EECS 394
SOFTWARE DEVELOPMENT

Chris Riesbeck

User Stories
User Stories and Scenarios

- User story: [a user type] can [do action] in order to [achieve goal]
  - "A food truck owner can see the average sales for the next 3 hours in order to know how much food to prepare ahead."
- User scenario: a story of an individual, in some typical context, using the app in some way to achieve a goal.
  - "With the breakfast rush over, Beth puts away the breakfast wraps. It's Wednesday in Daley Plaza -- how many burgers and dogs will she need to set up for the lunch crowd? She opens Nomad on her iPhone..."
Uses of Scenarios

- Demonstrate by example the value proposition and intended usage
- The basis for prioritizing what to build first
- The basis for demos and pitches
- The basis for interface and implementation decisions
USES OF USER STORIES

• The fundamental unit of work
  • Progress measured by user stories tested and done
  • Immediate tasks defined by user stories in progress
  • Amount of estimated work left calculated by story points assigned to stories divided by current velocity
User stories are not requirements

- User stories are only tokens for a conversation about requirements.
- That conversation happens when the story is selected for an iteration.
- Developing acceptance tests is a major part of that conversation.
With the breakfast rush over, Beth puts away the breakfast wraps. It's Wednesday in Daley Plaza -- how many burgers and dogs will she need to set up for the lunch crowd? She opens Nomad on her iPhone...

A food truck owner can see the average sales for the next 3 hours in order to know how much food to prepare ahead.

**Scenario**

**Stories**

**Tests**

**Given** a truck owner is logged in
**When** the owner selects Forecast
**Then** the app shows average same-day sales for the top 5 items on the truck's menu.
A user can add an item to the shopping cart

Wait! Do they have to be logged in?

<table>
<thead>
<tr>
<th>Given I am logged in</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I add an item to my shopping cart</td>
</tr>
<tr>
<td>Then my shopping cart page contains the item</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Given I am not logged in</th>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Given my shopping cart page contains items</th>
</tr>
</thead>
<tbody>
<tr>
<td>and I am not logged in</td>
</tr>
<tr>
<td>When I log in</td>
</tr>
<tr>
<td>Then my shopping cart page has the same items as before</td>
</tr>
</tbody>
</table>
Common format for acceptance tests:

- **Given**: preconditions, e.g., logged in, shopping cart not empty, ...
- **When**: user action or system event
- **Then**: required events and results
COMMON USER STORY MISTAKES

- Generic "user"
  - "User can assign grades to assignments."
  - "A teacher can assign grades to assignments."

- No goal
  - "A sandwich maker can see average sales for last week."
  - "A sandwich maker can see the average same-day sales for the next 3 hours in order to prepare enough food."

- Untestable
  - "A customer sees a more attractive interface."

- Unconnected to a critical scenario
COMMON SCENARIO MISTAKES

• Too big
  • A scenario with sequences of interactions separated in time.
  • Think scene, not a whole act.

• Branching
  • "Mentor approves request, or sends feedback on what needs to change."
  • A scenario is a story. A story has a single path. No "if" or "or" branches.
  • If there are several key alternatives, write a short scenario for each.

• No context
  • "Business owner opens statistics page."
  • "It's the end of the week. Beth is at home. She wants to see if business is improving with the new ad campaign..."
  • Critical decisions depend on where, when, why and how your app is used.

• Dummy or generic content
  • "Traveler enters desired destination."
http://www.agiletesting.info/5-common-mistakes-in-writing-user-stories-13
http://www.agile-ux.com/tag/user-stories/
http://www.scrumalliance.org/articles/366--common-mistakes-we-make-writing-user-stories