

COMP 3717 - Mobile Dev with Android Tech (x-list 202330) DTC









Assignments > Week 5: Minions

# Week 5: Minions

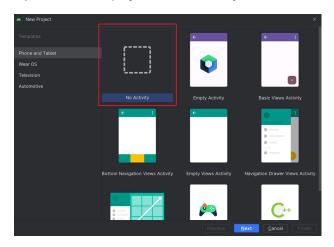
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Instructions

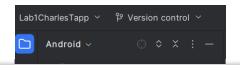
# Lab 4 - 10 points

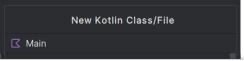
## Setup - 2 points

1.) Create a new project with No Activity

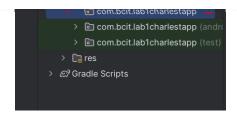


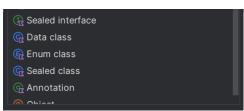
- 2.) Name it 'Lab4YourName' (replace 'YourName' with your real name)
- 3.) On your package directory *right click -> New -> Kotlin class/file* and create a new file called *Main*











4.) Create a main function and run the program to create a configuration

```
Main.kt ×

package com.bcit.lab1charlestapp

fun main() {
    println("Hello World")
}

7
```

5.) At the top of the file comment in your name and student number

### Program - 8 points

You have been given some UML designs for a game where you send minions off on missions. Your task is to follow the designs and the requirements below to create the game.

See the UML design here to start setting up the program

Figure 1

```
"C:\Program Files\Android\Android Studio\jbr\bin\java.e.

Wheres' me trusty ol hammer?

A Dwarf was sent off to gather some resources!

...

A Dwarf has returned from gathering, and found silver!

Process finished with exit code 0
```

Figure 2

```
"C:\Program Files\Android\Android Studio\jbr\bin\java.exe
My arrows never miss!

An Elf started a new hunt!

...

An Elf has returned from a hunt, and found a buffalo!
```

Figure 1 & 2 are examples of possible outputs the game might have

- The text in the green box is printed in MissionListener's missionStart()
- The text in the yellow box is printed in MissionListener's missionProgress()
- The text in the purple box is printed in MissionListener's missionComplete()
- The text in the orange box is the minion race
- The text in the red box is a possible reward
- The text in the pink box is the minion catchphrase

#### Race data

- Human:
  - base health: 5
  - base speed: 5
  - o backpack size: 5
  - o catchphrase: ""
- Dwarf:
  - o base health: 8
  - o base speed: 2
  - o backpack size: 8
  - o catchphrase: "Wheres' me trusty ol hammer?"
- Archer
  - o base health: 2
  - o base speed: 8
  - o backpack size: 3
  - catchphrase: "My arrows never miss!"

#### **Calculating reward**

- The time is takes to perform mission:
  - Gather: backpack size \* base speed \* random number between 0-4 inclusive
  - Hunt: base health \* base speed \* random number between 0-4 inclusive
- · Rewards based off time
  - Gather
    - between 10..21 = bronze
    - between 22..33 = silver
    - between 34..50 = gold
    - outside these ranges = nothing
  - Hunt
    - between 11..20 = mouse
    - between 21..30 = fox
    - between 31..50 = buffalo
    - outside these ranges = nothing

When you run the program, pass the *missionListener* into *start()* or *repeat()* as an anonymous class

start() should invoke the missionListener functions

The integer passed into repeat() should invoke start() that many times

The main function and every class should be in it's own file

When finished show your lab instructor in person to be graded immediately or submit your **project as a zipped** file here to be graded later.

Due on Oct 6, 2023 11:59 PM

Available on Oct 2, 2023 7:30 AM. Access restricted before availability starts.

# Submit Assignment

Files to submit \*

(0) file(s) to submit

After uploading, you must click Submit to complete the submission.

Add a File

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Comments