**SCRUM**

Scrum is a framework that helps teams work together. It encourages learning through experiences, self-organization while working on a problem, and reflection to continuously improve. It is founded on empiricism and lean thinking and employs an iterative, incremental approach to optimize predictability and to control risk.

Scrum has events that work by implementing these pillars:

* **Transparency** - the process and work must be visible to those performing the work as well as those receiving the work. This enables inspection.
* **Inspection** - the Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems. This enables adaptation.
* **Adaptation** - if anything deviates or if the product is unacceptable, the process or material must be adjusted as soon as possible. This is expected the moment anything new is learned through inspection and is difficult when people aren’t empowered/self-managing.

Scrum values:

* **Commitment**
* **Focus**
* **Openness**
* **Respect**
* **Courage**

**Scrum Team**

The Scrum Team is small enough to be nimble, large enough to complete significant work, typically 10 or fewer people, and cross-functional. In general, smaller teams communicate better and are more productive. This team consists of:

* **Developers** - are people committed to creating any aspect of a usable Increment each Sprint. They create a plan (Sprint Backlog) for the Sprint, adhere to a Definition of Done, adapt their plan each day, and hold each other accountable as pros.
* **Product Owner** - maximize the value of the product and is accountable for effective Product Backlog management
* **Scrum Master** - establishes Scrum by helping everyone understand Scrum theory and practice. They’re accountable for the team’s effectiveness and do this by enabling the team to improve practices, within the framework.

**Scrum Events**

**The Sprint** is where ideas are turned into value. It’s an event that’s a max of a month where a new one starts immediately after the end of the previous one. All the work necessary to achieve the Product Goal happen here. The Sprint contains:

* **Sprint Planning** - initiates the Sprint by laying out the work to be performed. The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal. This addresses: “*Why is this Sprint valuable?*” , “*What can be Done this Sprint?*” , and “*How will the chosen work get done?*”
* **Daily Scrum** - is a 15-minute event for the Developers to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary. It is held at the same time and place every working day of the Sprint. (The Product Owner or Scrum Master can participate as Developers.)
* **Sprint Review** - Here, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed. Based on this information, attendees collaborate on what to do next.
* **Sprint Retrospective** - The Scrum Team inspects how the last Sprint went and plan ways to increase quality and effectiveness. It is discussed what did/didn’t go well during the Sprint, and how those problems were/weren’t solved.

**Scrum Artifacts**

These artifacts represent work or value. Each contain a commitment to ensure it provides information that enhances transparency and focus.

**Product Backlog** - is an emergent, ordered list of what’s needed to improve the product and is the single source of work. (Commitment: Product Goal - *long-term objective*)

**Sprint Backlog** - comprises the Sprint Goal (why), the selected Product Backlog items (what), and the plan for delivering the Increment (how). It is a real-time plan/picture by and for the Developers of the work to be accomplished. It is updated throughout the Sprint. (Commitment: Sprint Goal - *single objective for the Sprint*)

**Increment** – is a concrete stepping stone toward the Product Goal and is additive to all prior Increments. (Commitment: Definition of Done - *description of the state of the Increment when it meets requirements*)

Source: <https://scrumguides.org/scrum-guide.html> & <https://www.atlassian.com/agile/scrum>

**Application**

Say, I’ll make a web app where it’s just one random image that people can like/dislike. Here, (since there’s just one of me) I’m going to be the owner, scrum master, developer as well as the customer I think.

