

CSCI 4050/6050
Software Engineering

Requirements Elicitation and Specification

User Stories

1

Announcements:

- 1. The quiz will be online with the lockdown browser and monitor.
- 2. Deliverable 1 is on eLC. Due on June 24@ midnight

User Stories

Often used in Agile processes, e.g., Scrum

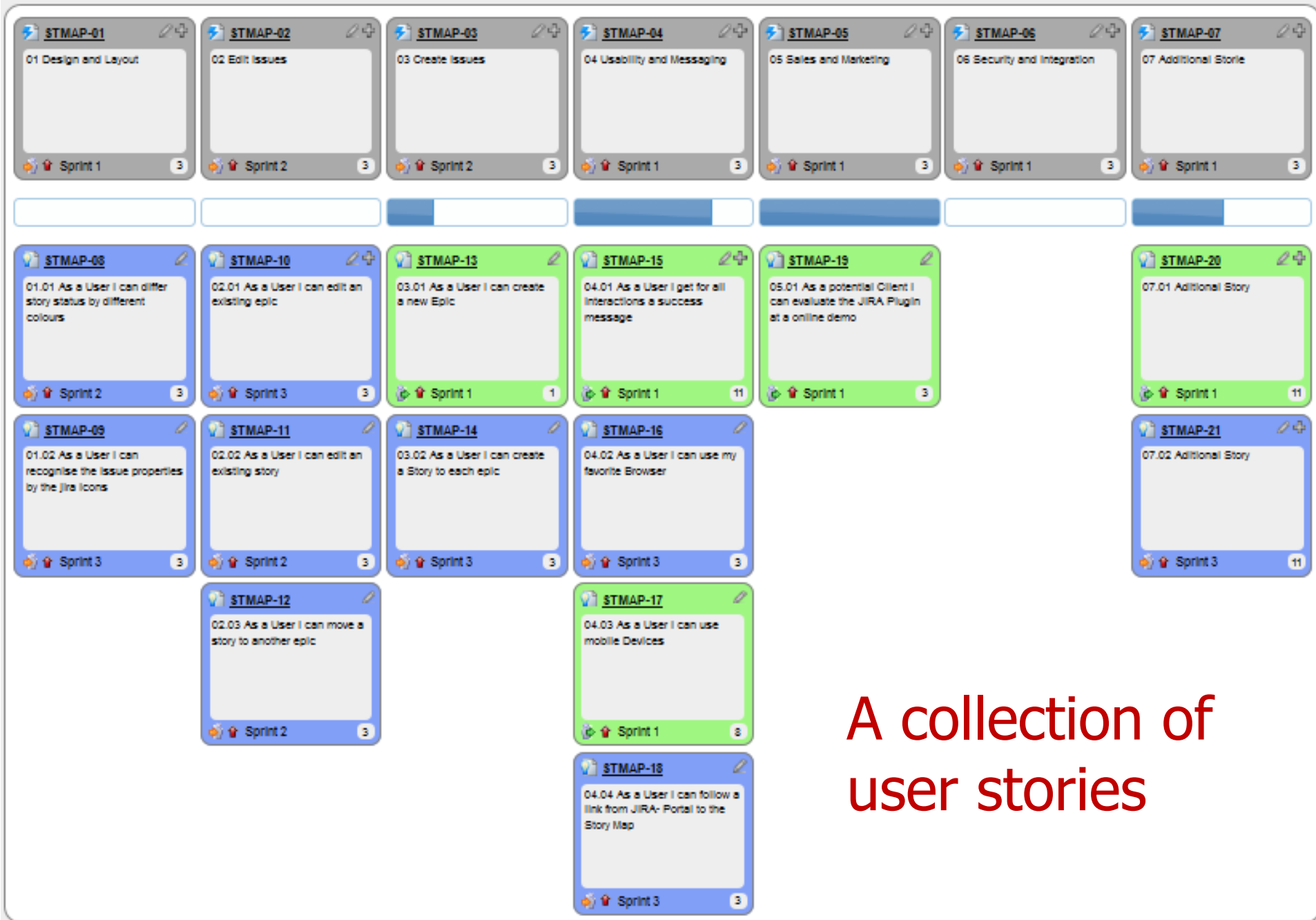
- A short, simple description of a feature told from the perspective of the person who desires the new capability, usually a user or customer of the system.
- Focuses on what the user wants to have, not what the user wants the system to do.
- Often recorded on a flash card or a post-it note.

