc.) and software (Operating system, editors, any other software needed)
14. Integrated Development Environment (IDE) – does it have an IDE or use any editor ( notepad++) to create the code.
15. Software to be installed on the host machine before you can create an app
16. Advantages
17. Disadvantages
18. Language availability (like English, French, etc.)
19. Uploading and Selling an App – Do you need to pay any license fee to upload the apps? If so, how much, steps involved in selling an app along with the dollars and cents as a share.
20. Third –party emulator which can be linked to the tool : Select an emulator and explain in detail
21. Market Share
22. Number of apps available
23. Number of downloads/users if applicable
24. Any other two properties not listed above