

The Waterfall Model is a process model, which was the first one to be produced. The steps in order of the Waterfall Model is analysis, requirements, design, implementation, test and debug, deploy and then lastly maintenance. For the requirements, this phase includes comprehending how the program needs to be designed and executed. The details of the input and output of the final product are written down and looked deeply into. Next, the requirements for design are study the the design and how it is prepared. This step helps in defining overall system architecture. Also, during this step the code to be written in the implementation step is done. During implementation, the system is developed into units. Every unit is ran to make sure that it functions properly, which is called Unit Testing. Next, during the test and debug stage, the software goes through testing to find possible errors. This is done so that the individual using the software does not find any issues with it. Also, for the deploy stage after all the tests are done to make sure the software works properly, the product is deployed for people to use. Lastly, maintenance is a step taken after installation, which means keeping up with the software and making any necessary changes.

The Waterfall Method was used for a long time, but then in 2001, a group of software developers came up with the Agile Manifesto methodology. "They stressed collaboration over documentation, self- organization rather than rigid management practices, and the ability to manage to constant change rather than lock yourself to a rigid waterfall development process" (Isaac Sacolick). With the Agile Development method, it always begins with the user in mind. Keeping the user in mind allows for the software to made very specifically for the user. The product owner, the person whose job it is to be the voice of the customer helps give feedback and gives ideas in order to create the best product. A big part of the Agile Development is the software development team. The teams consist of diverse members with different skills so that the job gets done. Additionally, there are agile frameworks that give specific information on the development process. The most well known agile framework is scrum, which "focuses on a delivery cadence called a spring and meeting structures: (Isaac Sacolick). The structures include planning, commitment and daily standup meetings. Overall, the agile methodology is better because when using this method, you get better quality applications, faster-developed applications and better technical practices.