***Analysis of the Best Programming Language for Beginners***

**Introduction**

*Topic:*

Best Programming Language for Beginners

*Background:*

According to Wikipedia, a programming language is a system of notation for writing computer programs. When people want to learn programming for the first time, people nowadays usually recommend Python as their first programming language. Klabat University or usually called Unklab is one of the examples for it. In Unklab, new students use a programming language like Python to start learning how to make programs. But it’s a different story with 3rd and 4th-year students because they used C++ as their first language instead of Python.

*Statement of the problem:*

People who want to learn about programming for the first time are having some confusion when choosing the programming language they should learn first.

*Purpose:*

Considering how technology have evolved and will evolve more in the future, we hope this research will be able to inform new students or beginners which programming language they should learn first.

*Questions and objectives:*

In this research, we will ask 4th year computer science majors a few major questions such as Is python better than C++ as the first programming language to learn? Is python the best programming for college students to learn? What about the other programming language?

**Literature Review**

*Introduction:*

Programming language is a bridge for us humans to communicate with a computer. Learning a programming language is important, especially for those who want to pursue a career in the tech industry. This literature review is focused on trying to figure out what is the best programming language for beginners.

*Body:*

There is a research named “A controlled experiment on Python vs C for an Introductory Programming Course: students’ outcomes”. The research talks about a programming language for beginners. It focuses on choosing a programming language to be used in an introductory computer programming course. The researcher states that they believe they can claim that the use of Python in an introductory programming course would have a higher impact on exam grades than the use of pair programming, and both would have a similar impact on the quality of the assignments. They also believe that the only aspects of Python that were relevant in this experiment were the simpler syntax (in comparison to C), dynamic types, simpler semantics for lists (as opposed to C arrays), and the interactive environment. Some of their important publications are Enbody et al. [2009], Enbody and Punch [2010], and also Hunt [2015]. In this experiment the research had, three faculty taught MC102 in two semesters, the second semester of 2015 and the second of 2016, alternating between C and Python. Thus a professor may have taught the course in 2015 in C, and 2016 in Python, and both instances were offered to students of the same major, says Mechanical Engineering. The results show that the average grade in each one of the two exams was higher in the Python course, and the number of students that failed the course were lower, compared to the C version. Also, students in the Python course were able to solve more lab projects, while submitting fewer erroneous solutions until submitting a final correct one. Unfortunately, they point out that they have not tested the impact of this change on future CS courses.

*Conclusion:*

**Methodology**

*Type of Research:*

Our type of research will be qualitative

*Population and Sample:*

The subjects for this research will be 3rd and 4th-year computer science majors.

*Instruments:*

We will use google form as our instrument for our research

*Data Collection:*

The link to the google form will be shared on students’ WhatsApp or telegram groups. People will click the link and those who passed the requirements such as 3rd-year and 4th-year computer science majors will fill out the forms and submit it.

*Data Analysis Procedure:*

Still using a google form, the data we will collect will be shown on the google form.