

# WEB 321

Week 3 – SCRUM Project Requirements and Work  
Estimations

# Topics

- Scrum
- User Stories
- Story Cards
- Planning Poker
- Sprints
- Daily Scrum
- Retrospects

# Scrum

- Agile framework
- Used to develop, deliver, and manage products
- Scrum and Agile should not be used interchangeably
- Scrum is an Agile framework that focuses on the continuous delivery
- Breaks projects into Sprints
- Embraces change through iterative Sprints

# Scrum

- 3 main artifacts
  - Product backlog
  - Sprint backlog
  - Sprint goal
- Product backlog
  - Master list of all work that needs to get completed
  - List of features, requirements, bug fixes, and enhancements
  - ToDo list

# Scrum

- Product backlog
  - Maintained by the product owner
  - Constantly changing
  - Contains user stories
- Sprint backlog
  - List of items, user stories, or bug fixes
  - Selected by the development team
  - Current Sprint's tasks
  - Tasks are chosen from the Product backlog

# Scrum

- Increment or Sprint Goal
  - Once a Sprint is completed it moves to the “Increment” status
  - Think of it as the “Done” status
  - Usually the product is in a “ready state” and can be “Shipped”
  - Usable product from the end of a Sprint
  - Milestone

# User stories

- Easy to read sentences in simple language
- Added to Sprints
- Building blocks to larger Agile frameworks
- Focused on the user and their needs/wants
- Promotes group collaboration
- Fun

# User stories

- Core component of Agile
- Identifies the user type
- Describes the needs of a user type
- Provides justification for the defined needs
- Simple sentences
- Describes the what and why



# User stories

- *As a [type of user], I want [some functionality] so that [some justification].*
- *As a [professor], I want [students to submit homework on-time], so that [they do not fall behind].*
- *As a [student], I want [grades posted by Thursday], so that [I am prepared for the upcoming homework assignment].*
- *As a [student], I want to [finish my homework by Friday], so that [I can take weekends off].*

# Story Cards

- User stories written on cards
- Records a compelling story of what the user wants and why
- Identifies the requirement
- Used to prioritize and estimate the work
- Becomes the tasks in an active Sprint

# Planning Poker

- Group based exercise
- Used for estimating the “size” of a task (user story)
- Generates a high-level estimate of the entire work effort
- Uses the concept “wisdom of the crowd”
- Based on the fibonacci sequence

# Planning Poker

- All participants are given a deck of cards with story points
- Stories are read out loud by the Scrum product owner
- Participants select a story point card based on how long they think it will take to complete the task. Cards are placed face down until all participants have selected a story point card
- All cards are turned over and the estimates are evaluated and discussed
- This process continues until there is a unanimous agreement on the estimate

# Sprints

- Selected tasks from the Sprint planning meeting
- Typically spans two weeks
- Contains tasks from the product backlog
- Once the team decides on a timespan (1 week, 2 weeks, etc.,) it should remain consistent throughout the project
- Delivers an “increment”

# Daily Scrum (Stand Up)

- Hosted by the Scrum master
- Meetings should be short and lean
- Typically last between 10 and 15 minutes
- Each attendee is asked the following questions
  - What have you completed since our last meeting?
  - What do you plan on completing before our next meeting?
  - Do you have any roadblocks?
- The goal is to identify and address issues early in the process

# Retrospects

- Meeting to reflect on the completed Sprint
- Opportunity to identify the strengths and weaknesses exposed during the Sprint
- *“How can we become more effective”*
- Great way to learn from previous experiences
- Strengthens the team