CSE2216
Application Development Lab

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Google classroom - **nklnttb**

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Course Outline

1. Why do we need a Mobile App

2. How Mobile Apps are built - Different Frameworks

3. Designing a basic mobile app

4. Making the app interactive

5. Using the internet to empower the app

6. Send it to F&F using Android Phones

Clarifications

1. In this lab, the most important rule is –

    TRY YOURSELF.

2. You must form a team of 2-3 members for the project **before 2nd lab. (July 27, 2023)**

3. Try to install Android Studio on your home pc if it has more than 6GB RAM.

Setting Up

1. Installing android studio - https://linuxhint.com/install_android_studio_ubuntu/

2. Setting up and connecting emulator

3. USB & wireless debugging - https://developer.android.com/studio/run/device

4. Sharing screen with scrcpy on windows - https://github.com/Genymobile/scrcpy

5. Setting up bitbucket/GitHub account

Contents

Lab 1 - Introduction to Android and Java Recap
(Sorting, Collection, ArrayList, HashMap Exercise, Interface)

Lab 2 - XML Layout Designing and adding Interactions,

Lab 3 - Event, Manifests, Intents including Image

Lab 4 - Activity Lifecycle, Toast, Logcat , Logo
& Brief on Project and Tutorials

Lab 5 - HTTP, API, JSON

Contents - 2nd Half

Lab 6 - Project Proposal & Tutorial Topics -

Lab 7 - Splash Screen, Webview, ProgressBar, Map

Lab 8 - Project Progress 1 - September 21 [After incourse]

Lab 9 - Integrating Firebase - October 5

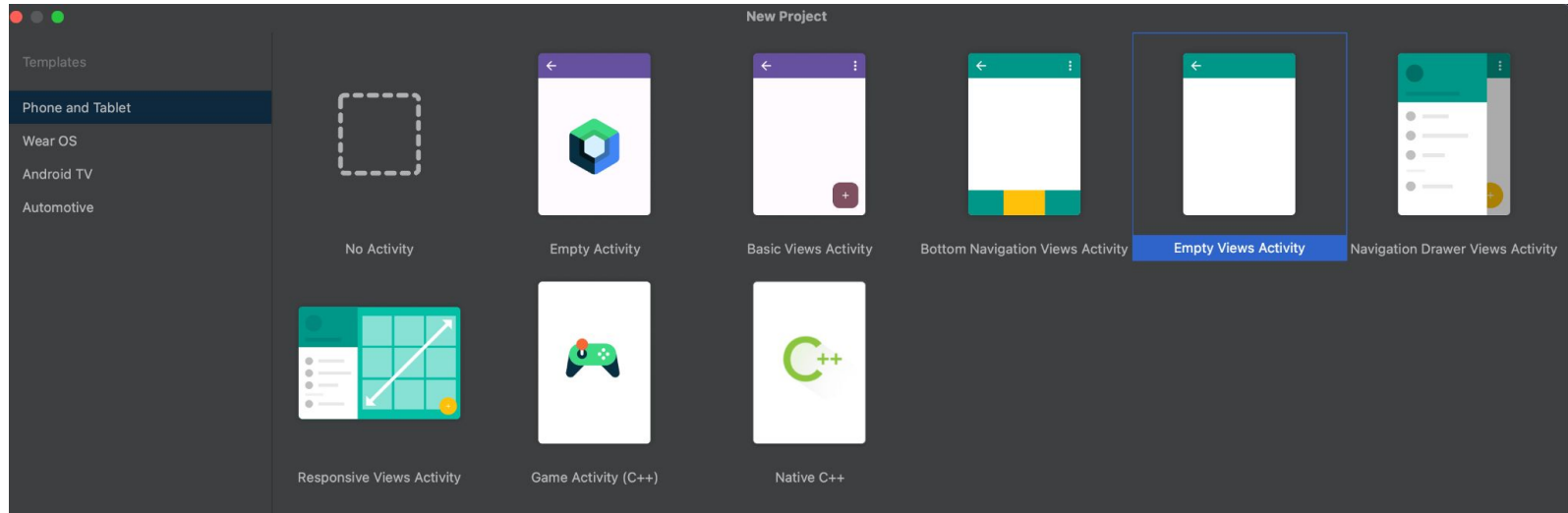Lab 10 - Project Progress 2 - October 12

Lab 11 - Project Presentation - Group 1 - October 26

Lab 12 - Project Presentation - Group 2 - November 2

AS Project Setup

1. Download and Install Android Studio

2. Launch Android Studio and Click on Create New Project

3. Select Empty Views Activity , not Empty Activity

4. Set up Project Name, Package, Path and Language

5. Click Finish

Choosing Right Type

Configuring Project

Empty Views Activity

Creates a new empty activity

Name	Lab1
Package name	csedu.cse2216.lab1|
Save location	/Users/fahimarefin/AndroidStudioProjects/Lab1
Language	Java
Minimum SDK	API 24: Android 7.0 (Nougat)

ⓘ Your app will run on approximately **95.4%** of devices.
Help me choose

Questions

1. Name

2. Your 3 most favorite apps apart from social media

3. What would you make if you were the head of an app development studio.

Possible Project Topics

- Healthcare
- Education
- Learning Skills
- Entertainment
- Business & Finance
- Travel
- Mental Health
- Physical Education

Thanks!

Any questions?

You can find us at

- fahim@cse.du.ac.bd

Git

https://www.atlassian.com/git/tutorials/learn-git-with-bitbucket-cloud

https://bitbucket.org/product/guides/basics/bitbucket-interface#your-work

For GitHub :
https://www.freecodecamp.org/news/learn-the-basics-of-git-in-under-10-minutes-da548267cc91/