Writing Assignment 3

**Topic #2**: Discuss what life-cycle model (Chapter 2) you used to develop your class project and how well it worked.

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The Mancala project consisted of creating a system to play the game Mancala on-line by two remote players. The project used a waterfall life-cycle. This paper will first discuss the phase of the project using the life-cycle model. Next it will describe how well this model worked for the project.

The Mancala project was designed and implemented on approximately two months. Upon reception of the problem statement in early October, a set of functional specifications was presented to the client. At the beginning of the implementation phase, I realized that one of the features listed in the design would be a possible bottleneck for the project. This feature initially consisted of making user profiles for the players and enabling to save several sessions of the game. This extra feature would save the state of the game and load it later if requested by a player. The client did not require such capability for the game; therefore, it was just an optional upgrade to the project. It appeared that the addition of such extra feature would be significantly time consuming. Such design would have added more complexity to the system and extended the implementation time. In order to remain in the allocated timeframe for the project and avoid going past the submission date, the profile feature had to be removed from the design. Consequently, I had to go one step back in the project workflow and revise the high-level design for the system.

During the testing phase of the system, the client asked for a slight change on the server’s interface. The client requested that the IP address of the server be visible on the server’s window. Such modifications did not require significant modifications to the structure of the program. However, I had to suspend the testing process of the previous version and add the requested change to the interface. Upon modification of that part of the implementation to satisfy the client’s request, the testing process was resumed.
For the Mancala project, the waterfall life-cycle model enabled to make some maintenance at each step of the workflow if required. It gave more flexibility to the client to suggest modifications to the system. For the programmer, the advantage of using this life-cycle model is that it required a documentation of each phase and a continuous consultation with the client to make sure he agrees with each phase of the project. However, I found it time consuming since no phase of the life-cycle is final and may require some revisions later. This model may be inefficient, especially if the client does not have a clear idea of what he really needs. If the client changes the requirements after a design is finished, that design must be modified to accommodate the new requirements, which will invalidate all the effort and the amount of time invested by the programmer.