## Introduction

We’ve discussed in broad terms what Computer Science is about. Computer Science is mostly interested in describing, analyzing and solving problems using theoretical or physical machines. However, before your eyes glaze over, you will discover that there is far more to Computer Science than simply programming. In this assignment, you will do some research on various areas in which Computer Science is applied

## Your Assignment

* You will work in groups of three or four to do your research
* Your team will create a 5-10 minute presentation on your research to the class. A PowerPoint or Slides presentation is a good starting point. Short videos or demonstrations are also encouraged
* Your research is open-ended, and does not need to be exhaustive. That is, you do not need to cover every topic within your area. Consider what may be interesting and applicable to your audience.
* Be mindful of context. Define the terms and provide examples as they relate to Computer Science. Some of the terms listed below also occur in other fields.
* Your information can be in point form (i.e. it does not need to be in full paragraphs)
* Create a “Works Cited” where you list your sources (i.e. the web sites where you found your information)
  + Place your hyperlinks directly underneath your answers
  + Format you hyperlinks. Name your hyperlinks after the website / webpage (i.e. [Wikipedia: Computer Science](http://en.wikipedia.org/wiki/Computer_science))
  + Do not simply paste URLs. [Read this document if you do not know how.](http://office.microsoft.com/en-ca/word-help/create-format-or-delete-a-hyperlink-HA010165929.aspx#BM1)
  + Wikipedia is acceptable as a starting point, but should *not* be your only reference used. Two or three reliable sources are expected

## Big Questions

* What does your topic actually refer to?

Python is a programming language that many beginners use. it is probably one of the easiest coding languages to use to this day.

* What is the history of your topic? Famous examples / names / important dates ?

Python was released on February 20th, 1991 by Guido van Rossum. Fun fact, Guido van Rossum got the name ‘python’ from a sketch show called “Monty Python’s Flying Circus”. Python was largely inspired by the ABC programming language, and Rossum developed python with the purpose to be the successor of ABC.

* Why is it important in the present? How does it apply to our lives?

Python is one of the most widely used languages, and can support various fields and use cases varying from game development to data science and web development.

* Where might this technology be in 10 years? Python might be used more in 10 years. With the rise of technology it will be very important to learn. It will be a important skill for a lot of people to apply for jobs since python is a easy and helpful language to learn it will also be taught in most schools around the world

euan gets ladies

| **Area of Interest** | **Some Places to Start** | **Student 1** | **Student 2** | **Student 3** | **Student 4** |
| --- | --- | --- | --- | --- | --- |
| Theoretical Computer Science | Allan Turing / Enigma  Algorithms / Big O Notation /  Computability / Automatons |  |  |  |  |
| Python | Comparison to other Languages /  Current Uses /  Examples / Demonstrations | Jaeden | Euan | Leo | hassan |
| Java | Comparison to other Languages /  Current Uses / Android  Object Oriented programming |  |  |  |  |
| Internet | HTML / PHP / Javascript / Architecture / Who Owns the Internet / Internet of Things. |  |  |  |  |
| Computer Architecture | Von Neuman architecture /  Quantum Computers /  Moore’s Law / Logic Gates |  |  |  |  |
| Artificial Intelligence | Machine Learning / Singularity / Turing Test / Big Data / Autonomous Vehicles |  |  |  |  |
| Computer Graphics | Animation / Rendering / Display Hardware / Heads Up Display /  Vector vs Raster / Resolution |  |  |  |  |
| Human-Computer Interaction | Interface Design / Speech Recognition / Visual Recognition / Physical Interfaces / Ergonomics |  |  |  |  |
| Robotics | FIRST robotics / Unmanned Exploration / Drones / Use in Medicine / Nanotechnology |  |  |  |  |
| Virtual Reality / Augmented Reality | Oculus Rift / Hololens / Vive  Mass Online Games  Virtual Design |  |  |  |  |
| Other |  |  |  |  |  |
| Other |  |  |  |  |  |

Comparison to other Languages /

Comparison to other languages -Hassan

Python is used to develop websites and games. It is very popular. Although Python is a good language to develop websites with, it is generally slower than java. However Python takes less time to develop. Python is a compiled language. Python is also easier to read.

Current uses - Euan

You may not realise it, but python is used in many different softwares and applications that we use today. Google, YouTube, Instagram and Spotify are all hugely popular apps that use python as one of the main languages. Why is python so popular? Python is relatively easy to learn and can be picked up quickly by many programmers and software developers, making it a reliable language to use. The simplicity of python makes it often preferred over Java and C++, and can be used efficiently by both novice and expert programmers. As industries change and technology becomes more widespread, python is becoming a skill that can be utilized in many different fields and companies, even if they aren’t software-related.

Examples - Jaeden

Demonstrations - leo

Python has wide range of use cases from