1.Study of object oriented concepts

1 .Object : An object contains data, it’s basically a value in memory referenced by an identifier.

2.Class : it is a collection of method and variables. It’s a sort of blueprint for an object.

For example :

**public class Person{**

**String name ;**

**String socialSecurityNumber ;}**

3.Instantiation of object : It’s the creation of an object, the syntax for it is :

**Person john= new Person() ;**

**john.name= ” John ”;**

**john. socialSecurityNumber= ” 989-7897”;**

4.Visibility (public /private/protected) is how easy the variable can be changed, in public you can change it anywhere in your code, when private or protected, you need to create a method inside your class to change it.

5.Member datas/methods A method is a function in a class, it can take a value, do something with it and give back an other value or a result.

6.Inheritance :It’s a feature that allows code reusability in a class that belong to a super-class. For example a « teacher » class belong to the super class « person »

**public class Teacher extends Person {**

**private string subject=”maths”; }**

7.Interface is a programming structure that allows us to enforce certain properties (like a method) on an object or a class.

8.Polymorphism is the concept that an object can belong to more than a class.

9 .Overriding is a language feature that permit that a subclass can have an implementation of a method different of a superclass.

10.Abstract classes are classes that contains abstract methods which is a method declared but not implemented, basically you can’t create an object with this class.

3.Study Android fundamental concepts

1.We can use Java, C++ or Kotlin

2.It’s a file that contains everything that is needed to launch the application, it’s like a .exe for an application.

3.By using Linux system, for each app it launch the code on it’s own virtual machine , separated from other apps.

4.

Activities :it represents a single screen with a user interface.

Services :It’s a component that runs in the background to perform long-running operations or work for remote processes.

Broadcast receivers :it’s a component that responds to system-wide broadcast announcements. A broadcast being an announcement that something happened to the phone( low battery ,screen turned off ect..)

Contents providers is something that can take data from a file, a database, the web or a storage location and give it to the application that can use it.

5.The manifest is an xml file that check the coumponent of the app before launching it. It identifies the permissions needed for the app, declares the API level required, declares hardware and software features needed ans declares the API libraries.

6.Ressources are files that are not code, it can be images, audio files or anything related to the visual. They are needed for the visual aspect of the application.