Assignment # 01

Name   Abdul wahab
Roll no   19484
Class   BS-IT 4th semester
Subject   Software engeneering

Answer the following Question:

Q) List out three mobile development IDE and their features in detail.

Ans/ An integrated development enviroment provide all the the toals you require to write and test software, and provide better readability and classification. Three development IDE and their features are:

1) Andried studio

This is Android official IDE and build for fastening the development procces to create high-quality Androids apps.

Features:-

Faster coding and speedy iteration:
Based on intelly IDEA code editor suggest code that you can select from a dropdown list

Coding with confidence:

Android studio provide code templates and sample apps for quicker and better development

Generate APKs for all devices:

Android studio provide build automation, dependency management and customizable build configuration.

GUI tool integration:

A drag and drop visual editor is provide by Android studio.

2) Visual Studio

This is a creation of Microsoft and it uses Microsoft software development platform, visual studio offers:

Intellisense:

with intellisense, visual studio has smart auto-completion, suggestion, highlighted syntax. It provide intelligent base on variable type, function definition and import modules.

Debugging:

inject code to a running app and debug with break point.

Built in Git command:

The visual studio editor comes with Git that enable you to come directly from the editor and push and pull from any hosted SCM services.

Customizable:

You can add new languages, themes, debuggers, and additional services as well.

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3) Xcode

X code is Apple's very own IDE. It is used for building apps for Apple products.

Features :-

Single window interface:

You get all development toals in one window; coding editor, UI design asset management, testing, and debuging.

Intelligent source or code editor:

Whichever programing language you are working the editor checks your code, suggests completion, highlight mistakes or auto fill and fix.

Graphical UI design:

Xcode has interface builder for creating interfaces for Apple product.

Integrated debugger:

An essential component in every IDE. Xcode also provides a seamless debugger and simulator.

Testing and integration:

For better app performance Xcode comes with a testing framework for funtional, performance and user-interface control.

Q2) Differentiate between Requirement elicitation and Requirement specification

Requirement elicitation:
It is the process through which the customers, buyers or users of a software system discover, reveal, articulate, and understand their requirements.

If the feasibility report is positive towards undertaking the project, next phase start with gathering requirements from the user. Analysts and engineers communicate with the client and en-users to known their ideas on what the software should provide and which features they want the software to include

Requirement specification:
SRS is a document created by System analyst after the requirement are collected from various stakeholders.

SRS defines how the intended software will interact with hardware, external interfaces, speed of operation, response time of system, portability of software across various platforms.

maintainability, speed of recovery after crashing, security, Quality, Limitators etc.

The requirements received from client are written in natural language. It is responsibility of system analyst to document the requirement in technical language.

1) User requirement are express in natural language.
2) Technical requirement are express in structure language.
3) Design description written in pseudo code.
4) GUI screen prints.
5) Conditional and mathematical notations for DFOS etc.

Q3) <u>waterfall model</u>:

The waterfall model was the first process model to be introduced. It is also refered to a linear-sequential life cycle model.

Business Requirements:

A customer comes to me and say that they need a software with multiple functionality and lot of such things:

1) Music player app.
2) loop option
3) Select song from storage
4) Play back option
5) Animation
6) Play MP3 song
7) Play / pause

SDLC mode adopt:
waterfall

Requirements:
1) Android as well as Ios app
2) offline app
3) user friendly
4) Easy to use
5) Lightweight in size

Result:
In waterfall case model is successfull because, the project is small, But if client want more features we will managed or become with disaster.

And waterfall model is not a very good choice for large project.

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