

CPSC 3720

Lesson 7

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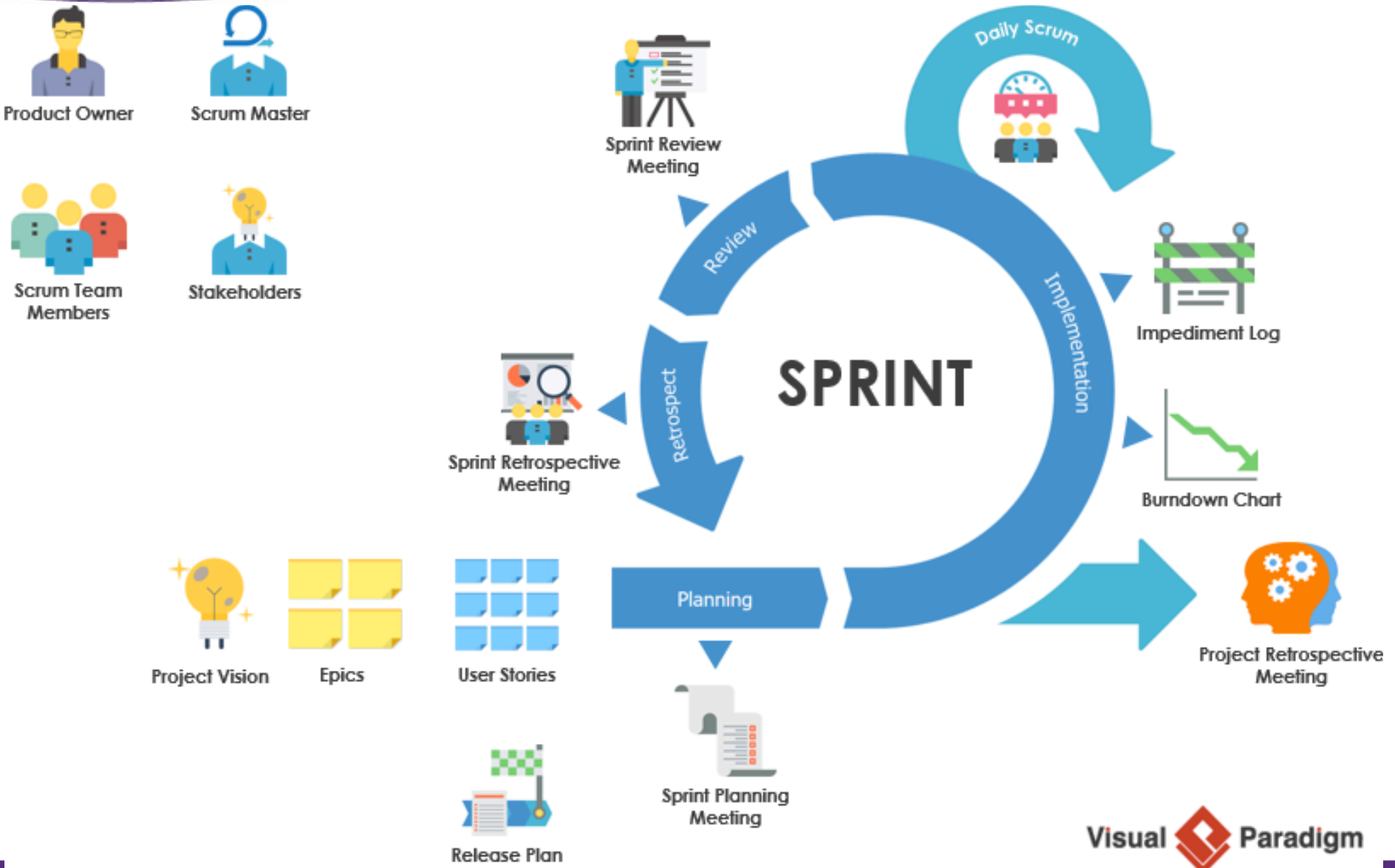


