**WEEK ONE WEEKLY ASSESSMENT**

* List out 10 advantages of Agile software development and 5 known drawbacks

**ANSWER:**

**10 Advantages of Agile software development**

* Faster Delivery: Agile process enables faster software development and delivery due to the division of the complete project into sub-modules.
* Better Quality: Agile helps in the delivery of better quality of service to the client.
* Reduced Risk: Agile helps you to take calculated risk and improve your project’s market scope
* Easy Project Management: dividing projects into sub modules helps you to manage the project easily and effectively.
* Enhance Customer Experience: Agile gives opportunity for the developer to work closely with the client and to know their vision
* Lower Development Cost: Since every step is well planned, executed, and delivered, you can easily calculate the cost of making an app and thus, justify your app budget to avoid wastage.
* Customization: The Agile process enables developers to customize the development timeline as per their choice and deliver a user-centric solution.
* Higher ROI: The Agile process aids the app owners and associated mobile app Development Company to take the right decision for gaining better ROI in the market.
* Early Market Reach: By dividing the complete app project into sub-modules, the Agile mobile app development approach encourages the team to deliver every module with the stipulated deadline.
* Agile process creates an environment where developers can get access to complete working tools.

**5 drawbacks of Agile software development**

* Less Predictability- For some deliverables, developers cannot quantifier the full extent of required efforts. This is especially true in the beginning of the development life cycle on the lager products.
* More time and commitment- Testers, customers and developers must constantly interact with each other. This involves numerous face-face conversations, as they are the best form of communication. All involved in the project must have close cooperation.
* Greater demands on developers and clients- These principles require close collaboration and extensive user involvement. Though it is an engaging and rewarding system, it demands a big commitment for the entirety of the project to ensure success.
* Lack of necessary documentation- Because requirement for software are clarified in time for development, documentation is less detailed. This means that when members join the team they do not know the details about certain features of how they need to perform. This creates misunderstanding and difficulties.
* Project easily falls off track- this method requires very little planning to get started, and assumes the customer’s needs are ever changing. With little to go on, you can see how this could limit the agile model. Then, if the customer’s feedback are not clear, a developer may focus on the wrong areas of development.
* Create 2 Repositories with 3 files in each of them Push and pull to and from these repositories at least twice using the command line or terminal on your Windows PC or Mac
* Declare 10 Variables of each of the different main data types in kotlin.

**ANSWER**

There are basically four data type variables which are; Number(Int), String, Character(char), and Boolean. Variable declaration of each are:

**Number Data type Variable:**

* Var Age: Byte = 16
* Var Salary: Int = 1\_000\_000
* Val Budget: Long = 2\_500\_600\_000
* Val mySquareRoot: Float = 12.234f
* Var StatisticalMean: Double = 8974673.9293849
* Var numberofballs: Byte = 4
* Val StadiumsPorpulation: Int = 500\_256\_345
* Var Pi: Float = 3.142f
* Var UKPorpulation: toLong = 506\_267\_764\_849\_827
* Val ClassNumber: Int = 142

**String Data Type Variable:**

* Var FirstName: String = “Nome”
* Val lastName: String = “Stella”
* Var Sentence: String = “He is a bad man”
* Var List: String = “””Chair, Table, Television, Bed”””
* Var School: String = “ Doma Group Of Schools”
* Var Church: String = “Living Spring Church”
* Var Gender: String = “Male”
* Var best\_Food: String = “Rice”
* Var Best\_Car: String = “Lambogini”
* Var best\_colour: String = “Withe”

**Character Data Type Variable:**

* Val Value1: Char = ‘a’
* Val Value2: Char = ‘y’
* Var Dan: Char = ‘f’
* Var Grade: Char = ‘F’
* Val Gender: Char = ‘M’
* Val Status: Char = ‘s’
* Val Tim: Char = ‘N’
* Val Alphabet1: Char = ‘g’
* Val Alphabet2: Char = ‘r’
* Var Alphabet3: Char = ‘u’

**Boolean Data Type Variable:**

* Val flag: Boolean = True
* Val Complexion: Boolean = False
* Var Height: Boolean = True
* Val Weight: Boolean = True
* Var blueEyes: Boolean = False
* Var Talkative: Boolean = True
* Val Shy: Boolean = True
* Var Blind: Boolean = False
* Var InLove: Boolean = True
* Val Smart: Boolean = True
* Define 5 functions which have no return value and 5 which return value. Also define 5 functions which receive arguments.

**Answer**

Five functions with no return value are:

* Fun Pi() {Var n: Float = 3.142f println(n)}
* Fun Sum(a: Int, b:Int) {Var add: Int = a+b println(add) }
* Fun sayHi() {println (“Hello World”)}
* Fun purpleCow() {println “Moo”}
* Fun Subtraction(num1: Int, Num2: Int) {Var Sub: Int = num1 – num2 println(sub)}

Five functions with return value are:

* Fun Pi(): Float {Var n: Float = 3.142f return n}
* Fun Sum(a: Int, b: Int): Int {return a+b}
* Fun sayHi(): String {return “Hello World”}
* Fun purpleCow(): String {return “Moo”}
* Fun Subtraction(num1:Int, num2:Int): Int {return num1 + num2}

Five functions which receive arguments are:

* Fun deskNum(num: Int, dig: Char): {println(“your desk number is $num+$dig”)}
* Fun Sum(fnum: Int, lnum:Int) {Var add: Int = fnum+lnum println (add)}
* Fun Name(Fistname: String, lastName: String) {println(Firstname +” ”+ lastName)}
* Fun Subtraction(num1: Int, Num2: Int) {Var Sub: Int = num1 – num2 println(Sub)}
* Fun Multiplication(num1: Int, Num2: Int) {Var Mul: Int = num1 – num2 println(Mub)}