CERTIFICATE OF PARTICIPATION

This Certificate is awarded to

Abraham Festus

for participation in

INTRODUCTION TO COMPUTER SCIENCE

After this course, the participants have learned about:

COURSE CONTENT

Introduction to Computer Science

A brief history of computer hardware and software
- Basic hardware elements
- von-Neumann architecture
- Input Process Output model

Introduction to operating systems
- History of operating systems
- Concept of abstraction layers

General concepts of computer programming
- Diversity of computer programs
- Basic concept of algorithm and flowcharts

Basic concepts of User and Command Line Interface
- Concept of an interface
- Difference between User and Command Line Interface
- Basic Linux commands (bash commands)

Introduction to Programing (Python)
- Brief introduction of python
- Basic data types (booleans, numbers, strings, lists, dictionaries)
- Usage of variables
- Operations (Logical and Arithmetic)
- Boolean logic and decision making
- Conditionals (if, if else, else)
- Functions (parameters, return value)
- Modules
- Introduction to Flask

Web Technology:
- Network and Internet fundamentals
- Introduction to web programming
- Introduction to HTML and CSS
- A brief introduction to static and dynamic web apps

Version Control with Git
- Overview of version control systems
- Introduction to Git
- Working with Git repository [create local repo]
- Basic Git Workflow [edit, add and commit]
- Working with remote repository [creation, push]
- Introduction and working to Github

LEARNING OUTCOMES

Upon successful completion, students have the knowledge and skills to:
- write a simple algorithm in python.
- Run basic commands in the command line.
- Know basic python structures and data types.
- Know the basics of web technologies.
- Able to generate small web apps (HTML & CSS).
- Able to use the python framework "flask" in order to run dynamic web applications.

This course was held for a period of 50-hours from September 2020 to December 2020.
Munich, 10th of December 2020

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CEO & Co-Founder