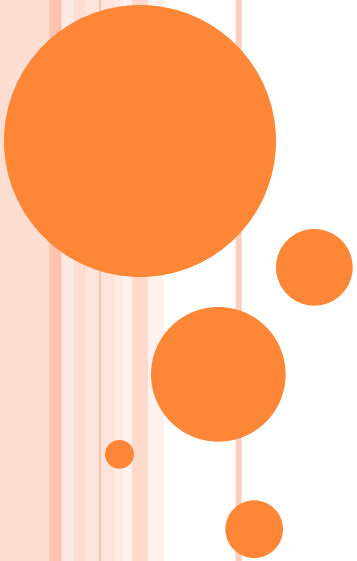


Release Planning

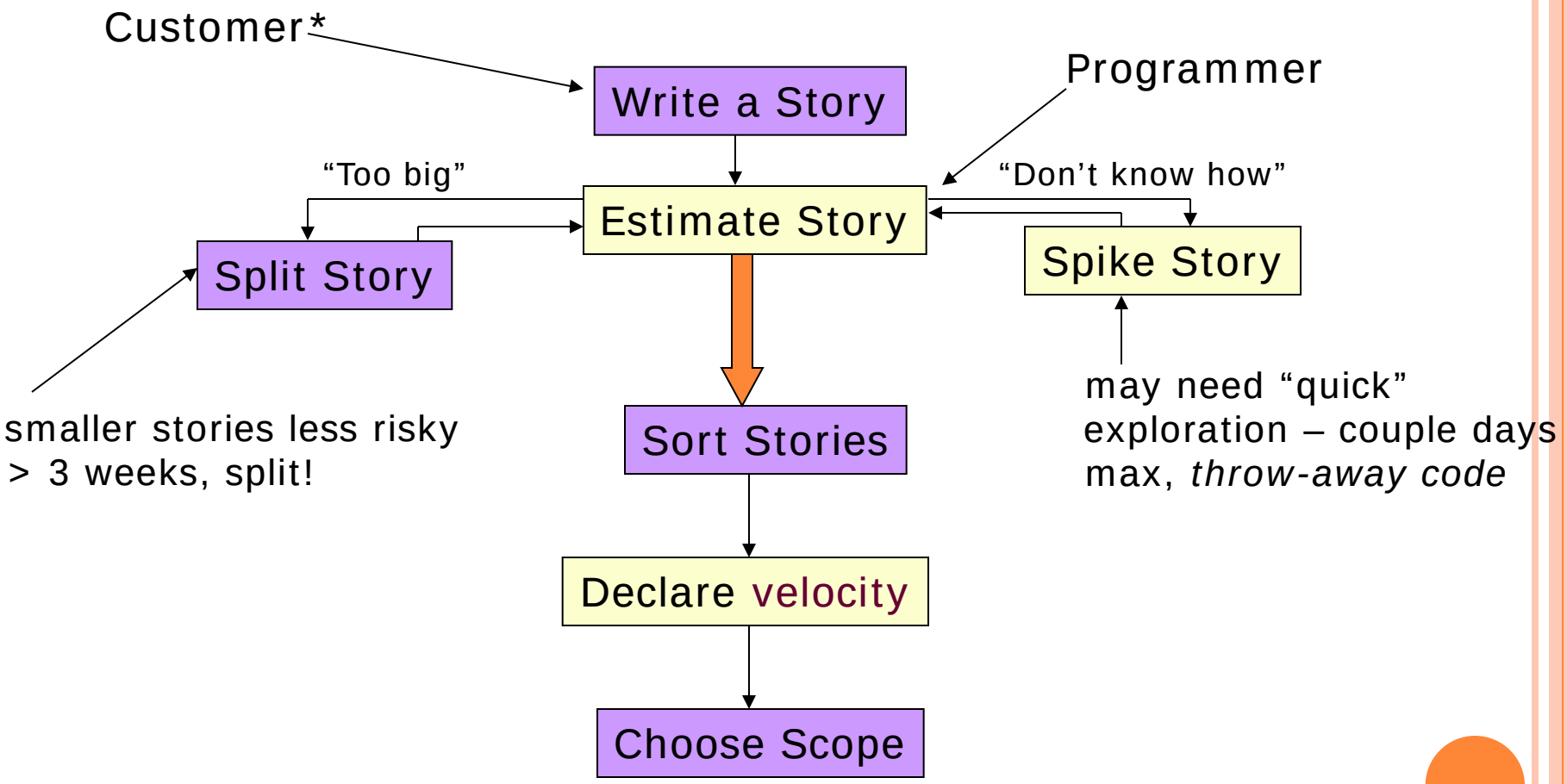
Helpful Resources

- *Planning Extreme Programming*, Kent Beck and Martin Fowler
- *Extreme Programming Installed*, Ron Jeffries, Ann Anderson and Chet Hendrickson
- *Extreme Programming Explored*, William Wake

What is a Release?

- A version of the system with enough new features to be valuable to the customer
- Probably represents 1 – 3 months work
- Release planning can take one to a few weeks

Release Planning Game



*Only customer should write story, only when they want a feature

A Story

must provide value to customer, not neat new technology

Story: Story Title

Several sentences to describe a *desired* feature.

