COMP 587 Lecture 2

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How is this V&V?

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- Your capabilities form a **test plan**
  - Write tests to ensure these capabilities work
- This is short (and easy to update)
- This is directly based on what we *want* the system to do
- ACC is a non-traditional test planning technique

Traditional Test Plans

- Lots of variation, but tend to include:
  - Purpose and objectives of testing
  - Testing requirements
  - Testing schedule
  - Evaluation criteria
  - Expected risks
  - Deliverables

-Requirements: what is necessary to run tests? What does the testing environment look like?
-Schedule: which tests will be written and executed, and when?
-Criteria: how do we know if our testing is successful?

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  - Testing requirements
  - Testing schedule
  - Evaluation criteria
  - Expected risks
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All good things!

-These are all good things to have, and this is giving you way more than ACC

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  - Purpose and objectives of testing
  - Testing requirements
  - Testing schedule
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All good things!
Why ACC?

-...so if these are good things, and its giving you more than ACC, why am I showing it?

ACC Motivation

- Creator of ACC asked at a software conference
- "Do you write [traditional] test plans?"
  - 80 people
- "Have you looked at them after the first week?"
  - 3 people

-A weaker test plan (ACC) is better than no test plan at all (in practice, what often happens with traditional test planning)

ACC vs. Traditional Test Plans

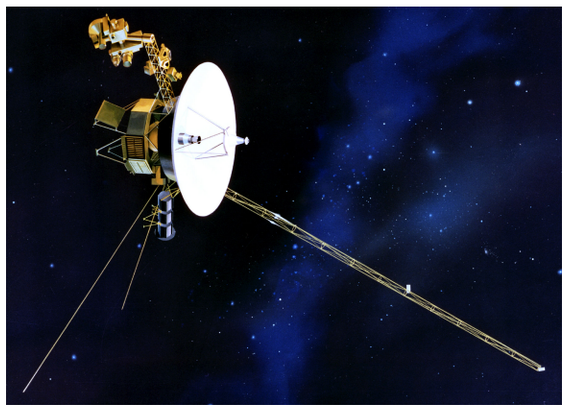
- ACC is short (and easy to update)
- ACC is based on an abstract ideal of the system
  - Changes relatively infrequently
- Traditional is long (monolithic)
- Traditional is based on a concrete system view
  - Can change rapidly

-While systems change often rapidly, their fundamental outlook tends to stay the same (e.g., Gmail is for email, Chrome is for web browsing)
-Counterexamples exist (iTunes is now for way more than just music), but even then less needs to change with ACC

Neither is Best

-If you have a startup making a web application, ACC probably suits you the best. Web technologies change rapidly, and startups tend to have limited knowledge of their requirements. ACC is flexible and won't hold you back.

Neither is Best



-If, however, you're building a space probe, you probably want a very detailed, traditional plan. You have a (relatively) great idea of what your requirements are, and they are unlikely to change. Minimization of system risk is critical, as one failure can bring down the mission.

Further Project Information (with ACC)