Comparing Object Oriented Languages

Many may assume that structured programming is entirely separate from the object oriented design. However, the object oriented paradigm, in fact, incorporates the major structured programming concepts within its design. Variables, Data Structures, If Statements, and Loops are all inherent to structured programming, and are also fundamental to object oriented programming. Simula was introduced in 1966 as Simula-1 and was created to aid in simulations. The programming modules in this language were not based on procedures, but on physical objects. Each object in Simula has its own behavior and data. Many consider Smalltalk to be the first truly object oriented language as it is virtually impossible to write a program in this language that is not object oriented.

C++ was implemented in 1982 under the name ‘C with Classes’ due to the most important concept of this language being the addition of classes. This provided the means for encapsulation which is now a fundamental aspect of the object oriented design. Java was officially released in 1996 and origins from consumer electronics. With the growing popularity of Java, Microsoft produced a version of Java called Visual J++. They decided to produce a more comprehensive response and developed a language called C#. This became the foundation for the companies .NET framework.