Use Case Diagrams

In programming, use case diagrams help in providing a visual representation of the program and how the user interacts with it. The more complex the user interactions, the more complex the diagram.
Use case diagrams also depict interactions with other "actors" which could be outside resources or even another system. As long as it is external to the program, it can be considered an actor. A good example would be a shopping program that redirects to a third-party payment processor. This payment processor would be considered a separate actor.
The diagram is typically surrounded by a box to demonstrate where the "system" actually stops. The diagrams will also employ symbols to denote relationships such as extend or include.
Below is an example of a diagram I made for a simple program called Turtle1. The actor has a number of buttons on the input interface that control a "Turtle with a pen." The actor uses these buttons to control where the Turtle moves and whether it draws as it moves or not.