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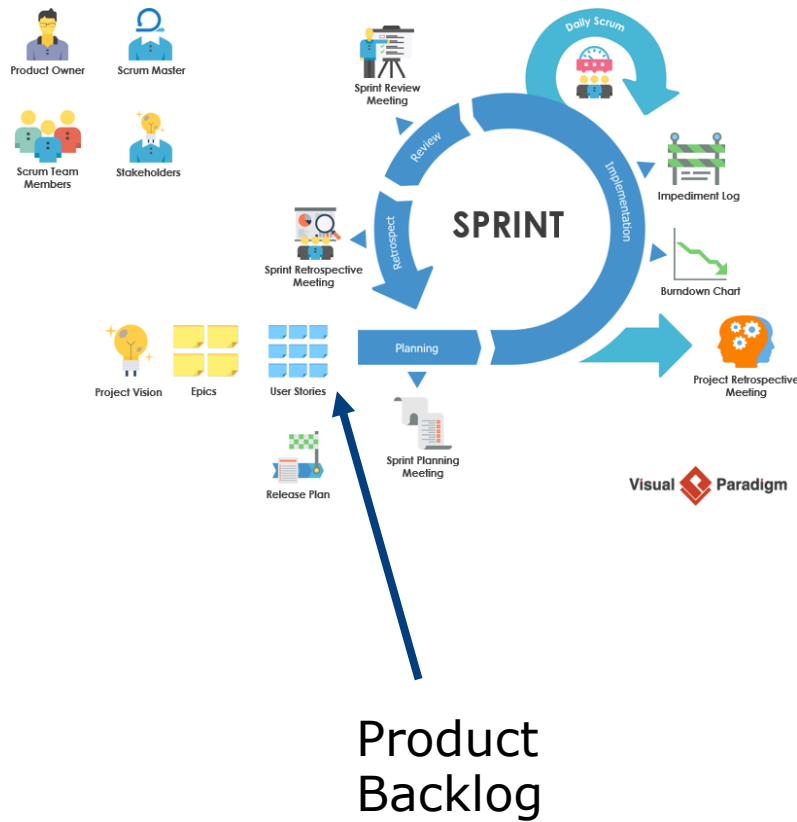
Today's Objectives

- Quick recap of prior classes
- Creating requirements with User Stories
 - Why Create User Stories?
 - The Three C's
 - Users and User Roles
 - *Gathering Stories*
 - *INVEST to create great stories*

Scrum in 1 Picture



Product Backlog



- The requirements
- A list of all desired work on the project
- Ideally expressed such that each item has value to the users or customers of the product
- Prioritized by the product owner
- Reprioritized at the start of each sprint

