Weekend 5 Homework Research

1. What is an extension function?

Extension function is a member function of a class that is defined outside of the class. In other words, it is used to extend a class with new functionality in Kotlin. An example of this would be, if you want to use a method to the String class that returns a new String with first and last character removed, since this method is not available in the String class, you can use an extension function to accomplish the task.

fun String.removeFirstLastChar(): String = this.substring(1, this.length - 1)

fun main(args: Array<String>) {

val myString= "Hello Everyone"

val result = myString.removeFirstLastChar()

println("First character is: $result")

}

1. What does Kotlin have for null safety?

Kotlin aims to eliminate the danger of null references from the code. Null Pointer Exception was one of the major issues address in Kotlin. Kotlin has 4 different operators for null safety and they are:

* Nullable operator (?)
* Elvis operator (?:)
* Null insurance (!! Or not null pointer)
* Type safety

1. What advantages does Kotlin have over Java?

Some advantages Kotlin have over Java are as follow:

* Null safety is one of the major advantages of Kotlin over Java.
* Extension functions
* Co-routines for a threading scheme because it allows us to write async code in a blocking fashion. The goal for this is to focus on the data rather than how to fetch it.
* Easier to maintain, read, and modify changes when needed.
* Created to increase productivity.
* No semicolons.
* Inferred typing, in order to set the type of variable on the fly.

1. How do you implement headless fragments?

A headless fragment is a fragment that does not contain any UI. They also do not inflate any XML resources, create or return a view. They are only instantiated and added to the activity by calling the methods of the FragmentManagement. You implement a headless fragment by pretty much the same thing like implementing a regular fragment by extending a Fragment class. However, you will need retain the instance of that fragment by checking if an instance already exists or not and if not, create a new instance.