**Form Buster**
**Team Members:**
- Daniel Acosta (dacosta2022@my.fit.edu)
- Christopher Demuro (cdemuro2022@my.fit.edu)
- Alex Merino (amerino2022@my.fit.edu)
- Luka Miodrag Starcevic (lstarcevic2022@my.fit.edu)

**Faculty Advisor:** Phillip Bernhard (pbernhar@fit.edu)

**Client:** Phillip Bernhard (pbernhar@fit.edu)
**Date of meeting:**
- 10/24/2025

**Progress of Current Milestone:**

| Task | Completion | Daniel | Chris | Alex | Luka | To-Do |
|------|-----------|--------|-------|------|------|-------|
| Implement, Test, Demo Form Templates | 100% | 0% | 100% | 0% | 0% | N/A |
| Implement, Demo, Test Forms in the Inbox | 90% | 100% | 0% | 0% | 0% | Send notifications based on signature graph, expand notification details when clicked on |
| Implement, Test Signature Graph | 80% | 0% | 0% | 100% | 0% | |
| Implement, Test Completing a Signature | 100% | 0% | 0% | 100% | 0% | N/A |
| Conduct Evaluation and analyze results | 50% | 33% | 33% | 33% | 0% | Continue evaluation while system nears completion |
| Create Poster for Design Showcase | 100% | 25% | 25% | 25% | 25% | N/A |
| Fix form editor's issues due to quill formatting | 95% | 0% | 0% | 0% | 100% | Certain formatting is not being saved currently, such as text alignment |

**Discussion of Accomplished Tasks:**

- **Implement, Test, Demo Form Templates:** Before this milestone, there were only two form types that were held in the database. To bolster the library of forms that the web application houses, time was spent to convert PDF forms into an html format that can easily be inserted into the web application's database.

- **Implement, Demo, Test Forms in the Inbox:** Building on top of the work done in the last milestone, the inbox has been updated visually and has some new features. These new features include reading of messages, clearing of read messages from the inbox, refresh button to refresh notifications, and dynamic notification styles. Currently, there are two types of notifications, one for form approval/disapproval and another for indicating that a new form has been assigned to a signee.

- **Implement, Test Signature Graph:** Continuing from the last milestone, the Signature graph was further developed to become more robust and able to display more details about the form. Also, in accordance with feedback from Dr. Chan, user details are displayed on the signature graph without needing for users to click on the graph, easing user accessibility.

- **Implement, Test Completing a Signature:** During this milestone we began and finished implementing the signing page of the web application. This page was put off until now because each component of the page can be obtained from a previously implemented component. With all the other components completed, it was simple to combine them into one page and include a signature box at the bottom for the signatory to sign. The page contains the form type that was filled out, the data the form creator input, and other signatures that were filled out by other users.

- **Conduct Evaluation and analyze results:** Near the end of the milestone, the team began user testing with the web application. Testers were asked to complete a list of tasks which lead them throughout the entire system. Users registered, signed in, started a form, and viewed the signature tree as a student. Another group registered as an advisor and signed a form which had previously been started. Then they were asked to view the entire form from the signature tree page.

- **Create Poster for Design Showcase:** Since there is no Senior Design Showcase in the Fall, the main purpose for the poster is to have a centralized file which contains a summary of all work done throughout the entire project. The work on the poster was shared amongst the members of the team including the formatting, images, and text seen on the poster.

- **Fix form editor's issues due to quill formatting:** The editor, while allowing for text editing, could not actually produce forms that had correct formatting due to quill stripping the class name and attributes, as well as some other issues, so the input would not be properly displayed unless manually changed. The editor now finally allows for creation of forms without any major issues, the only thing left being adding more formatting options. A preview mode was also added to the editor, which shows the state the form will look like on the form submission page.