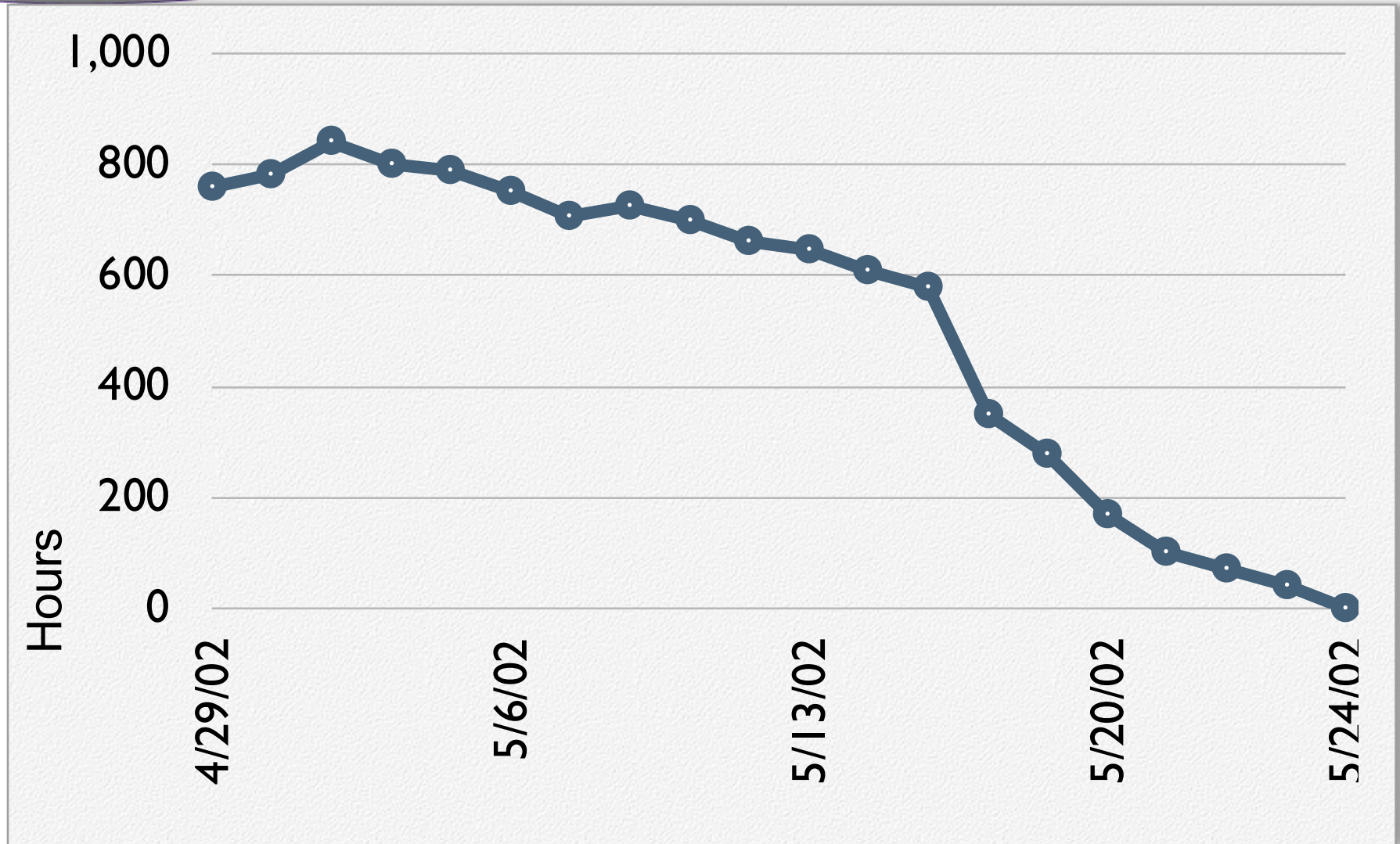
Example Product Backlog

Backlog item	Storypoint Estimate
Allow a guest to make a reservation	3
As a guest, I want to cancel a reservation.	5
As a guest, I want to change the dates of a reservation.	3
As a hotel employee, I can run RevPAR reports (revenue-per-available-room)	8
Improve exception handling	8
...	30
...	50

