**Scrum Roles**

* Scrum has 3 roles:
  + product owner
  + scrum master
  + development team member
* **Product Owner**
  + accountable for the product backlog (to-do list of items for the development team)
  + responsible for the product backlog and ensuring the development team works on the most important items
  + scrum does not have a project manager role
* **SCENARIO**: a development team that is rebuilding their website and developing new mobile apps for a large fitness chain
  + Product Owner Example
    - Product Owner: Bob Jones
      * Understands the needs of the business community
      * Domain expert (understands the impact of IT on organizational transformation)
      * Competitor roadmap
      * respected
      * good communicator
    - Bob has been with the fitness club since they only had 1 location and very few members
    - no there are 20+ locations and thousands of members
  + Technical expertise of product owners
    - understands technology enough to communicate effectively
    - senior business analysts are good candidates
    - there are always exceptions
* **Development Team**
  + converts product backlog into a potentially releasable increment
  + members have diverse skills (design, code, testing, documentation, deployment, process automations, etc.)
  + development team is self-organized and cross-functional
  + Specialists can be development team members
  + team members can split their time between mulitple teams or dedicate all of their time to one team
  + if splitting time across teams, understand productivity impact of context switching
  + optimal size is between three and nine members
  + Development team Example
    - Jim: design expert
    - Maria: coding and testing
    - Ravi: QA and understands business requirements
    - Chuck: documentation, tools, and builds
    - Jamal: coding and test automation
* **Scrum Master**
  + someone w/mastery of agile and scrum concepts: Scrum master is agile coach, problem-solver, and *servant leader*
  + servant leader?
    - does not demand their teammate to become more efficient
    - servant leader *helps* their teammates to become more efficient
  + Scrum Master Example
    - Ashely Wright:
      * understands and lives agile principles everyday
      * experienced in implementing scrum
      * problem-solver
      * can influence groups
      * mentor
      * servant leader
* Jira Security
  + *users* can be assigned to a *group* 🡪 each *group* be assigned to a *permission scheme* 🡪 *permission schemes* can have multiple *projects* associated with it

**Scrum Artifacts**

* Product backlog
  + product backlog : to-do list for the development team
    - can be updated by anyone
    - single source of truth of requirements
  + product backlog characteristics
    - continues to evolve
    - exists as long as the product exists
    - one product has one product backlog and one product owner

**Scrum Events: Sprints and Sprint Planning**

* Sprint = Iteration
  + sprint is an iteration, container for other events
  + must be 30 calendar days or less
  + must result in a potentially releasable product increment
* Potentially Releasable Product
  + "Vertically sliced" portion of product that provides end-to-end functionality
  + usable in production; provides business value
  + good example: allows user to search for a product by product name
  + bad example: database schema, mocked UI with no functionality
* Sprint Planning
  + timeboxed for 8 hours for a 30-day sprint
  + adjust to lower timeboxed limits for shorter sprints
  + Part 1: Define the *what* and spring goal
  + Part 2: Define the *how* for the next few days
  + Sprint goal
    - limit scope
    - inspire the team
    - keep the scrum team focused and inspired

**Scrum Events: Daily Scrum**

* What is Daily Scrum?
  + timeboxed to 15 minutes
  + development teams "hug": measure progress towards sprint goal, adapt if necessary
  + same location, same time

**Scrum Events: Sprint Reviews**

* Sprint Review
  + inspect product increment and adapt product backlog
  + timeboxed to 4 hours for a 30-day spring usually short for shorter sprints
* **Confluence**
  + "*Confluence* is a team workspace where knowledge and collaboration meet. Dynamic pages give your team a place to create, capture, and collaborate on any project or idea."

**Scrum Events: Daily Retrospective**

* Sprint Retrospective
  + inspect and adapt everything other than the product increment and backlog
  + answer the question: how can we become more efficient?
  + identify areas of improvement
  + scrum team is required to attend
* Sprint Retrospective: Rules of the game
  + Scrum team discusses 3 things:
    - what went well
    - what be done differently
    - what do we commit to change
  + timeboxed to 3 hours for a 30-day spring, usually shorter for a shorter sprint

**Product Backlog Refinement**

* Backlog refinement/Grooming
  + product owner and development team are required to attend
  + can be conducted as one event or a series of events
  + cannot exceed 10% of the development team's capacity per sprint
* Backlog refinement
  + add more details to product backlog items
  + clarify requirements
  + revisit priorities
  + add/remove items to backlog
  + backlog item decomposition
  + estimation
* Technical Debt
  + Component needs refactoring due to excessive dependencies
  + new versions of programming language and runtime are available
  + quick short-term solution
  + found a better/more efficient way of implanting something