**Android Assignment**

**Module -1) Introduction**

1. **What is Software?**

* **Software is a set of instructions, data or programs used to operate computers and execute specific tasks.** It is the opposite of hardware, which describes the physical aspects of a computer. Software is a generic term used to refer to applications, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part.
* The two main categories of software are application software and system software. An application is software that fulfills a specific need or performs tasks. System software is designed to run a computer’s hardware and provides a platform for applications to run on top of.
* **Application software:-**
* The most common type of software, application software is a computer software package that performs a specific function for a user, or in some cases, for another application. An application can be self-contained, or it can be a group of programs that run the application for the user. Examples of modern applications include office suites, graphics software, databases and database management programs, web browsers, word processors, software development tools, image editors and communication platforms.
* **System software:-**
* These software programs are designed to run a computer’s application programs and hardware. System software coordinates the activities and functions of the hardware and software. In addition, it controls the operations of the computer hardware and provides an environment or platform for all the other types of software to work in. The OS is the best example of system software; it manages all the other computer programs. Other examples of system software include the firmware, computer language translators and system utilities.

1. **Types Of Application?**

* There are 2 types of applications:
* **STANDALONE APPS:-**
* The application we are installing on our computer is called a standalone application. To work with any application, if you install that software into your computer then it is called a standalone application. For Example, if you want to play some videos, generally we are using VLC PLAYER. To create a documentation or PowerPoint presentation we go for ms office. To browse something from the internet we are using Mozilla Firefox or Google Chrome. All these are standalone applications.
* The standalone application is always compatible with a single operating system. We have to specify which operating system we are using, which is important. Application is always dependent on an operating system is called a standalone application.
* **WEB APPLICATIONS:-**
* Without installing any software, we are working with the software called a web application. Regularly we are using gmail.com, facebook.com, YouTube, and google.com, we don’t need to install these applications before using them. It is independent of the operating system, that is not dependent on a particular operating system. Examples: Facebook, Gmail, IRCTC.

1. **What is Mobile Application?**

* A mobile app (or mobile application) is a software application developed specifically for use on small, wireless computing devices, such as smartphones and tablets, rather than desktop or laptop computers.
* Mobile apps are sometimes categorized according to whether they are web-based or native apps, which are created specifically for a given platform. A third category, hybrid apps, combines elements of both native and web apps.

1. **Difference between mobile application and web application?**

* Mobile applications are specifically created to be operated from mobile. In contrast, web applications are created with the purpose of the content and services being browsed by the user from any device via browsers.
* Mobile applications need to be installed from the app store, while web applications can be easily viewed from any browser and thus do not need to be installed.
* Mobile applications can be accessed even offline, and that’s not the case with web applications since browsers do not work without a proper internet connection.
* Mobile applications are faster to browse, while web applications may take a while to load.
* Mobile applications need to be approved by the app store. Since web applications are browsed through browsers, they need not require approval from the app store.
* Mobile applications have more sophisticated security, while web applications may not have that level of heightened security compared to mobile applications.
* Mobile apps need to be updated frequently. Web apps will take care of updates themselves.

1. **Who Developed Android?**

* Android is a mobile operating system based on a modified version of the Linux kernel and other open-source software, designed primarily for touchscreen mobile devices such as smartphones and tablets. Android is developed by a consortium of developers known as the Open Handset Alliance, though its most widely used version is primarily developed by Google. It was unveiled in November 2007, with the first commercial Android device, the HTC Dream, being launched in September 2008.