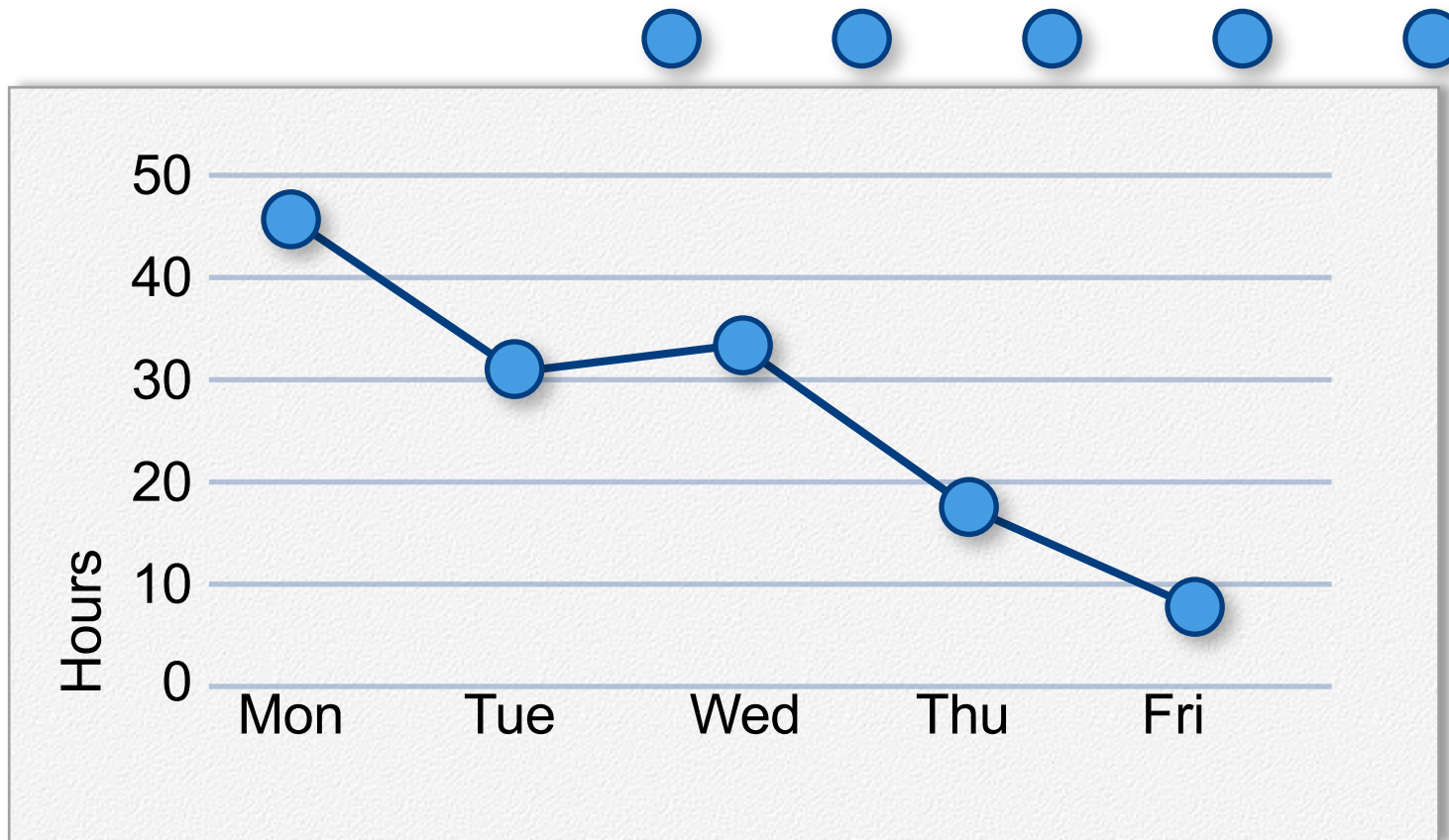
Sprint Backlog

Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	4	
Test the middle tier	8	16	16	11	8
Write online help	12				
Write the foo class	8	8	8	8	8
Add error logging			8	4	

Sprint Burndown Chart



Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	7	
Test the middle tier	8	16	16	11	8
Write online help	12				



The Importance of Teams in Software Development

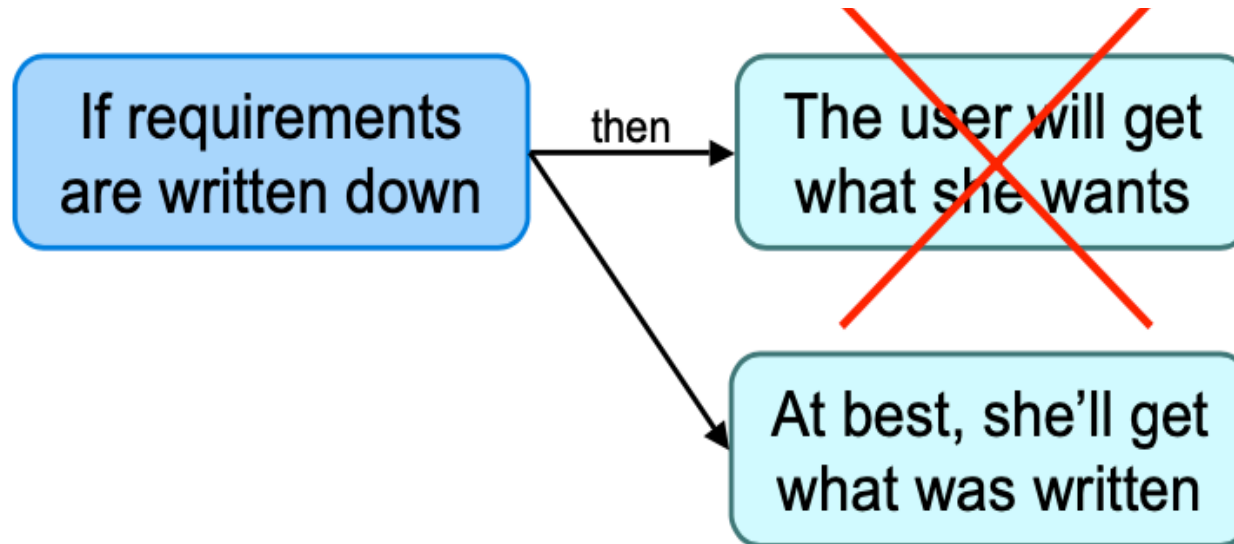
- Conway's Law:
 - ❖ "Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure." — Melvin E. Conway
- Team = Software/Product
 - ❖ "You can't have great software without a great team, and most software teams behave like dysfunctional families" - Jim McCarthy

