AN INTRODUCTION TO EXPLORATORY TESTING

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Who am I?

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What is Exploratory Testing?

- Simultaneous learning, test design and test execution – James Bach

- It's a method of testing that values the tester as an integral part of the test process

- It's an approach that shares the same values as the Agile Manifesto
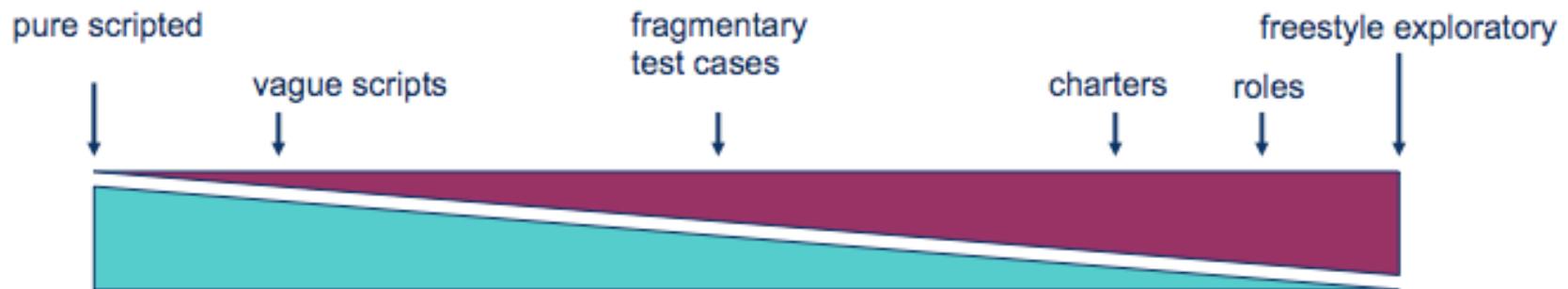

Image from Jon Bach

Exploratory Skills and Tactics

Self-Management

- Chartering
- Refocusing
- Branching/ Backtracking
- Alternating
- Recording/ Reporting
- Resourcing

Developing Ideas

- Modeling
- Questioning
- Generating/ Elaborating
- Overproduction /Abandonment
- Abandonment/ Recovery
- Collaborating

Examining the Product

- Interacting with the product
- Observing
- Applying tools
- Conjecturing
- Modeling

Session Based Test Management

- Major criticisms of exploratory testing:
  - "it's hard to make progress visible"
  - "it's hard to know what kind of coverage you have"

- SBTM developed by Jon Bach as a way to address those problems
  - The basic work unit in session-based test management is the session, and the sessions are organized around test charters.
  - Each session is time-boxed (typically 45 to 60 minutes) and the charter for each session often outlines the basic testing mission.
  - After each session, testers debrief with the test lead and charters are updated and reprioritized as appropriate.
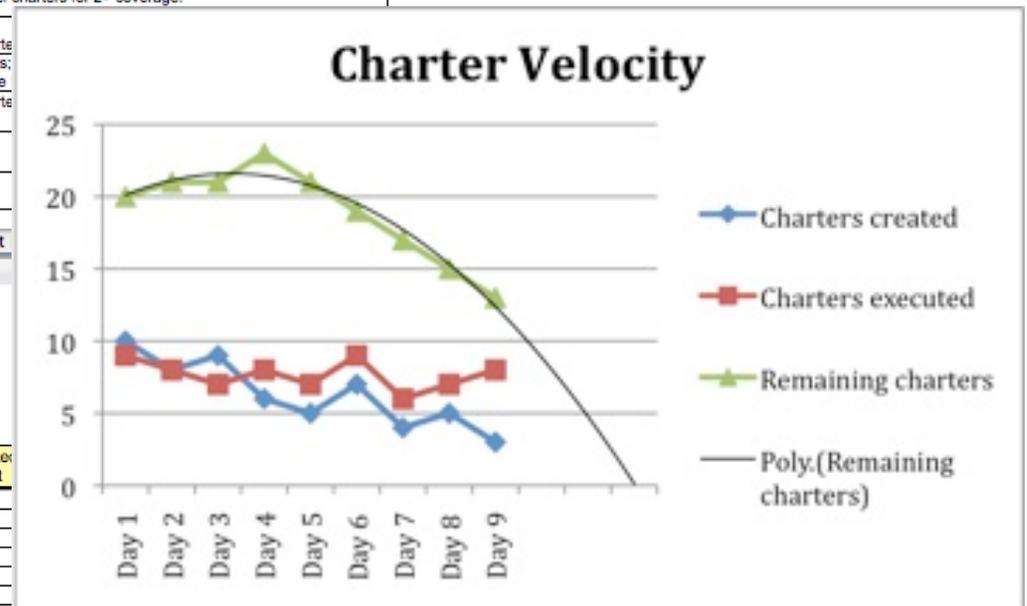
Visibility and Coverage

How we test at Interactions

- Scrum development process
- Standard agile testing practices (unit testing, continuous integration, etc)
- Session Based Exploratory Testing

Testing outside of the sprint	"Embedded" testers
- Chartering takes place during the sprint where the story is developed	- Chartering takes place during the sprint where the story is developed
- Story test execution takes place following the sprint	- Story test execution takes place during the sprint
- **Defects are worked as backlog items**	- **A story is not "done" until all defects are fixed**
- Regression testing takes place with the final release	- Regression testing takes place with the final release

How we test at Interactions (cont)

- Chartering is done by story and/or release

- Charters are tracked in JIRA

- Session notes are tracked in JIRA

  (previously on the wiki, that worked well too)

- Debriefs take place daily

- Automated regression testing for web applications

- Performance testing done on major platform changes and for new client go-live

Techniques for Exploratory Testing

- Mnemonics
    - Application touring: FCC CUTS VIDS
    - Session notes: MCOASTER
    - Coverage: SFDPOT
    - Quality Criteria: CRUSSPICSTMPL
    - Oracles: HICCUPPS
- Tools
    - BB TestAssistant (or iShowU for the Mac)
    - Selenium / Watir
    - Session Tester

Build and Price an F150 on fordvehicles.com

- We will run this like a test project
- Process:
  - Outline the areas of the application we need to test
  - Develop initial charters
  - Execute tests
  - Debrief
  - Reprioritize