

Requirements and Specification, ESOF 328, Spring 2022
“Beyond requirements development” (Chapter 19)
“Software requirements and risk management” (Chapter 32)

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Beyond requirements development, Chapter 19

Guideline: approximately 15% of total project effort should be devoted to requirements work

3 items to think of when deciding requirements development effort:

1. Percent of total work – Approximately 15%
2. Developer to BA ratio – Approximately 6:1 (1 BA can develop requirements to keep 6 developers busy. For COTS use 3:1)
3. Activity breakdown - # of artifacts needed – process flows, user stories, screens, reports, etc.

Estimating the project size:

- # of testable requirements
- Function points
- Story points
- #, type and complexity of interface elements
- Estimated lines of code needed to implement specific requirements

Drive software architecture:

- Functionality
- Quality attributes
- Constraints

Possible quality assurance methods:

- Testing – execute software
- Inspection – examine code to ensure it satisfies the requirements
- Demonstration – show the code works
- Analysis- reason how the system should work under certain circumstance

Software requirements and risk management, Chapter 32

Risk – condition that could cause some loss or otherwise threaten the success of a project

If something has occurred, that isn't a risk, it is an issue and should be dealt with using the requirements management plan.

Elements to risk management:

- Assessment (identification, analysis and prioritization)
- Avoidance
- Control (management planning which includes mitigation approaches, contingency plans, owners and timelines, resolution which includes executing the mitigation plan, monitoring)

Express risks using the format: condition – consequence

Risk exposure – probability that the risk occurs (somewhere between 0, impossible, to 1, inevitable) * impact if risk occurs (from 1, no problem, to 10, big problem)

Don't assume that risks are under control just because they are identified and have mitigation actions. Must monitor the risk status and determine if the mitigation plans work (page 542)