Why User Stories vs Requirements Specs?

The slide features a decorative header with a solid orange background. Below the orange section, there are two wavy, horizontal lines: a grey one on top and a purple one on the bottom. The main body of the slide is white, and the footer is a solid purple bar.

Why User Stories?

- Shift from writing to talking



- "You built what I asked for, but not what I need!"

Examples of ambiguous requirements

The user can enter a name. It can be 127 characters.

- Must the user enter a name?
- Can it be other than 127 chars?

The system should prominently display a warning message whenever the user enters invalid data.

- What does *should* mean?
- What does *prominently display* mean?
- Is *invalid data* defined elsewhere?

Why User Stories?

- Stories are comprehensible
 - Developers and customers understand them
 - People can understand them better as stories
- Stories support iterative development
- Stories support participatory design
 - The users of the system become part of the team designing the behavior of the system

The Three C's of User Stories

Card

- Stories are traditionally written on note cards.
- Cards may be annotated with estimates, notes, etc.

Conversation

- Details behind the story come out during conversation with customer

Confirmation

- Acceptance tests confirm the story was coded correctly

Examples – Travel Reservation System

As a user, I can reserve a hotel room.

As a vacation planner, I can see photos of the hotels.

As a user, I can cancel a reservation.

As a user, I can restrict searches so that I only see hotels with available rooms.

What about additional details?

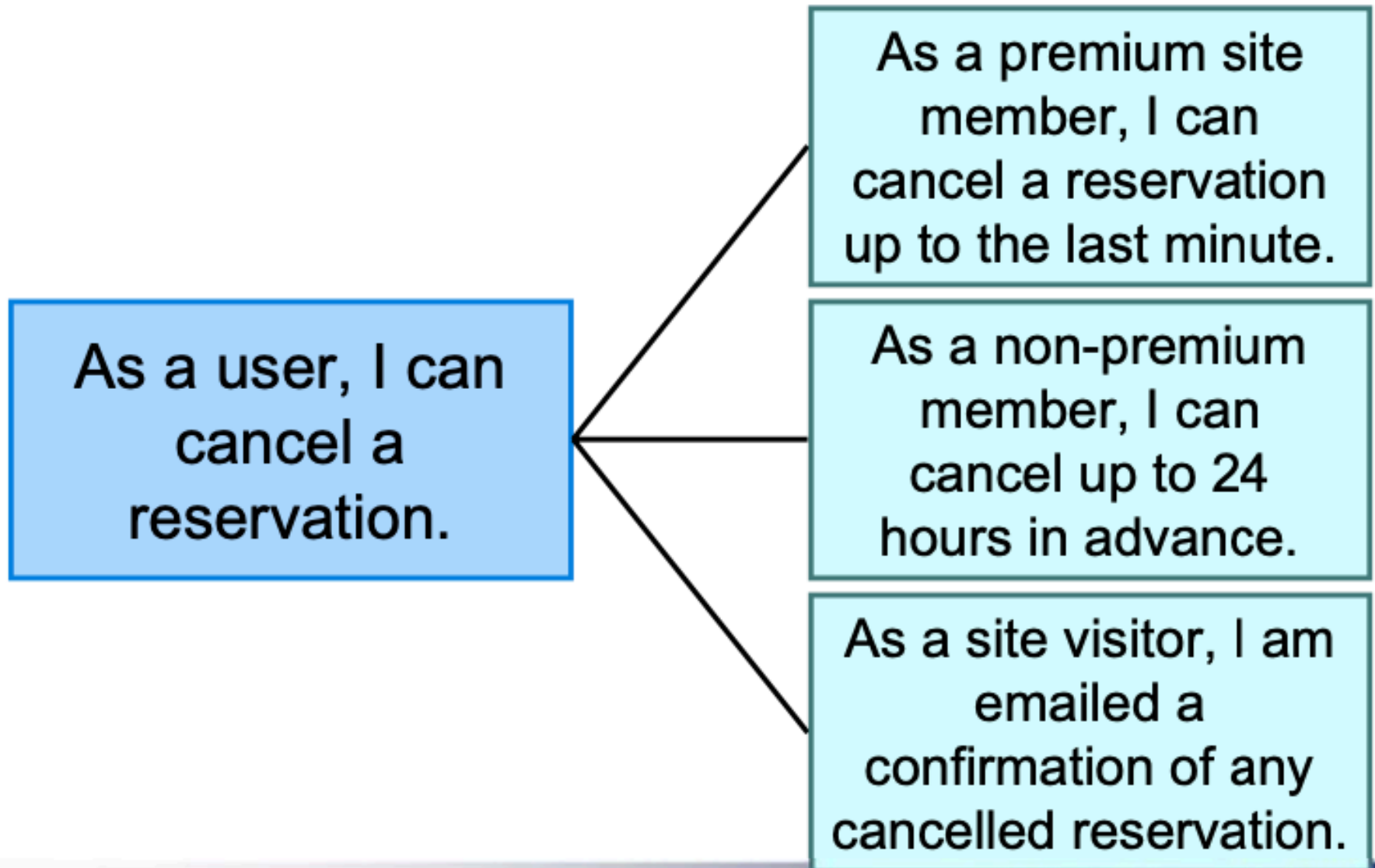
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As a vacation planner, I can see photos of the hotels.