User Stories: Story Board



User stories
on post-it
notes

From:
thoughtworks.com



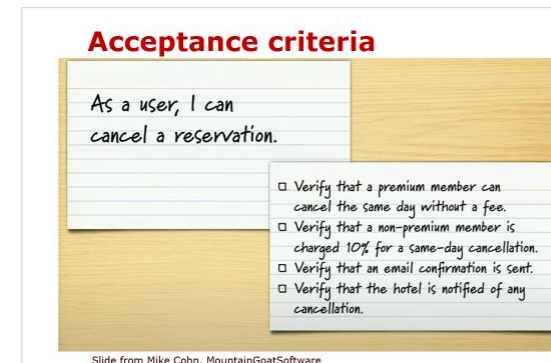
A collection of user stories

Figure from: wikipedia.org

User Stories

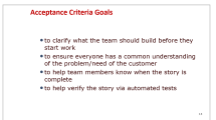
Three C's of user stories:

- **Card**: The main intention is to describe the user story in short form to allow *common understanding* of the user need among all stakeholders.
- **Conversation**: User stories shift the focus from writing about features to *discussing* them. In fact, these discussions are more important than whatever text is written.
- **Confirmation**: *Acceptance tests* confirm that the story was delivered correctly.



Acceptance criteria

- Acceptance Criteria is the detail required to know when a ticket meets its definition of done. These are not solution specific, but they can detail requirements that need to be hit.
- Acceptance criteria do not have to follow a specific “format”. However, their intent should be clearly defined.



Attaching Acceptance Criteria to the User Story (1)

As a customer, I want to withdraw cash from an ATM So that I don't have to wait in line at the bank.

Acceptance Criterion 1:

Given *that the account is creditworthy*

And the card is valid

And the dispenser contains cash,

When *the customer requests the cash*

Then *ensure the account is debited*

And ensure cash is dispensed

And ensure the card is returned

Acceptance Criterion 2:

Given *that the account is overdrawn*

And the card is valid,

When *the customer requests the cash*

Then *ensure the rejection message is displayed*

And ensure cash is not dispensed.

Attaching Acceptance Criteria to the User Story (2)

As a user I want to sign in from a login page so that users can be authenticated.

Acceptance Criteria:

Success

- *I can enter my email address and password and submit it for authentication.*
- *"Remember me" checked – store cookie for automatic login next time*
- *"Remember me" not checked – require login next time*

Failure

- *Illegal email format*
- *Unknown email/password*
- *System down for maintenance*

Attaching Acceptance Criteria to the User Story (3)

As a conference attendee, I want to be able to register online, so I can register quickly and cut down on paperwork.

Acceptance Criteria:

- *A user cannot submit a form without completing all the mandatory fields.*
- *Information from the form is stored in the registrations database.*
- *Protection against robots is working (captcha).*
- *Payment can be made via credit card.*
- *An acknowledgment email is sent to the user after submitting the form.*

