

2.3 What is the connection between Miller's law and stepwise refinement?

Miller's law states that humans can concentrate on approximately 7 things at a time. Large software project has much more than 7 components. So, applying Miller's law was not easy. Miller's Law cannot develop a software in a single step and stepwise refinement needed. Stepwise refinement is the way that develops a computer program by first describing general functions, then breaking each function down into details which are refined in successive steps until the whole program is fully defined. And also, by Miller's law developer can construct the most critical artifacts.

2.5 How are a workflow, an artifact, and a baseline related?

A workflow is a set of activities of development that describes one of the core activities of development such as requirements, analysis, design, implementation, and test. An **artifact** is one of many kinds of tangible by-product produced during the development of software. Some artifacts help describe the function, architecture, and design of software. A baseline is a set of artifacts.

2.17 Describe a risk inherent in using the waterfall life-cycle model.

We know Waterfall model has six phases such as requirements, design, implementation, verification, deployment, and maintenance. Waterfall model basically based on sequential design process. Waterfall model works like water falls down from up. If waterfalls from up there is no way, it can go back. So, if any correction needed to make in waterfall model we can not go back to other phase. Such as if we are in implementation phase, and if we needed to change any part of design phase, we cannot go back that's the risk of waterfall life-cycle mode.

2.18 Describe a risk inherent in using the code-and-fix life-cycle model.

The Code and fix-cycle model is fully unequipped for expansion or revision.

2.20 Describe a risk inherent in using agile processes.

The risk inherent in using agile process can be following:

1. Its tough to keep track the progress of agile process for new member.
2. Measuring progress is hard not like waterfall model.
3. It needed more time and energy to communicate in between developers and customers.
4. If developer involves one agile process, they cannot work different project though that might be important for them.
5. Sometimes project can be ever-lasting due to no clear end.