**Product backlog:**

|  |  |  |
| --- | --- | --- |
| **no.** | **Stories** | **Acceptance Criteria** |
| 1 | As a **student-developer**, I want to **make a product backlog** to **start the Sprint.** | - Have a backlog of things that are might/might not be done. |
| 2 | As a **student-developer**, I want to **research about wireframing** so that I can **create better web apps**. | - Have an idea on how to wireframe. |
| 3 | As a **student-developer**, I want to **research about scrum** so that I can **do projects more efficiently**. | - Have an idea on how scrum works. |
| 4 | As a **student-developer**, I want to **research about making sitemaps** so that I can **start developing a simple web app.** | - Have an idea on how to sitemap. |
| 5 | As a **student-developer**, I want to **make a video regarding scrum (w/ PDF)** to **understand it better & finish the 1st part of the Sprint**. | - Have the video & PDF ready in the Scrum folder. |
| 6 | As a **student-developer**, I want to **make a sitemap of my web app** to **apply what I learned**. | - Have a sitemap ready for the documentation. |
| 7 | As a **student-developer**, I want to **make a wireframe of the web app** so that I can **have a better idea of what it should be**. | - Have a wireframe ready for documentation. |
| 8 | As a **user**, I want to **be able to like/dislike the image** so that I can **Influence how long an image stays up**. | - Have working "OK" &"NOT OK" buttons and say how much the image has respectively.  - Many OKs make the image stay up longer.  - Many dislikes make it able to be replaced sooner. |
| 9 | As a **student-developer**, I want to **make a video about the wireframe (w/ PDF)** to **finish the last part of the Sprint** | - Have the video & PDF ready in the Wireframe folder. |
| 10 | As a **student-developer**, I want to **make a video about the sitemap (w/ PDF)** to **finish the 2nd part of the Sprint**. | - Have the video & PDF ready in the Sitemap folder. |
| 11 | As a **user**, I want to **be able to see what the webapp is about and who created it** so that I can **know what to do with it & maybe contact the creator**. | - Have an "about" page that shows what it's about and shows contact information. |
| 12 | As a **user**, I want to **upload most image formats** so that I **don't have to worry about converting images.** | - Have an upload function that accepts & displays most common image formats. |

For planning, I prioritized the sprint 1 backlog (w/ some help from Story & Value Points). Then, I create the first sprint with the following goal:

GOAL: Learn about Scrum, Sitemap, Wireframe. (also create sitemap & wireframe)

**Sprint 1 backlog**:

|  |  |  |
| --- | --- | --- |
| **no.** | **Stories** | **Plan** |
| 1 | As a **student-developer**, I want to **research about scrum** so that I can **do projects more efficiently**. | - Review videos and websites regarding scrum online. |
| 2 | As a **student-developer**, I want to **make a product backlog** to **start the Sprint.** | - Make the first backlog of things that are might/might not be done. |
| 3 | As a **student-developer**, I want to **make a video regarding scrum (w/ PDF)** to **understand it better & finish the 1st part of the Sprint**. | - Start making the document for the scrum ‘report’ and application.  - Record a video of such. |
| 4 | As a **student-developer**, I want to **research about making sitemaps** so that I can **start developing a simple web app.** | - Review videos and websites regarding making sitemaps. |
| 5 | As a **student-developer**, I want to **make a sitemap of my web app** to **apply what I learned**. | - Have a sitemap ready for the documentation |
| 6 | As a **student-developer**, I want to **make a video about the sitemap (w/ PDF)** to **finish the 2nd part of the Sprint**. | - Have the video & PDF ready in the Sitemap folder |
| 7 | As a **student-developer**, I want to **research about wireframing** so that I can **create better web apps**. | - Have an idea on how to wireframe |
| 8 | As a **student-developer**, I want to **make a wireframe of the web app** so that I can **have a better idea of what it should be**. | - Have a wireframe ready for documentation |
| 9 | As a **student-developer**, I want to **make a video about the wireframe (w/ PDF)** to **finish the last part of the Sprint.** | - Have the video & PDF ready in the Wireframe folder |

**Daily Scrum**:

Here, I’ll just go about, checking my progress and update my scrum board in Jira. Move on to the next story in the backlog, do those, then updating the board again until I’m done (or before time runs out).

**Sprint Review**:

Here, I’ll review if each of the stories meet the “Definition of Done” or not. Below are the items that would be “Done.”

**Increment**:

* Product Backlog
* Sprint 1 Backlog
* Scrum (report & application) PDF
* Scrum (report & application) Video
* Sitemap
* Wireframe
* Sitemap Video & PDF
* Wireframe Video & PDF

**Sprint Retrospective**:

The issues would be talked here. For one, try to eliminate distractions next sprint. (there’s not that much to talk about since there’s only me)