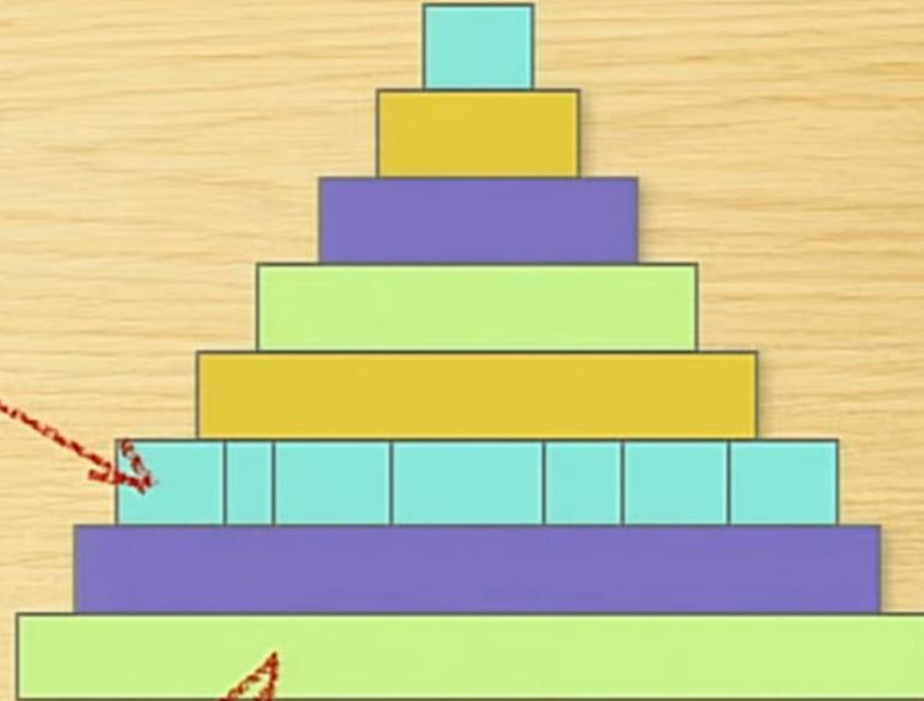
Some additional useful terms

Theme

A collection of related user stories

Epic

A large user story



Theme Manage Promotions

US 21 Manage promotions

As an administrator, I want to be able to manage promotions so that promo info are always correct and up to date.

Acceptance Criteria

Admins can add, edit, send, and delete promotions.

Cannot delete a promotion after being sent to the users.

Theme Manage Promotions

Theme 1: Manage promotions

US 21 : Add new promotion

As an administrator, I want to be able to add a new promotion so that

Acceptance Criteria

Admin will be provided with a form to enter promo code, expiration date of the promotion, and promo percentage. All fields are mandatory.

Theme Manage Promotions

Theme: Manage promotions

US 22 update an existing promotion

As an administrator, I want to be able to update a promotion so that promo info are always correct and up to date.

Acceptance Criteria

1. Admin will be provided with a form to enter promo code, expiration date of the promotion, and promo percentage.

All fields are mandatory.

