

Requirements

Requirements...

- tells us **what** we are going to develop
- are **customer**-oriented
- is an iterative process like development

How do we elicit customer requirements?

- Blueskying
 - A brainstorming session to collect ideas for the project
 - Not concerned with feasibility, just capturing everything
- Role playing
 - The customer pretends that the requirement collector is the software
 - The requirements collector then takes notes about how they (the software) should respond to the customer
- Observation
 - watch a stakeholder go about their normal work routine
 - take notes on what needs arise that the software can fill

A User Story is...

- a **single** requirement of the software
- written from the perspective of the **customer**
- written using terminology the **customer** is familiar with
- short
- **NOT about technologies or specific implementation details**

Writing User Stories - Formats

- Head First Book Format (we will focus on this style)
 - Simple and easy to write format
 - Title: Accept PayPal
 - Description: Users will be able to pay for their T-Shirt purchases using PayPal.
 - Priority: 10
 - Estimate: 4 days
- Alternative Agile Format
 - Repetitive, but highlights value and features with specific types of stakeholders.
 - As a [role], I want [feature] so that [value/rationale].
- How can we write good user stories?

The INVEST User Story Guidelines

- **Independent** - User stories should be as independent as possible (order independent).
- **Negotiable** - User stories are not contracts. As such, they should be open for further discussion.
- **Valuable** - Each story is required to be of value to the customer (it could be the user or the purchaser).
- **Estimatable** - If the story is too broad or vague, the development team will not be able to understand it, to make an estimation. The story should enable the development team to make a judgment about the complexities of work and the efforts required.
- **Small** – How long the estimate is with respect to your iterations? If the user story cannot fit within an iteration, it is probably too large.
- **Testable** - Can we verify the user story is complete? If you don't know how to test it, you may need more clarification from the customer. You might ask the question "how will I know I've done that?".

Practical User Story Guidelines

- The title of a user story completes the sentence "The user will be able to ..."
- The title is an *action* that can be performed, and what object on which it will be performed
- Split any user stories that you can. Apply the "and" rule
- There is no "Part 1" or "Part 2" user stories. Each user story is a separate deliverable
- For similar terms pick one and be consistent
 - "Delete/Remove All Trips From The Plan" use "Delete" or "Remove"
- If a title has "Or", e.g., "Add Or Delete Picture", split into separate user stories
- Stay away from technical terms, e.g., "Upload Photo"
 - What is the purpose for why they are uploading? Instead, think "Add Photo To Collection" or "Share Recent Photo".
- Avoid ambiguous terms, e.g., "Manage Photos"
 - What does this mean? Add? Delete? View?. The use of these types of terms indicates a lack of clarity and will result in wrong estimates.
- Think present tense. What is not present tense? "Will Be", "Showing"