Strength

1. There is a compiler for C++ on every major operating system. (portability)

Favorable

- 2. Is a language which is compiled, so it can often run faster than languages such as Java or Python.
- 3. Has been standardized by the International Standards Association. Last version in 2011.

Weaknesses

- 1. It is not very safe by itself, as it lacks automatic boundary checks, invalid pointer checks etc. (Hard to code).
- 2. By default there is no built-in memory management, requiring developers to use external libraries or re-invent the wheel.
- 3. Its OOP system is rather archaic.
- 4. Lacks the ability to define completely custom operators. (Not to be confused with the ability to define custom implementations for a hard-wired set of operators, which C++ has.)

5. Does not offer full algebraic.

6. Functions are not first class to the property from code is form

Opportunities

- 1. Has a long established usage base that likely guarantees support for the language will continue for quite some time.
- 2. Students at P.U.P.R. have to take several programming classes, most of which are teached in C++
- 3. Has a significant number of open source libraries available.

Threats

External

Internal

Strength	Weaknesses	
 It's a C based language so it should be easy to learn for anyone with background in another C based language. Java has a very large standard class library including a GUI class. Automatic Memory Management implemented. There is a Java Runtime Environment for every major operating system. (portability) Simplified syntax (compared to C++) Very OOP. 	 If you dislike OOP or used mixed paradigms, the only way to write functions is to make them class methods. Requires an interpreter. (Slower than C++) 	
Opportunities	Threats	
1. It is a proprietary language owned by Sun.	1. It is a proprietary language owned by Sun.	
2. Lots of available code and third-party libraries	2. If the version of Java is updated it may contain bugs and therefore the Operating System may disable it.	

Unfavorable

Favorable

Internal

External

	Favorable		Unfavorable	
Internal	Strength 1. Forced indenting results in more legible code and increase in maintainability. 2. Enhanced documentation system. 3. Runs on any machine with Python installed. (portability) 4. Has many useful data structures built-in like: lists, tuples, sets, dictionaries, strings, queues etc.			Weaknesses 1. Its very slow. Slower than C++ and Java. 2. Has less libraries than C++ or Java. 3. Less familiar to students at P.U.P.R.
External	Opportunities	Pyth	non	Threats