Cite or attach supporting materials

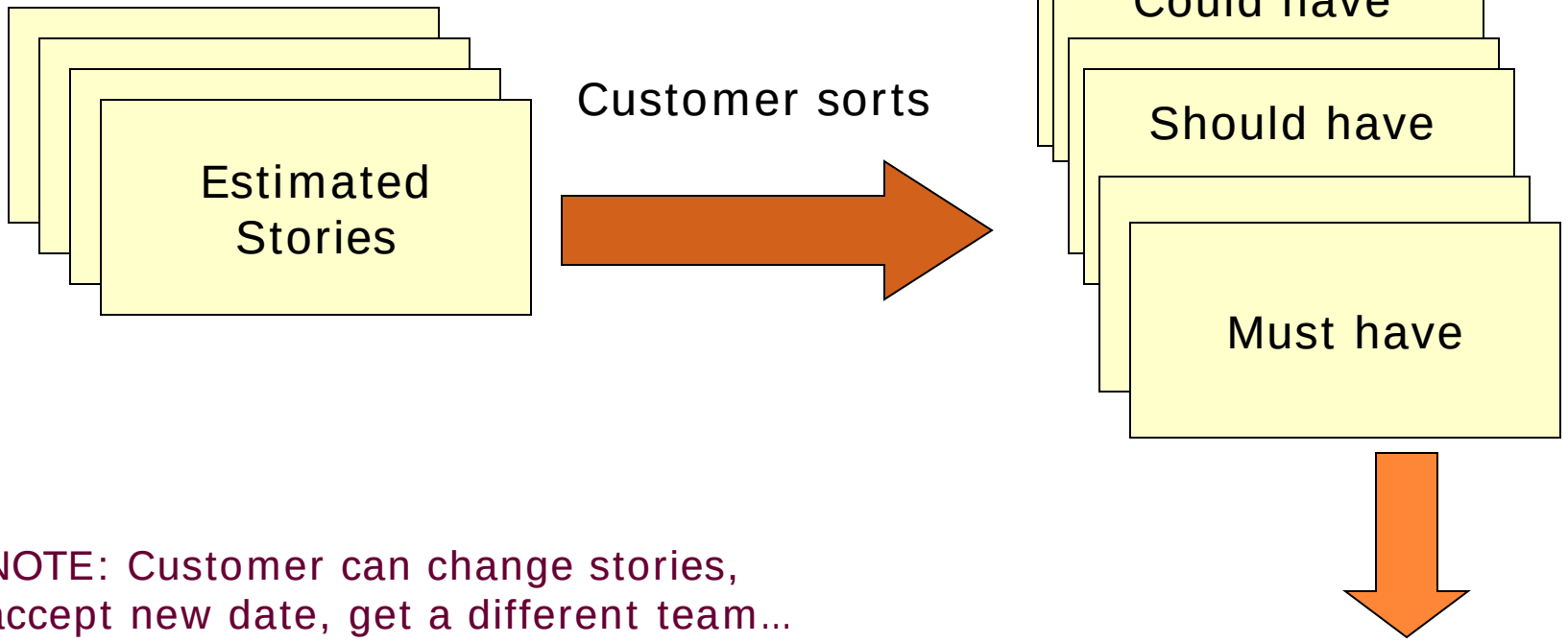
This is a promise to discuss a feature, not a complete description of it.

Estimate: Added by programmer, in "story points"

Put story on index card: keep terse (the shorter the better), easy to manipulate

Ideal programmer weeks, most important to indicate relative lengths

Release Planning



NOTE: Customer can change stories, accept new date, get a different team… but can't change the estimates!

Sample Stories

Vision

Produce a system for faculty to track student progress

a little vague, but it's a starting point….

Story: Query=>Details

Given a query, return a list of all matching items. Look at the details of any items. Store the information in any format.

Programmers can't estimate, tell customer it's too big

Split Story

Story: Query

Want to query by student name, student username or by course

Story: Details

Want to know student name, email, GPA, major, minor, student ID, courses taken and grades received.

Story: Any format

Want to store information as csv or as xml or in .rtf

Requires "spike"

More stories

Programmers may prompt customers for stories, for example about types of systems, performance, etc.

> Story: Portable
>
> System should be usable on a PC. Running under Unix would be a plus.

Programmer may add constraint to the story when doing the estimate (customer must agree). Or story could be split, so parts could be estimated separately (e.g., PC vs Unix)

> Story: Portable (Java)
>
> System should be usable on a PC. Running under Unix would be a plus.

More on Stories

- Stories should be independent. Can then be built in any order (can't always achieve, of course).
- Each story must be testable.
- Should trace acceptance test to story, not underlying class.
- Writing stories should be iterative. Write between 2-5 stories then stop. Estimate stories, conversation between programmers and customer.

More quick examples

- Show hotels
  - Show hotels near a place
- Book a hotel
  - Book a hotel. Charge to credit card and check credit card validity. Send confirmation.
- Cancel hotel reservation
  - Find reservation, cancel it, apply credit on credit card, send confirmation
- Bank Overdraft
  - When a transaction causes a customer's account to go into overdraft, transfer money from the overdraft protection account, if any

Task Planning

- Developer breaks stories into tasks
- Task is something one developer can implement in 4-16 hours
- List of tasks is created on flip chart, whiteboard, etc.
- Developers sign up for tasks, estimate in task points
- Each programmer's *budget* is the number of points he or she implemented in the last iteration. Sign up for only that many in this iteration.
- Task selection continues until all tasks assigned or all developers at budget. May need to remove tasks. If all tasks assigned and have more budget, ask customer for more stories.

Halfway Point

- At halfway point, team holds meeting. At this point, half the stories should be complete. If not, reapportion if possible. If not possible, inform customer. May pull task or at least determine which task has lowest priority.
- Nightmare scenario: Get to end of iteration with 90% of tasks complete but no stories complete. At halfway point, want to see *completed stories*.

Conclusion

- Using an agile method does not mean that the stakeholders will get what they want. It simply means that they'll be able to control the team to get the most business value for the least cost.