**Coding and Robotics**

**Week 1: General Class**

**Topics: *Introduction, Objectives, Importance, How to Learn, Result***

**Introduction:**

We are going to study the basic programming languages used in designing and developing apps.

These programming languages includes: HTML, CSS, JAVASCRIPT, BOOTSTRAP, PHP, SQL, PYTHON, FLUTTER, KOTLIN and many more.

The people that building these apps through coding are called programmers.

There are different categories of the building process:

1. Drawing how it will look like: this is done by the UI/UX Designer
2. Designing what was drawn: this is done by the Front End Developer
3. Developing the functionalities of what was drawn: this is done by Backend Developer

What is **Coding?**

This is a process of performing a computer computation usually by designing and developing an executable computer program.

**Objectives:**

To build scalable solutions to ICT problems in form of Apps.

**Importance:**

1. Critical Thinking: Becoming a programmer by coding requires thinking out possible ways of arriving at a set goal.
2. ICT Inclined: By the frequent use of computer for coding which leads to research would enhance your knowledge of ICT terminologies and use.
3. Problem Solving: Before you should start coding, you must have seen a problem which you want to solve.
4. Creativity: By thinking of what you can do with coding, you start being creative to identify the situations or systems that can be upgraded by coding to ease operations with less negative effect on the society and humans.

**How to Study Coding:**

1. We need to have a computer device and an internet connection
2. Download the code editors required for writing a particular programming language. Example: Sublime text 3, Visual studio Code and many more. You may also download the IDE specifically made for the programming language of interest. You may download the programming language where the language is environment based programming language.
3. Learn how to write coding by installing the editors you have downloaded and following this lecturers in this class, you would grow step by step in learning.
4. Build a project by utilizing all you have learnt in the class. You can make a simple app
5. Run and debug your app. This is to make sure that everything is working well and is called test running.
6. Stage your app. This is to allow your people see what you have done for advice and suggestions towards making it better.
7. Publish your app. This is the process of releasing your app to the world for use.

**Result:**

1. Review

**Assignment**

1. Write two objectives of coding and robotics
2. Write two importance of coding and robotics
3. What are the full meaning of the following: HTML, CSS, SQL, UI/UX, ICT, IDE
4. Write two expected results after publishing your app.