

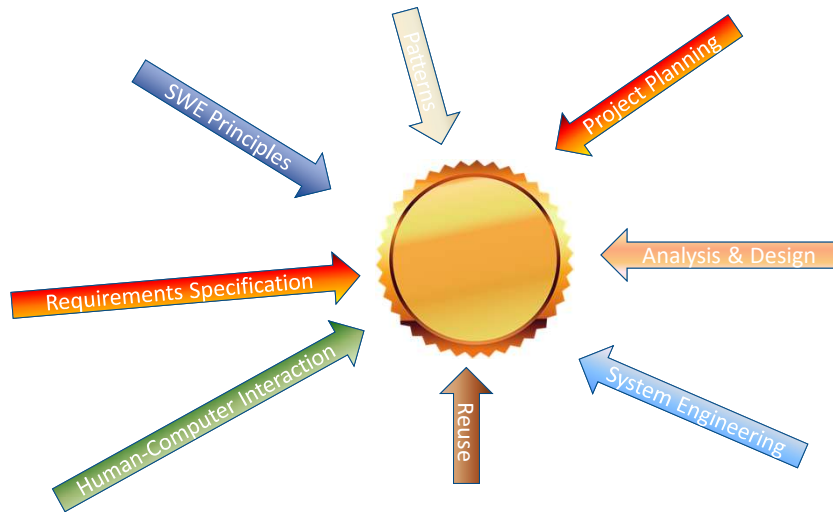


Software Quality



Welcome to the module on Software Quality.

Overview



Everything we have been talking about all semester has had something to do with software quality. This is perhaps the most central and important topic of the course. We will discuss the meaning of quality, and how to achieve and how to assure it. We will then turn our attention to defects: where they come from, what to do with them, and how to prevent them. We then discuss the Quality Triangle: People, Processes, and Tools. We conclude with a discussion of software quality assurance.

Objectives



Define some terms related to Software Quality.



Perform activities to achieve and assure software quality.



Justify the Return on Investment (ROI) of quality processes.



Prevent defects from entering your software in the first place.



Demonstrate how investments in People, Process and Tools can promote quality.



Describe the Quality organization: CM, Testing, and SQA.

Here is what you should be able to do upon completion of this module:

- Define some terms related to Software Quality.
- You should be able to perform activities to achieve and assure software quality.
- Considering that activities to achieve and assure quality are an investment, you should be able to demonstrate the Return on Investment (ROI) of performing these quality processes.
- You will be able to demonstrate techniques to prevent defects from entering your software in the first place.
- You should be able to show how investments in People, Process and Tools can promote quality.
- Finally, you should be able to describe the Quality organization: CM, Testing, and Software Quality Assurance (SQA).



Outline

- Software quality
 - What is it? How to get it?
- Defects
 - What to do about them?
- The quality triangle
 - People, Processes, Tools
- Software Quality Assurance

There are four more videos in this module.

First, we will examine three questions:

1. What is software quality?
2. How do we achieve it?
3. How do we assure it?

Then we will discuss defects and what to do about them.

Next, we will talk about the quality triangle: People, Processes and Tools. The idea is that investing in any of these three dimensions will result in improved quality.

Then we will zoom in on people, processes and tools that relate specifically to software quality assurance.



Next

- Software Quality
 - What is it?
 - How do we get it?

There's a lot here, so let's get started....