

Software Development Process

Team Alpha Helix

Version 1.1

Document Version History

Version #	Implemented By	Revision Date	Reason
1.0	Arron	9/18/2017	Initial document creation
1.1	Gavin	9/25/2017	Added Project and Sprint Backlogs

Process and Scheduling

For the Phoenix Bioinformatics project, Team Alpha Helix is going to be utilizing the Scrum methodology. In the Fall semester we plan to have 6 sprints, each two weeks in duration. Each sprint will consist of user stories taken from the project backlog, selected to be worked on for the duration of the sprint.

The first step of the development process is to break down the project requirements into User Stories, which are high-level representations of desired functionality and features from a user perspective. User stories follow the pattern of “As a user, I would like to X to accomplish Y”. These User Stories are then added to a backlog of requirements/tasks for the entire project, the project backlog.

Using the information from the project description, and the extra knowledge from the sponsor discussion, the acceptance criteria for the user stories are determined, fleshed out, and presented in a verifiable statement to be used as confirmation of completed work. The user stories with complete acceptance criteria are presented to the sponsors for their approval, and the sponsors may provide feedback on what information needs to be changed, added, or clarified.

The finalized version of the user stories are then assigned point values through a process called “planning poker”, to rank the difficulty/time required to complete the tasks. After all user stories have been assigned a point value, they are put back into the project backlog.

When a sprint is started, user stories are selected from the project backlog to be added to the sprint backlog, which contains the in-progress user stories to be worked on during the current sprint. These user stories are the focus of the two week sprint, and if needed, further information about the requirements can be elicited from the sponsor during the weekly meeting.

If all tasks are completed during a sprint, then new tasks can be brought in from the backlog based on point value and time remaining in the current sprint. If all tasks are not completed, incomplete work goes back into the project backlog to be pulled into future sprints.

Project Backlog

ID: 186 - Saving in-progress submissions

As a Researcher, I want my changes to be saved automatically so that if I leave the page or close my browser, the information will be there the next time I visit the page.

ID: 184 - Search

As a Researcher, I want to search for gene annotations related to any plant.

ID: 183 - Automatic data export

As an Administrator, I want a data dump of the database to be created and stored on the server such that it is accessible by the desired external systems.

ID: 180 - Submitter notification

As a Researcher, I want to be notified via email when a submission I have created is finalized by a curator.

ID: 181 - Curator editing and finalization

As a Curator, I want to edit submissions before finalizing them, after which they are viewable to the public.

ID: 188 - Preview before submission

As a Researcher, I want to review the data I am about to submit, so that I can verify that it is correct before doing so.

ID: 182 - User data export

As an Authenticated User, I want to export data from the database so that I can have it downloaded to my device.

ID: 189 - View list of submissions

As a Researcher, I want to see all of my past submissions, each indicating their current status.

Sprint Backlog

Sprint 1

Sprint 1 will be our first sprint focusing on the features surrounding the “evidence with” field. Since this is the first sprint, there may be some onboarding time delays as we become more familiar with working on the project. The primary focus of sprint 1 is the user story #185, “Add evidence field to annotation”.

ID: 185 - Add evidence field to annotation
<i>As a Researcher, I want to annotate with supporting evidence for certain annotation types.</i>