**Discussion of Contribution of each Team Member:**

- **Daniel Acosta:** Contributions to this milestone include fleshing out the remaining systems of the inbox system and adding notifications on form approval, disapproval, and creation. Redesigned the visuals of the inbox to be more visually appealing and consistent. Features added to the inbox include reading of messages, clearing of read messages from the inbox, refresh button to refresh notifications, and dynamic notification styles.
- **Christopher Demuro:** Contributions to this milestone included the implementation of new forms, including the Request to Retake a Course form and the Course Waiver Request form, including all of the relevant fields and checks, and testing profile autofill functionality. Both of these forms are fully complete and replicate the content of the fillable PDF forms as closely as reasonably possible.
- **Alex Merino:** Contributions to this milestone include fully implementing the Signature page where users are able to sign forms. This includes the frontend GUI alongside the backend logic for updating the signatures of users and how it affects all other parts of the system, specifically the Form Tracker and Signature Graph. Another page worked on was the signature graph where the graph will display user roles when the pages is loaded. Implementation of the functionality of the graphs was also part of the scope completed for this semester. Providing help on the senior design poster with formatting and text content alongside gathering users to test the web app were two tasks also contributed to this milestone.
- **Luka Miodrag Starcevic:** Contributions in this milestone mainly focused on getting the form editor working and adding a preview page to it. Changing the UI of the editor to make it more usable and presentable as well as importing the css of the form page for the preview mode to be accurate were part of this. Other contributions include adding documentation and refactoring of other parts of the code.

**Milestone 6 Task Matrix:**

| Task | Daniel | Chris | Alex | Luka |
|---|---|---|---|---|
| Implement, test, and demo Signature Graph | 0% | 0% | 100% | 0% |
| Implement, test and demo 'excluded' forms | 0% | 0% | 100% | 0% |
| Implement, test, and demo Inbox Notifications | 100% | 0% | 0% | 0% |
| Implement, test, and demo GUI fixes | 0% | 100% | 0% | 0% |
| Implement, test, demo Saving Forms in Editor | 0% | 0% | 0% | 100% |
| Test/demo of entire system | 25% | 25% | 25% | 25% |
| Conduct evaluation and analyze results | 25% | 25% | 25% | 25% |
| Create user/developer manual | 25% | 25% | 25% | 25% |
| Create demo video | 25% | 25% | 25% | 25% |

**Discussion of Planned Tasks:**

- **Implement, test, and demo Signature Graph:** The signature graph will go through its final phase of refactoring where updates will be made based on the feedback from Drs. Bernhard and Chan. The logic behind how the signature graph is created will be finalized and able to handle every form that is saved in the system.
- **Implement, test and demo 'excluded' forms:** After feedback from Dr. Chan in milestone 4, the 'excluded' form database and functionality will be added to the system. This functionality will only be available to administrators where they can essentially pause forms from being continued until being enabled again by an administrator.
- **Implement, test, and demo Inbox Notifications:** To finalize the inbox, the logic behind the signature graph needs to be utilized to determine who to send the notifications to. Currently, the notification to sign is immediately sent to all signees. We do not want to send notifications to people before they can sign off on the form. Additionally, a popup showing more details about the notification will be added so that clicking on forms simulates "reading" them so that they can be cleared from the inbox later.

- **Implement, test, and demo GUI fixes:** There are many GUI bugs that were pushed aside in favor of functionality of the web application, so now at the end of the project those GUI bugs will be worked on and leave a more polished website than seen in previous milestones.
- **Implement, test, demo Saving Forms in Editor:** To finish off the full functionality of the editor, saving a form needs to be reworked to ensure forms are saved with all of the correct information. This also applies to updating a form template in the editor as well and ensuring the data overwrites the previous template.
- **Test/demo of entire system:** The entire system will be tested in accordance with the test cases laid out in the test plan. Any bugs or errors found during testing will be fixed and retesting will ensue.
- **Conduct Evaluation and analyze results:** We will continue our evaluations of the system by finding more testers who have not seen the website before and have them complete a list of tasks. We will also ask users from the last milestone to complete the list again, and evaluate if the problems they found still occur.
- **Create User/Developer Manual:** We will write a user manual in the context of all three of our user types. The user manual will explain all the separate functions that each user has. A developer manual will also be attached to the end of the user manual to explain all the functions throughout the entire system and the location of the functions.
- **Create Demo Video:** We will demonstrate the entire system in one video, showcasing the web application for all user types as well as pointing out unique features for each user.