

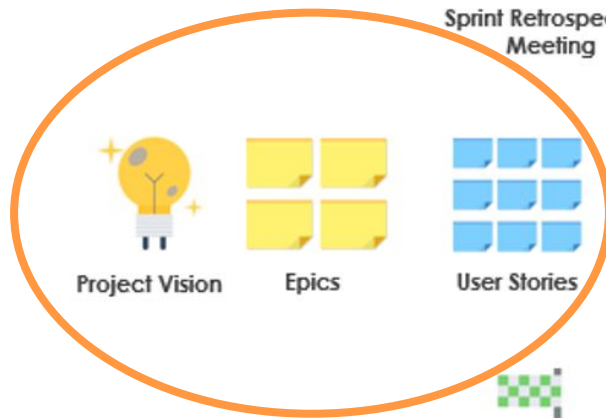
W05-1: User Stories Pt. 3

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CPSC 3720: Software Engineering



Product Owner
Scrum Master

Scrum Team Members
Stakeholders



Sprint Retrospective Meeting

Sprint Review Meeting

Sprint Planning Meeting

Release Plan

Planning

Review

Retrospect

SPRINT

Implementation

Daily Scrum

Impediment Log

Burndown Chart

Project Retrospective Meeting

Today's Objectives

- RECAP:
 - Creating User Stories
- Good Stories
 - Games!
- Gathering Requirements



Recap: User Stories



What are User Stories?

User Stories:

- short simple descriptions of a features
- told from the perspective of the person who desires the new capability
 - usually a user or customer of the system

User Story Template:

As a <type of user/user role>, I want <some goal> so that <some reason>

WHO

WHAT

WHY



Kahoot! The Three C's of User Stories



Kahoot! What does INVEST stand for?



User Stories: General Guidelines

INVEST

- Independent
- Negotiable
- Valuable
- Estimatable
- Small
- Testable
- S.A.M. (helps with testable)
 - Specific
 - Attainable
 - Measurable

Story Hierarchy

- **Product**: the largest chunk of value
- **Epic**: a medium chunk of value
 - larger than a story but smaller than the whole product
- **User Story**: smallest piece of value
 - can be implemented in at most a **week or two**
 - **broken down into tasks for each sprint**

Stories should answer: **Who, What, Why?**

- **Who** - the the user story is for (As a User)
- **What** - the Functionality that the user story implements (I want)
- **Why** - the reason the user needs the user story (so that)



User Story Games



User Story Games!

- 4 Games
 - Who, What, Why
 - Sizing
 - Negotiability
 - Testability
- Each team gets one of each deck
 - Deck types: W (W1 & W2), Z (Z & Z2), N, T (T3)
 - Keep the type icons **face up**
- Wait for instructions to follow



User Story Game #1: W Deck

W1

W2

Who, What, Why Game

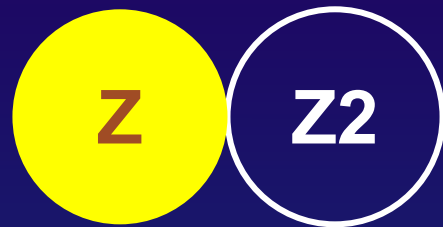
- **Who** - who the user story is for
- **What** - the functionality that the user story implements
- **Why** - the reason the user needs the user story

Instructions:

- Separate the W1 & W2 decks into two stacks:
 - This card is a **good story**
 - This card is **missing one of the three W's**
- When done, turn over cards to check your answers
- You have **5 minutes**



User Story Game #2: Z Deck



Sizing Game

- **Product** - the largest chunk of value
- **Epic** - medium chunk that is larger than a story but smaller than the product
- **User Story** - smallest piece of value that can be implemented in a week or two

Instructions:

- Separate the Z & Z2 decks into **Product**, **Epic**, and **User Story** stacks
- When done, turn over cards to check your answers
- You have **5 minutes**



User Story Game #3: N Deck



Negotiability Game

- This story is a conversation starter. There is a desired result but the exact method to obtain the result is open. Everything is user-oriented, not implemented-oriented. There are different levels of “negotiability.”

Instructions:

- Order the N cards from **most to least negotiable**
- When done, turn over cards to check your answers
- You have **5 minutes**



User Story Game #3: T Deck

T3

Testability Game

- These stories provide enough clarity to determine how to objectively test the desired results.

Instructions:

- Separate the T3 decks into two stacks:
 - Testable Stories
 - Not-Testable Stories
- When done, turn over cards to check your answers
- You have 5 minutes



Gathering User Stories



How Do We Gather Requirements?

- The Waterfall Way
 - Eliciting or capturing requirements
 - Implies users know and don't want to tell us
- The Agile Way
 - Trawling* for requirements
 - Requirements change and mature or die
 - Can be caught with different size nets
 - Skill matters - this is not an easy task



*Mastering the Requirements Process by
Suzanne and James Robertson, 1999.



Gathering User Stories

- Our “net” will not be so large or fine that we can get all user stories up front
- But we should come up with as many as possible



Techniques for Gathering Stories

Questionnaires

Observation

User Interviews

**Story-Writing
Workshops**

Gathering Stories: Questionnaires & Observation

Questionnaires

- Good way to drill into existing stories
- If you have a large user base, questionnaires can help prioritize stories

Questionnaires

Observation

- A terrific way to pick up insights on usage
- Can do this with or without a user's knowledge or through a user doing a demo

Observation



Gathering Stories: User Interviews

User Interviews

- Need to interview the right people and as many roles as possible
- Most users **don't really know what they want**
 - Don't ask them what they want
 - BUT! Ensure they're **involved** in the process

User Interviews

Empirical Design

Designers of the new system make decisions by studying prospective users in typical situations

Participatory Design

The users of the system become part of the team designing the behavior of the system

Gathering Stories: User Interviews

Don't ask it this way:

- Would you like it in a browser?

