Tenzin Sherap Nepali Lab One Ouestion 2

Short Essay. The software development process described in section 2.16 is known as the Waterfall Model. Investigate what "Agile Development" is about and compare it to the Waterfall Model. **Create a PDF file to submit.**

The waterfall model described in section 2.16 consists of seven steps. The first being **Requirements**, at this step all the equipment needed for a specific problem is gathered. The next step is **System Design**, here we lay out the structure and identify the hardware needed. The next phase is **Implementation**, we translate the problem to code so the machine can understand it. Next is the **Test and Debug** stage, this is where we find any errors the code has. The **Production** phase is when the software is released into the market or returned back to the customer who requested it. Lastly, **Maintenence** is where feedback or any errors that run in the future regarding the software is fixed. All these steps stack one another thus creating a waterfall model.

In regards to Agile Development, the waterfall development has a flaw of being slow at responding to errors. The model was designed to adapt quickly to the changes in requests from customers. The reason for its name "agile" was for quick project completion. The model wipes out anything that is inefficient. The steps in agile development are somewhat similar to that of the waterfall development:

- 1. Requirement gathering
- 2. Requirement Analysis
- 3. Design
- 4. Coding
- 5. Unit testing
- 6. Acceptance testing

What separates agile development to the waterfall is the response time between the consumers and the programmers. There are more in contact with one another. In addition, Agile Development focuses more on production than requirement analysis, they push out systems at a faster rate than waterfall development. What's vastly different is the way the requirements are skimmed into smaller parts that are incrementally developed. These iterations are small and developed in a short manner of time.

