

Key Development Activities

Requirements

- What should the system do ?
- What are the needs of the users ?
- What are the needs of the host organisation ?
- What are interoperability needs of existing systems

We need to think about functional elements
(stuff that system should do)

And also non-functional elements

(quality properties of system operation)

Security, Reliability, Ease of Use, Maintainability etc.

Design

- Before we implement anything, we need an overall structure for the system
- What objects, architectures, files, databases, servers, services etc. should we create ?
- Only then do we know the places where requirements should be implemented
- Also helps divide up work between team members

Implementation

You are familiar with programming, but there is more to implementation than just “cutting code”...

- Parallel working and code sharing
- API partitioning and “firewalling”
- Versioning, integration and config management
- Development environments and automated build
- Automated testing

Docs and training material also need writing !

Verification & Validation

- Demonstrates that system meets needs of client
- Involves checking, reviewing, evaluating & testing
- Testing is the most common V & V activity
- So you'll be doing plenty of that !
- User evaluation is the most undervalued
- You'll come up with excuses why you didn't do it
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