Better because it's more open. But it has too much context:

- “What would you think of having this app in a browser rather than as a native Windows application even if it means reduced performance, a poorer overall user experience, and less interactivity?”

Best! Open-ended and Context-free:

- “What would you be willing to give up in order to have it in a browser?”



Gathering Stories: Story-Writing Workshops

Story-Writing Workshops

- Includes the developers, users, customers, others
- Write as many user stories as possible and they are not prioritized
- **Low-fidelity prototypes** and other brainstorming techniques can be used

Story-Writing Workshops

As a frequent flyer, I want to book a trip.

As a frequent flyer, I want to book a trip using miles.

As a frequent flyer, I want to re-book a trip I make often.

As a frequent flyer, I want to request an upgrade.

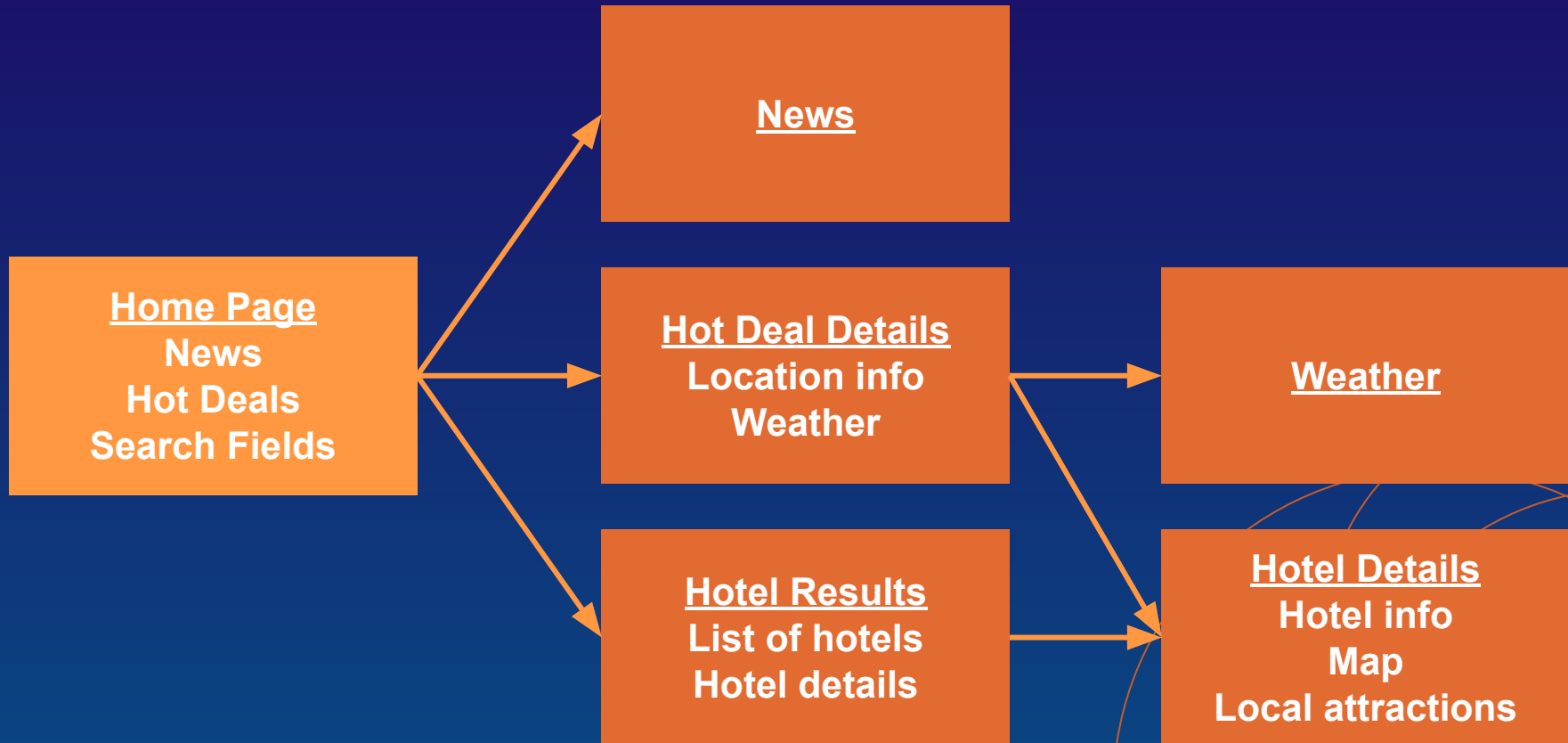
As a frequent flyer, I want to see if my upgrade cleared.

Low Fidelity Prototyping

- Start with an empty box:
 - “Here’s the main screen in the system.”
- Ask open-ended, context-free questions as you go:
 - What will the users most likely want to do next?
 - What mistakes could the user make here?
 - What could confuse the user at this point?
 - What additional information could the user need?
- Consider these questions for each user role



Low-Fidelity Prototype Example



Up Next...

- Project Kickoff next class!
- QUIZ 2 on Tuesday Feb 11
 - Weeks 3 - 5
 - Closed-note
 - 35 pts



Sources

Much of the presentation content was developed using slides and information provided and permitted for this use by Mountain Goat Software:
www.mountaingoatsoftware.com.

The company (and founder Mike Cohn) are great sources for Agile best practices.

