

NATIVE MOBILE PROGRAMMING

CSM 3123

NAME : ILHAM HANINA MADIHA BINTI OTHMAN

MATRIC NO : S63762

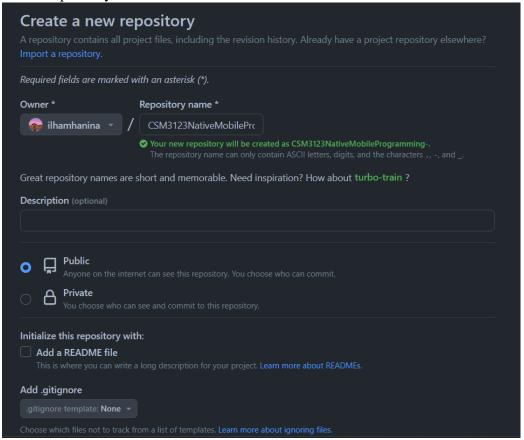
LECTURER : DR RABIEI B MAMAT

LAB : LAB WEEK 1

LAB DATE : 26 OCTOBER 2023

1. Setup github

1.1 Create repository.



1.2 Check if the installation of git is successful.

```
PS C:\Users\user> git
usage: git [-v | --version] [-h | --help] [-C <path>] [-c <name>=<value>]
[--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
[-p | --paginate | -P | --no-pager] [--no-replace-objects] [--b
are]
                  [--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
                  [--config-env=<name>=<envvar>] <command> [<args>]
These are common Git commands used in various situations:
start a working area (see also: git help tutorial)
                    Clone a repository into a new directory
Create an empty Git repository or reinitialize an existing on
    clone
     init
work on the current change (see also: git help everyday)
add Add file contents to the index
mv Move or rename a file, a directory, or a symlink
restore Restore working tree files
                     Remove files from the working tree and from the index
    rm
examine the history and state (see also: git help revisions)
                    Use binary search to find the commit that introduced a bug
Show changes between commits, commit and working tree, etc
Print lines matching a pattern
    bisect
    diff
```

1.3 Create a directory named CSM3123NativeMobileProgramming

1.4 Open the directory

```
PS C:\Users\user> cd CSM3123NativeMobileProgramming
PS C:\Users\user\CSM3123NativeMobileProgramming>
```

1.5 To create a file named README.md writes CSM3123NativeMobileProgramming in it, write this and write command cat README.md to read the file.

```
PS C:\Users\user\CSM3123NativeMobileProgramming> echo "CSM3123NativeMobile Programming" >> README.md
PS C:\Users\user\CSM3123NativeMobileProgramming> cat README.md
CSM3123NativeMobileProgramming
PS C:\Users\user\CSM3123NativeMobileProgramming>
```

1.6 Write git init to tell the computer that the directory is managed by the Git program and add command git add README.md to tell the Git program that we want to track any changes.

```
PS C:\Users\user\CSM3123NativeMobileProgramming> git init
Initialized empty Git repository in C:/Users/user/CSM3123NativeMobileProgramming/.git/
PS C:\Users\user\CSM3123NativeMobileProgramming> git add README.md
```

1.7 Create a commit with command git commit -m "first commit". Commit is like a milestone.

```
PS C:\Users\user\CSM3123NativeMobileProgramming> git commit -m "first commit"
[master (root-commit) 3134555] first commit

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 README.md
PS C:\Users\user\CSM3123NativeMobileProgramming>
```

1.8 Connect GitHub repo with computer.

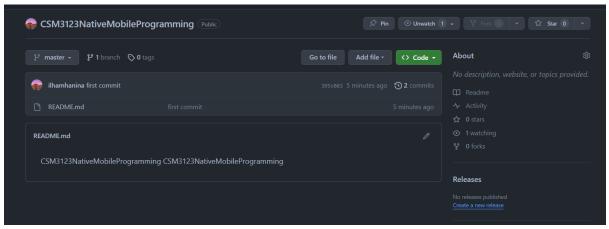
```
PS C:\Users\user\CSM3123NativeMobileProgramming> git remote add origin https://github.com/ilhamhanina/CSM3123NativeMobileProgramming.git
PS C:\Users\user\CSM3123NativeMobileProgramming> |
```

1.9 Push origin

```
PS C:\Users\user\CSM3123NativeMobileProgramming> git push -u origin master info: please complete authentication in your browser...
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 489 bytes | 489.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/ilhamhanina/CSM3123NativeMobileProgramming.git
* [new branch] master -> master
branch 'master' set up to track 'origin/master'.
PS C:\Users\user\CSM3123NativeMobileProgramming> |
```

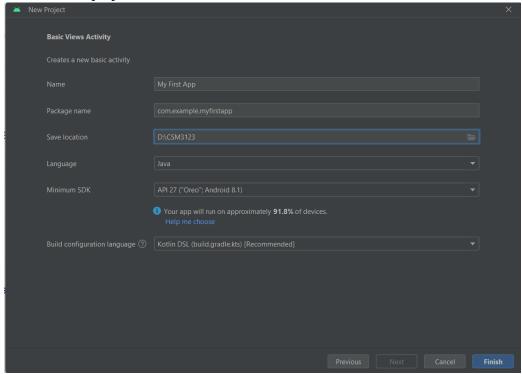
1.10 And if we go to

https://github.com/ilhamhanina/CSM3123NativeMobileProgramming , we will see this :



2. Create your First Android App.

2.1 Create a new project.



2.2 All of the codes are provided in the GitHub platform, https://github.com/ilhamhanina/CSM3123NativeMobileProgramming.git on Lab 1 folder.

3. Define the following keywords according to Android Studio Development Environment

a. Views

This class represents the basic building block for user interface components. A View occupies a rectangular area on the screen and is responsible for drawing and event handling. View is the base class for widgets, which are used to create interactive UI components (buttons, text fields, etc.). The ViewGroup subclass is the base class for layouts, which are invisible containers that hold other Views (or other ViewGroups) and define their layout properties.

b. Toast

A toast provides simple feedback about an operation in a small popup. It only fills the amount of space required for the message and the current activity remains visible and interactive. Toasts automatically disappear after a timeout.

c. Fragment

A Fragment represents a reusable portion of your app's UI. A fragment defines and manages its own layout, has its own lifecycle, and can handle its own input events. Fragments can't live on their own. They must be hosted by an activity or another fragment. The fragment's view hierarchy becomes part of, or attaches to, the host's view hierarchy.

d. Intent

An Intent provides a facility for performing late runtime binding between the code in different applications. Its most significant use is in the launching of activities, where it can be thought of as the glue between activities. It is basically a passive data structure holding an abstract description of an action to be performed.

e. Resources

"Resources" in the context of Android development refer to assets, such as layout files, images, strings, and other data that are external to the code but are essential for defining the user interface and behaviour of an app. Android apps use resources to support localization, theming, and overall flexibility.

f. Layout

A layout defines the structure for a user interface in your app, such as in an activity. All elements in the layout are built using a hierarchy of View and ViewGroup objects. A View usually draws something the user can see and interact with. A ViewGroup is an invisible container that defines the layout structure for View and other ViewGroup objects.

4. Submission

Github Link:

 $\underline{https://github.com/ilhamhanina/CSM3123NativeMobileProgramming.git}$