Estimation poker

As you refine your requirements, you need to refine your estimates as well. It's time to have some fun!

One of the most popular ways of estimating user stories is by playing *estimation poker*, sometimes called *planning poker*, a game to determine user story size and to build consensus among the development team members.

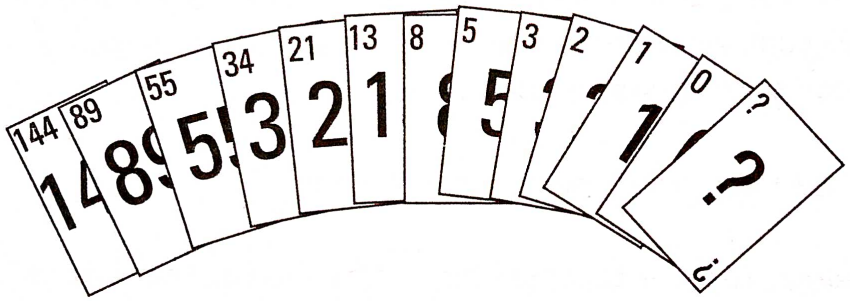

FIGURE 8-3: A deck of estimation poker cards.

The Fibonacci sequence follows this progression:

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, and so on

Each number after the first two is the sum of the previous two numbers.

Each user story receives an estimate relative to other user stories. For instance, a user story that is a 5 requires more work than a 3, a 2, and a 1. It is about 5 times as much effort as a 1, more than double the effort of a 2, and roughly the amount of effort as a 3 and a 2 combined. It is not as much effort as an 8, but is just over half the effort of an 8.

To play estimation poker, follow these steps:

1. **Provide each member of the development team with a deck of estimation poker cards.**

2. **From the list of user stories presented by the product owner, the team agrees on one user story that would be a 5.**

   The team follows two rules: (1) The development team should not allow any single user story larger than an 8 to be pulled into a sprint, and (2) scrum teams should be able to complete roughly 6-10 user stories in a sprint.

   The scrum master helps the development team reach consensus by using fist of five or thumbs up/thumbs down (as described in Chapter 6). This user story becomes the *anchor story.*

3. **The product owner reads a high-priority user story to the players.**

4. **Each player selects a card representing his or her estimate of the effort involved in the user story and lays the card facedown on the table.**

   The players should compare the user story to other user stories they have estimated. (The first time through, the players compare the user story to only the anchor story.) Make sure no other players can see your card.

5. **All players turn over their cards simultaneously.**

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6. **If the players have different story points:**
   a. *It's time for discussion.*

      The players with the highest and lowest scores talk about their assumptions and why they think the estimate for the user story should be higher or lower, respectively. The players compare the effort for the user story against the anchor story. The product owner provides more clarification about the story, as necessary.

   b. *Once everyone agrees on assumptions and has any necessary clarifications, the players reevaluate their estimates and place their new selected cards on the table.*

   c. *If the story points are different, the players repeat the process, usually up to three times.*

   d. *If the players can't agree on the estimated effort, the scrum master helps the development team determine a score that all the players can support (he or she may use fist of five or thumbs up/thumbs down, as described in Chapter 6), or determine that the user story requires more detail or needs to be further broken down.*
7. **The players repeat Steps 3 through 6 for each user story.**

Release Planning

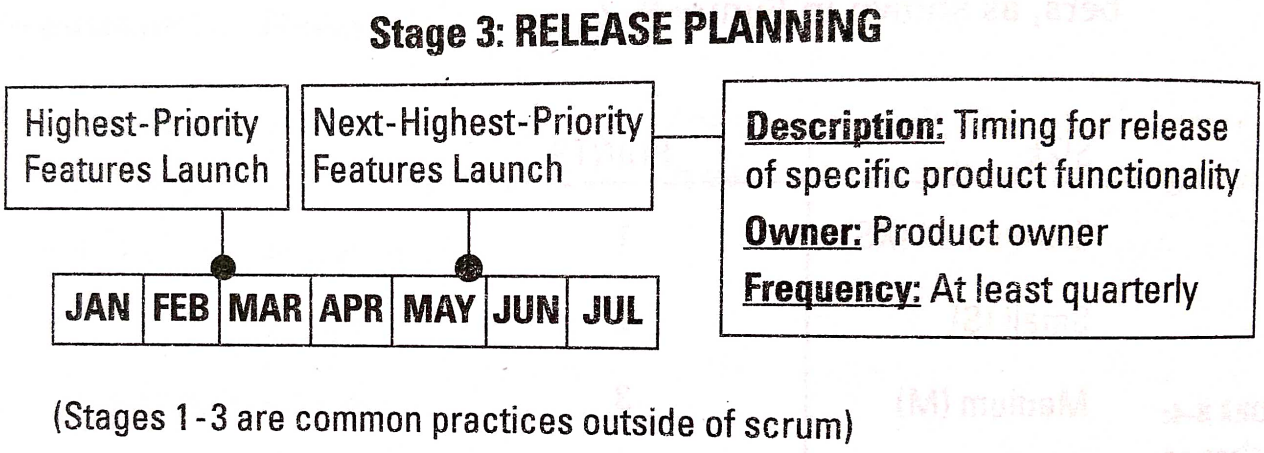

FIGURE 8-5: Release planning as part of the Roadmap to Value.

Release planning involves completing two key activities:

- **Revising the product backlog:** In Chapter 7, we tell you that the product backlog is a comprehensive list of all the user stories you currently know for

your project, whether or not they belong in the current release. Keep in mind that your list of user stories will probably change throughout the project.

- **Creating the release plan:** This activity consists of the release goal, release target date, and prioritization of product backlog items that support the release goal. The release plan provides a midrange goal that the team can accomplish.

product owner creates a release plan at the start of each release. To create a release plan, follow these steps:

1. **Establish the release goal.**

   The release goal is an overall business goal for the product features in your release. The product owner and development team collaborate to create a release goal based on business priorities and the development team's development speed and capabilities.

2. **Identify a target release date.**

   Some scrum teams determine release dates based on the completion of functionality; others may have hard dates, such as March 31 or September 1.

3. **Review the product backlog and the product roadmap to determine the highest-priority user stories that support your release goal (the minimum marketable features).**

   These user stories will make up your first release.

TIP

   We like to achieve releases with about 80 percent of the user stories, using the final 20 percent to add robust features that will meet the release goal while adding to the product's "wow" factor.

4. **Refine the user stories in your release goal.**

   During release planning, dependencies, gaps, or new details are often identified that affect estimates and prioritization. This is the time to make sure the

5. **Estimate the number of sprints needed, based on the scrum team's velocity.**

Scrum teams use velocity to plan how much work they can take on in a release and sprint. *Velocity* is the sum of all user story points completed within a sprint. So, if a scrum team completed six user stories during its first sprint with sizes 8, 5, 5, 3, 2, 1, their velocity for the first sprint is 24. The scrum team would plan its second sprint keeping in mind that it completed 24 story points during the first sprint.

6. **Identify work necessary to release that can't be completed within a sprint. Plan a release sprint, if necessary, and determine how long it should be.**

Some project teams add a *release sprint* to some releases to conduct activities that are unrelated to product development but necessary to release the product to customers. If you need a release sprint, be sure to factor that into the date you choose. You can find more about release sprints in Chapter 11.