As a user, I can cancel a reservation.

As a user, I can restrict searches so that I only see hotels with available rooms.

Details as “sub-stories”



Details as Acceptance Tests

As a user, I can cancel a reservation.

- Verify that a premium member can cancel the same day without a fee.
- Verify that a non-premium member is charged 10% for a same-day cancellation.
- Verify that an email confirmation is sent.
- Verify that the hotel is notified of any cancellation.

The “User”

- Many projects mistakenly assume there's only one user which will lead to missing stories



Travel Site- Who is the User?

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Travel Site- Who is the User?

Mary

Frequent flier who
never knows where
she'll be

Laura

Wants to schedule
her family's annual
vacation

Jim

Frequent flier who
flies every week but
always to the same
place

Howard

Mary's assistant;
books her
reservations

Dominic

Hotel chain Vice
President; wants to
monitor reservations

Think about User “Roles”

- Users vary by
 - How they use the software
 - Their backgrounds
 - Their familiarity with software/computers
 - What they use the software for
- A **User Role** is a collection of defining attributes that characterize a population of users and their intended interactions with the system.

Advantages of using roles

Users become tangible

Start thinking of software as solving needs of real people.

Avoid saying “the user”

Instead we talk about “a frequent flier” or “a repeat traveler”

Incorporate roles into stories

“As a <role>, I want <story> so that <benefit>.”

Clemson Sportswear eCommerce Site

Who is the User?

We've been hired to build
CUSports.com
a new eCommerce site for all things
Clemson Sports

Brainstorm the user roles who
will interact with this site:

<https://pinup.com/Abv7PPdC4>

User Roles: Modeling Steps

- ✓ Brainstorm an initial set of user roles
- ❑ Organize the set
 - ❑ Discuss roles and group together those roles that are similar or overlapping
- ❑ Consolidate roles
 - ❑ Combine roles or replace with a new more generic role
 - ❑ Eliminate roles that are unimportant to the success of the product
- ❑ Refine roles
 - ❑ Review roles to clarify and refine

This Week

- Reading: User Stories Applied by Mike Cohn, Chapters 1-3
(available on the O'Reilly site)

QUIZ MONDAY SEPT 7 – will be a timed quiz taken outside class