

Sprint 3 Report (8/26/21 - 9/24/2021)

What's New (User Facing)

- The Names of the graphs were changed as per user request.
- Functionality to get mean from mean bars was added.
- Functionality to get the mean from the mean bars was added for all the buttons.
- Feature to calculate the mean was added.
- Plotting of the calibration graphs was added.

Work Summary (Developer Facing)

Our team worked on various client-requested enhancements. We created some of the primary core functions, such as showing the calibration graph and calculating the mean from the mean bars. Several meetings were conducted during the development process to discuss the approach to the solution. We also conducted weekly meetings with the customer to discuss the feature needs and get approvals on the features prior deployment. We were also able to conclude targeted stories for sprint 3 without issue due to the planned development.

Unfinished Work

It was necessary to implement a threading problem in the program in order to decrease GUI latency. The developers are now gaining the necessary skills to work on the problem. We did not estimate how much effort it would take to work on the problem alongside the development of the key functionality. We discovered along the way that the essential functionalities must be built before threading can be implemented.

Another problem necessitates changes to the GUI for a better user experience. We're excited to work on this problem at the conclusion of the project, once all of the features have been completed. Both issues have been postponed till the following spring.

Completed Issues/User Stories

Here are links to the issues that we completed in this sprint:

- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/34>

- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/33>
- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/29>
- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/26>
- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/23>

Incomplete Issues/User Stories

Here are links to issues we worked on but did not complete in this sprint:

- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/27>
When the project is finished, the Code Enhancement issue will be closed. This problem will be carried over until the final sprint. This issue deals with code improvements, which aid in refactoring and detecting code smells. The code modifications have no effect on performance.
- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/25>
We decided that the feature did not add sufficient value for us to work on it in this sprint because sprint 3 focused more on the feature development than the user interface experience enhancements. This issue will also be carried over to the next sprint.
- <https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/issues/24>
We did not get to this issue because threading knowledge was essential prior to working on this issue. Once all of the features requested by the user have been implemented, the developers will turn their attention to this problem. This problem will likewise be carried over to the next sprint.

Code Files for Review

Please review the following code files, which were actively developed during this sprint, for quality:

- Calculations.py
<https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/blob/main/Calculations.py>

[b/main/calculations/Calculations.py](#)

- main.py
<https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/blob/main/mainUI/main.py>
- biology-labview-ui.ui
<https://github.com/WSUCptSCapstone-Fall2022Spring2023/biology-labviewtopython/tree/main/ui>
(this ui file serves as our ui mockup approved by the client)

Retrospective Summary

Here's what went well:

- We were able to satisfy the client's requirements for the sprint 3.
- Completed the work of the targeted issues.
- Positive feedback from the client.

Here's what we'd like to improve:

- Better planning and understanding before starting working on the issue.
- More communication

Here are changes we plan to implement in the next sprint:

- Fix scheduled peer meetings weekly.
- Collaborative approach towards development