I have neither given or received, nor have I tolerated others' use of unauthorized aid.

Joseph Leveille

Unified Modeling Language(UML) is quite useful because it sets a standard way to format most types of diagrams that may be used to describe software functionalities. This makes it easier to communicate ideas about code to people who did not work on that particular project. Without this unified set of grammar rules, the process of reading someone else's diagrams would be full of having to ask the creator to clarify their specific shapes and organization. UML is capable of visualizing every aspect of object oriented programming, so it can be used for a huge variety of idea structures. This obviously applies to object oriented coding projects, but since code is used to model real world situations, UML is naturally adept at showing how the world works as well.

In addition to clear communication, UML also provides an easier way for programmers to document their thoughts. Due to the nature of programming in that it is abstract and difficult to see in use, documentation is absolutely necessary for any piece of software that will be given to another user. For many programmers, including myself, documenting the work that has been completed feels like more of a chore than the actual implementation. So, with the widely recognized option of using UML diagrams as documentation, we can all avoid writing unnecessarily long, bland explanations to explain our work. This saves time for programmers that would much rather be working on adding the next feature in their project, which, in turn, makes the project run more efficiently.

The UML rule set makes it consistent that all programmers use the same symbols and formatting for the same classifications of diagrams, but these rules are set as they are in order to make the most logical sense to readers. Most or all of the formatting in UML diagrams are intuitive to understand, even for people who have never seen a UML diagram before. For example, the stick figures in use case diagrams are very obviously users who interact with a product in a way described by the action in the rectangle to which a line leads inside the bounds of the product.

Because UML was developed for the explicit purpose of modeling object oriented code, it offers a wide variety of different types of models so that one of them will surely apply to just about any piece of code written. This makes it useful in many roles to a great number of programmers, so the language naturally proliferated in the computer science community.

Works Cited:

https://www.tutorialspoint.com/uml/uml_overview.htm
https://www.researchgate.net/publication/322991992_Importance_of_UML_Diagrams_in_Software_Development

http://sce2.umkc.edu/BIT/burrise/pl/modeling/