

Project Schedules

ICGE TEAM SCIENCE

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3 Major Purposes for a Schedule

- Make commitments about when tasks will be done
- Encourage team members to see their efforts as part of the whole
 - Details, with names of responsible team member are important
 - Publicizes commitments
 - Test assumptions
- A tool to track progress
 - Break project down into manageable components
 - Provides a clearer view of the project

Important components of a schedule

- Rule of thirds
 - Design
 - Implementation
 - Testing
- Design
 - Gather requirements and develop initial design
- Implementation
 - Development of actual working code/software
- Testing
 - Different than debugging
 - Compare code to desired requirements with real-world test cases

Divide and conquer

- Big projects can be broken down into smaller projects with their own schedules. Look for small wins.
- The more change/uncertainty the shorter the milestone
- Include places to make adjustments to the schedule and to react to changes in requirements

Some normal problems

- Unrealistic assumptions
- Uncertain/changing/unwritten project requirements
- Schedule is really our best estimate (probability) of how the project will progress
 - Estimates are difficult
 - Good initial designs (and experience) lead to better estimates

Common Oversights

- Did everyone review the schedule and agree to it?
- Did you take into account holidays, major events, other times when work is not likely to be done?
- Are people regularly reporting on progress?
- Is there someone in charge of the overall schedule?
- Do people feel comfortable challenging the assumptions/requirements/time estimates?

Exercise

- Create a draft project schedule for your team project
- You may start with either January or March
- End date must be April 28
- At a minimum the project schedule should include:
 - List of tasks
 - Team member name associated with the task
 - Deadline for the task

References

- Making Things Happen Mastering Project Management, Scott Berkun, O'Reilly, 2008.
 - Most of the material for this set of slides was taken from Chapter 2, pp. 24-42, with some minor modifications for this class.
- The Checklist Manifesto: How to Get Things Right, Atul Gawande, Picador, 2009.
 - A wonderful little book on how to ensure that complex processes are handled so that nothing disastrous happens.
- Project Management for the 21st Century, [Bennet Lientz](#) & [Kathryn Rea](#), Taylor and Francis, 2001.
 - A little heavier reading, but it covers most of the essential aspects of project management for all sorts of scientific and high-tech projects.