Planning Releases and Sprints

» Decomposing requirements and creating user stories

» Creating a product backlog, release plan, and sprint backlog

» Planning sprints

REMEMBER

The concept of breaking down requirements into smaller pieces is called *decomposition.*

Refining Requirements and Estimates

What is a user story?

The *user story* is a simple description of a product requirement in terms of what that requirement must accomplish for whom. Traditional requirements usually read something like this: "The system shall [insert technical description]." This requirement addresses only the technical nature of what will be done; the overall business objective is unclear. Because the development team has the context to

Your user story will have, at a minimum, the following parts:

Title (recognizable name for the user story)

As a (type of user)

I want to (take this action)

so that (I get this benefit)

The user story also includes a list of validation steps *(acceptance criteria)* to take so you know that the working requirement for the user story is correct:

When I (take this action), (this happens)

User stories may also include the following:

- **A user story ID:** A number to differentiate this user story from other user stories.
- **The user story value and effort estimate:** *Value* is how beneficial a user story might be to the organization creating that product. *Effort* is the ease or difficulty in creating that user story. We introduce how to score a user story's business value, risk, and effort in Chapter 7.
- **The name of the person who thought of the user story:** Anyone on the project team can create a user story.

Figure 8-1 shows a typical user story card, front and back. The front has the main description of the user story. The back shows how you will confirm that the requirement works correctly, after the development team has created the functionality.

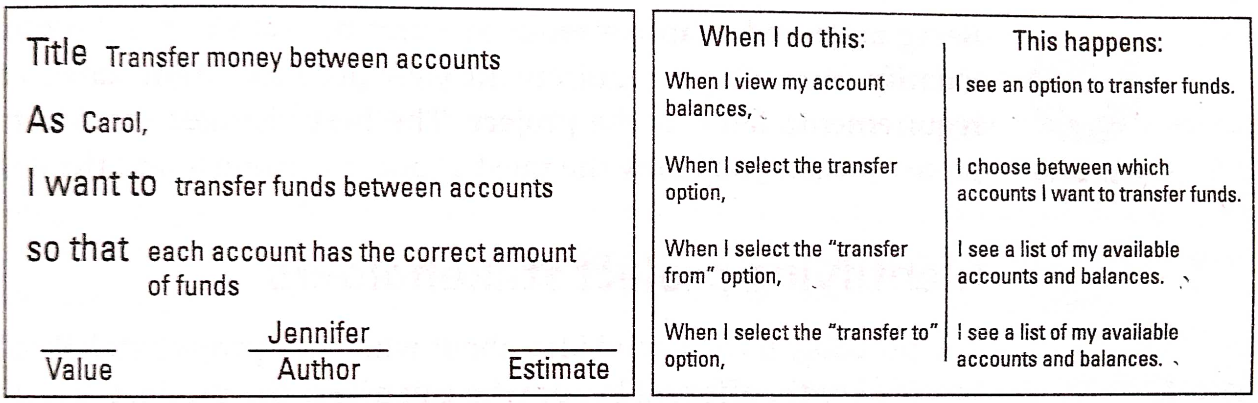

FIGURE 8-1: Card-based user story example.

Steps to create a user story

When creating a user story, follow these steps:

1. Identify the project stakeholders.
2. Identify who will use the product.
3. Working with the stakeholders, write down the requirements that the product will need and use the format described earlier to create your user stories.

Identifying project stakeholders

You probably have a good idea about who your project stakeholders are — anyone involved with, affected by, or who can affect the product and its creation.

Make sure the stakeholders are available to help you create requirements. Stakeholders of the sample mobile banking application introduced in Chapter 7 might include the following:

- People who interact with customers on a regular basis, such as customer service representatives or bank branch personnel.
- Business experts for the different areas where your product's customers interact. For example, XYZ Bank might have one manager in charge of checking accounts, another manager in charge of savings accounts, and a third manager in charge of online bill payment services. If you're creating a mobile banking application, all these people would be project stakeholders.
- Users of your product, if they're available.
- Experts of the type of product you're creating. For example, a developer who has created mobile applications, a marketing manager who knows how to create mobile campaigns, and a user experience specialist who specializes in mobile interfaces all might be helpful on the sample XYZ Bank mobile banking project.

Identifying users

Your customers and stakeholders provide requirements for the product owner to vet for placement on your product backlog. Your customers may or may not be the same people who will use your product. Knowing who your end users are and how they will interact with your product drive how you define and implement each requirement on your product roadmap.

Suppose that you're the product owner for the XYZ Bank's mobile banking project. You're responsible for the department that will bring the product to market, preferably in the next six months. You have the following ideas about the application's users:

- The customers (the end users of the application) probably want quick access to up-to-date information about their balances and recent transactions.
- Maybe the customers are about to buy a large-ticket item, and they want to make sure they can charge it.

- Maybe the customers' ATM cards were just refused, but they have no idea why, and they want to check recent transactions for possible fraudulent activities.
- Maybe the customers just realized that they forgot to pay their credit card bill and will have penalty charges if they don't pay the card today.

Determining product requirements and creating user stories

After you have identified your different customers, you can start to determine product requirements and create user stories for the personas. A good way to create user stories is to bring your stakeholders together for a user story creation session.

Title Transfer money between accounts

As Carol,

I want to categorize expenses,

so that I can easily identify my purchases made for my clients.

Value | Jennifer Author | Estimate

Title Put stop on a check

As Nick,

I want to stop payment on a lost or stolen check,

so that I can avoid any unauthorized activity on my account.

Value | Caroline Author | Estimate

FIGURE 8-2: Sample user stories.

Breaking down requirements

You refine requirements many times throughout an agile project. Fo

TABLE 8-1 **Decomposing a Requirement**

Requirement Level	Requirement
Theme	See bank account data on a mobile device.
Features	See account balances.
	See a list of recent withdrawals or purchases.
	See a list of recent deposits.
	See my upcoming automatic bill payments.
	See my account alerts.
Epic user stories — decomposed from "see account balances"	See checking account balance.
	See savings account balance.
	See loan balance.
	See investment account balance.
	See retirement account balance.

Requirement Level	Requirement
User stories — decomposed from "see checking account balance"	See a list of my accounts once securely logged in.
	Select and view my checking account.
	See account balance changes after withdrawals.
	See account balance changes after purchases.
	See day's end account balance.
	See available account balance.
	See mobile application navigation items.
	Change account view.
	Log out of mobile application.