2. Admins cannot modify a promotion after the promotion has been sent to customers.

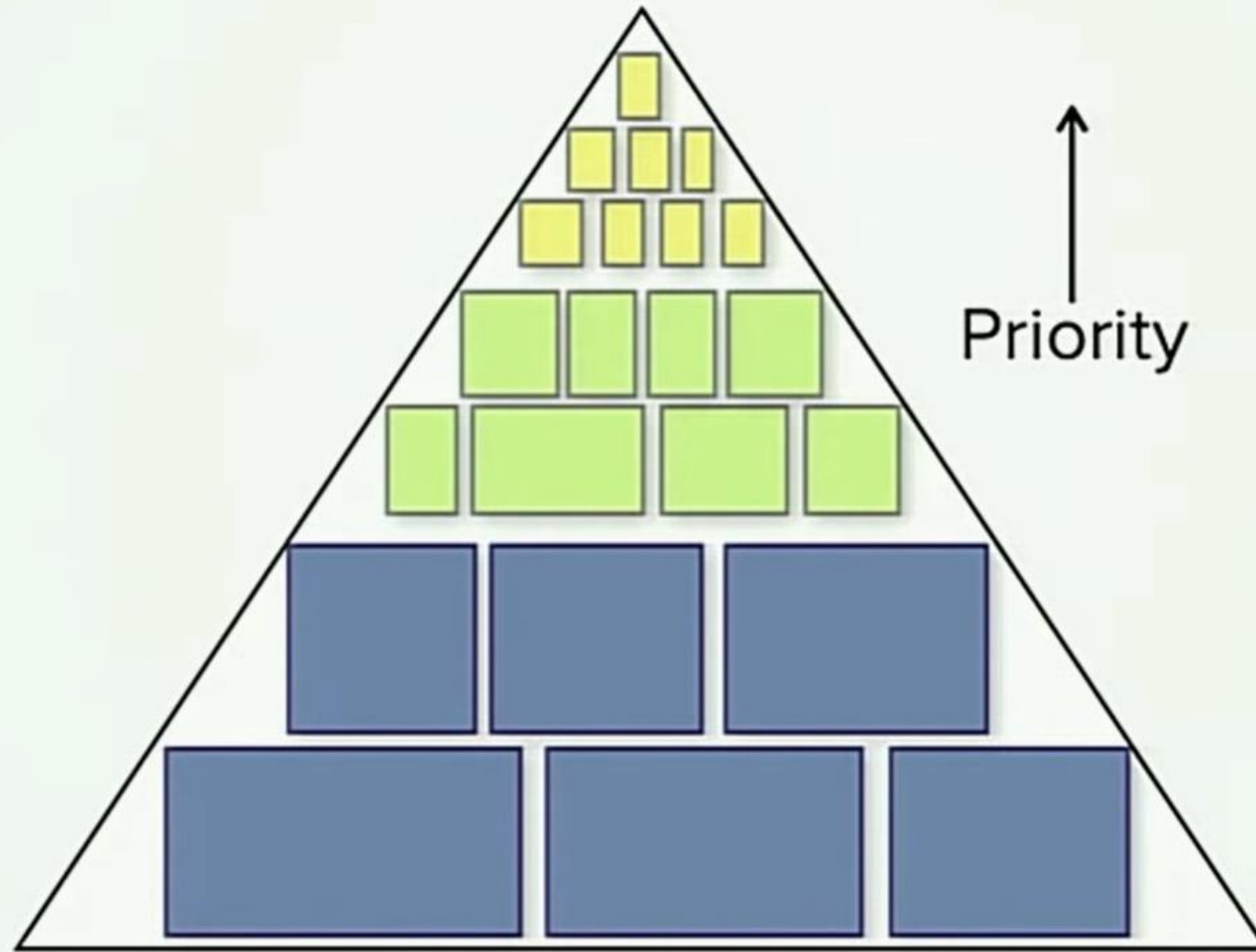
Theme **Manage promotions**

US 21: Edit Promotion

As an administrator I want to be able to edit a promotion to correct any information

Acceptance Criteria

Administrators should not be able to edit a promotion that has been already sent to the users.



User Stories

- Some user stories can be large in scope and complex. These are called **epics**.
- Typically, an epic cannot be completed in a single sprint.
- Epics are split into smaller, regular user stories, after a conversation.
- Often, several related user stories are grouped together to form a **theme**, but a distinction epic vs. theme is sometimes unclear.

User Stories

Epic example:

As a hotel operator, I want to set the optimal rate for rooms in my hotel.

- a. As a hotel operator, I want to set the optimal rate for rooms based on prior year pricing.*
- b. As a hotel operator, I want to set the optimal rate for rooms based on what hotels comparable to mine are charging.*
- c. As a hotel operator, I want to set the optimal rate for rooms based on current projected occupancy.*

User Stories

As a user I want to sign in to the site from a login page so that users can be authenticated.

As an epic, it can lead to additional user stories:

As a new user, I want to register by creating a username and password so that the system can remember my personal information.

As a registered user, I can log in with my username and password so I can trust the system.

As a registered user, I can change my password so that I can keep it secure or make it easier to remember.

As a registered user, I want the system to warn me if my password is easy to guess so that my account is harder to break into.

As a forgetful user, I want to be able to reset my password.

As a registered user, I am notified if there have been three consecutive failed attempts to access my account, so that I am aware if someone is trying to access my account.

Activity: Writing user Stories.

- We will solve activity 3 on the assignments page