## Two essential roles:

- Product Owner: Focuses on what needs to be done
  - Reviews team's work
    - Accepts
    - Rejects
  - Interact with stakeholders
- Scrum Master: Keeps team working at sustainable pace
  - Acts as spokesperson
  - Devise charts and boards to organize project
  - Helps remove roadblocks

## Establish scrum team:

- Enable daily communication for team members
- Establish team norms early
  - Working relationship
  - Conflict resolution
  - Project consensus
  - How to hold team accountable

# **Product Vision**

- Established by product owner
- Destination = Minimum Viable Product
  - Develop the smallest possible site to reduce scope creep
- Once vision is in hand, you can decompose the vision
- To create product vision
  - Establish themes (goal functionality of app)
  - Break themes into features (different components of page)
  - Establish which features are musts, and which features could be optional

# Writing user stories:

- User story: tactical level of work that can be delivered quickly (written by PO)
- INVEST story development acronym
  - Independent (can be delivered separately from other stories)
  - Negotiable (Until it is submitted for work, it can be modified)
  - Valuable (delivers value to PO and stakeholders
  - Estimable (descriptive enough so you know what has to be done to finish it
  - Small (small enough to be completed in one sprint)
  - Testable (must provide enough information to be able to test)
- Functional User Story Format (functional = serves a function for end user)
  - o <user role>, I want
  - o <user requirement> so that
  - <desired benefit>
    - Example: as a <mobile customer>, I want

- <to create a profile> so that
- <future orders are faster to place>
- Non functional story (work that supports user without directly benefiting them)
  - Example: As a developer, I want to upgrade the database software to the latest version so that we have a portable product
- Whenever a user story is written, an AC (Acceptance Criteria) is written
  - Should be as explicit as possible so everyone knows what done means
  - Example:
    - Customer name is captured and saved
    - Customer email address is captured and saved
    - Customer phone number is captured and saved
    - Customer password is captured and saved
    - Additionally (input is valid)

#### Workflow:

# **Product Backlog:**

- Themes and features are broken down into user stories
- Stories are estimated using points
  - Relative estimation: We use relative estimation to get a rough size of our work by comparing user stories to each other
    - Not a commitment
  - Actual estimation: Story points convey relative size as an actual value
    - Story points are done using poker planning

# **Create Team Boundaries:**

- Definition of done: states the minimum requirements for all team stories
  - More general than AC
  - Should apply to everything in your backlog
  - Example: it has been code reviewed and all errors fixed or it has been tested in a pre-development environment
- Backlog prioritization (Backlog grooming...done by PO)
  - Stories are sequenced or prioritized by value
  - You want the most valuable stuff delivered first
- Sprint cadence
  - o Can be from 1 to 4 weeks in length, with preference to shortest time scale

## Create Roadmap and release plan

- Roadmap: guide showing when themes will be worked on during a time frame
- Release plan: high level plan connecting roadmap to sprints
  - At the end of every sprint, you want to have a fully functional program, however, you don't have to release these programs to stakeholders until you want.
  - The release plan should specify what sprints are in which release, what stories are in each sprint, and how many points each story is worth.