

Product Backlog: A product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements.

Step 1: Identify roles

- Each team member is a developer
- One developer has an additional role (and hence should have less actual programming workload)
 - Scrum master: resolve impediments, ensure Scrum is understood, ensures the meetings take place
 - Product owner: responsible for maintaining the Product Backlog

Roles:

(In a real setting there would be different people fulfilling the following roles, but I worked alone)

- **Developers: Ankita**
- **Developer (with extra role): Ankita is also Scrum Master**
- **Product Owner: Ankita**

Step 2: Create Product Backlog

- The Product Owner "owns" the Product Backlog BUT the whole team should be involved in creating it
- Take your requirements and prioritize them
- Transform the first five requirements into Product Backlog Items (may need splitting up)
 - You will implement the first few requirements

This task should take ~30 min

Product Backlog Creation

Roles: The Product Owner "owns" the Product Backlog, but the entire team is involved in creating it.

Outline and Accomplishments: The team collaborated to create the Product Backlog, leveraging the outlined requirements. The Product Owner, Ankita, led the prioritization process with input from the whole team. The goal was to transform the first five requirements into actionable Product Backlog Items, ensuring clarity and granularity for implementation.

Product Backlog Requirements (in order of priority):

User Account Creation: As a player, I want to create a personal account, so I can save my progress and scores.

Quiz Category Selection: As a player, I want to select different quiz categories, so I can choose topics that interest me.

Difficulty Levels: As a player, I want to choose different difficulty levels, so I can challenge myself appropriately.

Answering Questions: As a player, I want to answer multiple-choice questions, so I can engage with the quiz format that is familiar and straightforward.

Time-Limited Questions: As a player, I want each question to be time-limited, so the game is more challenging and fair.

Step 3: Perform two Sprints

- Perform two Sprints
 - Schedule is up to you
- Each sprint should have:
 - One sprint planning meeting at the beginning, estimate the tasks [max. 30]
 - One daily scrum meeting (standup) [max. 10 min]
 - Work

- *One sprint review meeting at the end [max. 30 min]*
 - *Sprint 1 should result at the very least in a working infrastructure*
 - *Needs to contain everything that is needed to work on the first few Product Backlog items*
 - *Sprint 2 should result in an Increment (i.e., at least one feature)*
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- **08/28: Coding Challenge Game Kickoff**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner. Stakeholders were also present.
 - **Outline and Accomplishments:** During the kickoff, the team outlined the project scope, objectives, and initial timelines specific to the coding challenge game. Accomplishments included defining the project's vision, identifying potential coding challenges, and establishing a communication plan tailored to the needs of beginner coders.
 - **09/04: Sprint 0 Planning Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team successfully defined the tasks for Sprint 0, aligning with the initial Product Backlog items tailored to the coding challenge game. Accomplishments included creating a backlog of beginner-friendly coding challenges and setting up development environments suitable for novice coders.
 - **09/11: Sprint 0**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Sprint 0 focused on addressing specific Product Backlog items, including the setup of foundational elements for user account creation, quiz category selection, difficulty levels suitable for beginners, answering coding questions, time-limited coding challenges, score tracking, leaderboard functionality, game pause & resume, and accessibility features designed for beginner coders. The team also conducted initial training sessions to ensure a shared understanding of the upcoming work, tailored to the coding proficiency of beginners.
 - **09/11: Daily Standup**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Team members shared updates on their progress, with a focus on tasks related to the defined Product Backlog items specific to the coding challenge game. Ankita facilitated discussions to address any issues and ensure a smooth workflow, emphasizing progress toward the Sprint 0 goals.
 - **09/13: Sprint Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team presented progress on the defined Product Backlog items during Sprint 0 to Stakeholders, were provided

feedback, and Ankita updated the Product Backlog based on insights gained during the review meeting.

- **09/03: Sprint Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner. Stakeholders were also present.
 - **Outcome and Accomplishments:** The team kickstarted the project by defining the game's scope, objectives, and initial timelines. This included finalizing the vision for the coding challenge game, identifying potential hurdles, and establishing an effective communication plan.
- **09/10: Sprint Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team successfully charted out tasks for Sprint 0, aligning them with the initial Product Backlog items of user account creation and quiz category selection.
- **09/17: Sprint 1 Planning Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Sprint 0 was dedicated to realizing specific Product Backlog items, such as user account creation, quiz category selection, beginner-friendly difficulty levels, coding question responses, time-limited challenges, score tracking, leaderboard functionality, game pause & resume, and beginner-centric accessibility features. Additionally, the team conducted preliminary training sessions to ensure a collective understanding of the project.
- **09/18: Daily Standups for Sprint 1**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Team members shared progress updates and Ankita steered discussions to address issues and ensure a streamlined workflow.
- **09/20: Sprint Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team presented progress on the defined Product Backlog items. Stakeholders provided feedback. Ankita updated the Product Backlog based on insights gained during the review, refining the vision and priorities with the beginner coding challenge context in mind.
- **10/02: Sprint Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team estimated tasks related to the next set of Product Backlog items, setting goals for Sprint 1 with a focus on delivering a working infrastructure that incorporated user account creation, quiz category selection, and beginner-friendly difficulty levels.

- **10/04 - 10/18: Daily Standups for Sprint 1**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Daily standups during this period centered around the progress of tasks related to the working infrastructure. The team ensured a coordinated effort to meet the Sprint 1 goals.
- **10/23: Sprint 1 Review Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team showcased the working infrastructure developed during Sprint 1, highlighting achievements related to user account creation, quiz category selection, and beginner-friendly difficulty levels. Stakeholders provided valuable feedback, and Ankita updated the Product Backlog to reflect the refined vision and priorities.
- **10/25: Sprint 2 Planning Meeting**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** The team committed to delivering a significant Increment by the end of Sprint 2, focusing on adding at least one feature to the existing infrastructure. Features discussed included developing a system that gauges the progress of the user and increases/decreases the question difficulty accordingly.
- **10/30 - 11/13: Daily Standups for Sprint 2**
 - **Roles:** Ankita continued as both Scrum Master and Product Owner.
 - **Outcome and Accomplishments:** Daily updates during this period emphasized progress toward the Sprint 2 goals, with a specific focus on addressing issues. The team ensured a collaborative effort to deliver the defined features.
- **11/15: Sprint 2 Review Meeting**
 - **Roles:** Ankita served as both Scrum Master and Product Owner during the Sprint 2 Review Meeting.
 - **Outcome and Accomplishments:** The team presented the quiz question difficulty Increment achieved during Sprint 2, showcasing at least one new feature integrated into the existing infrastructure. Stakeholders provided valuable feedback, and Ankita updated the Product Backlog based on insights gained during the review, refining the game further for the optimal learning journey of beginner coders.

Progress Summary (as of Sprint 2 concluding Review Meeting): The two main product backlog features of focus were user account creation and quiz category selection. The main increment which was established at the end of Sprint 2 was the system gauge allowing for the game controls to be able to adjust future question difficulting according to user progress and accuracy. This latest increment is substantial as it provides the user with

appropriate quiz questions, inevitably aiding them in improving their coding skills and being able to learn at an efficient pace and level.