Incremental and Regression Testing
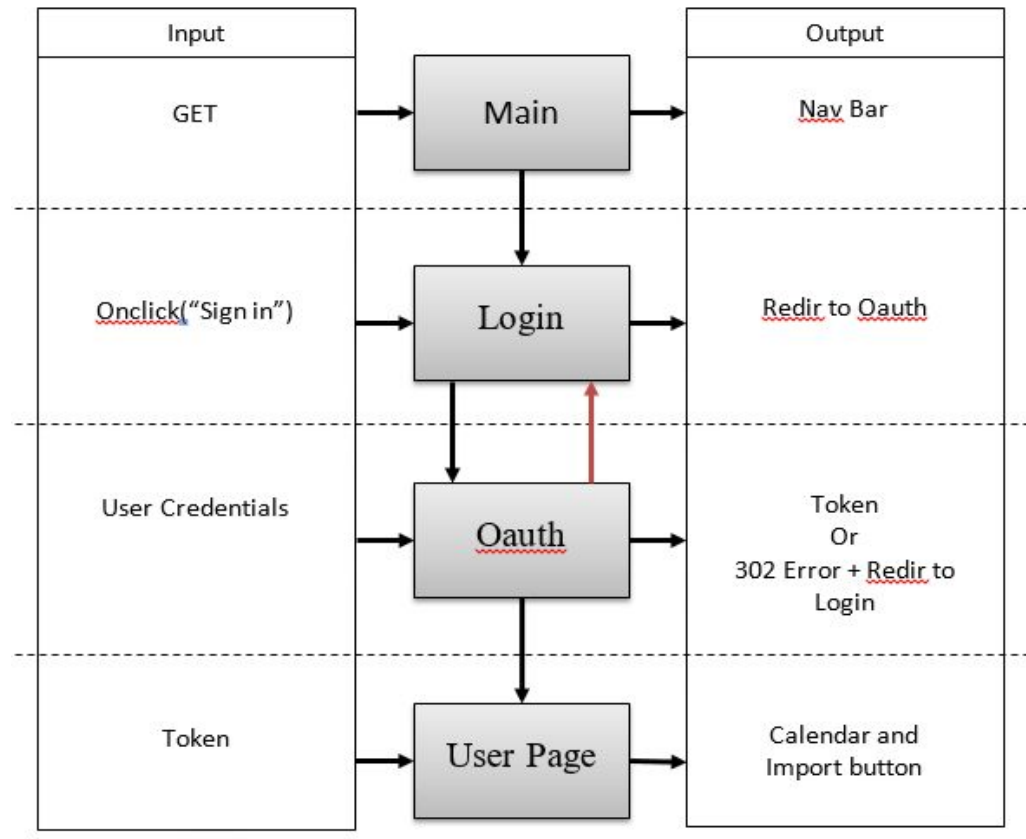
Guna Kondapaneni, Lisa Campbell, Matthew Pace,
Brian Kaetzel, Joseph Khawly

Classification of Components

Define All Components

- **Main:** The first component consists of launching and displaying the initial screen which consists of a navigation bar.
- **Login:** This component is navigated to from main and requires the user to select 'Sign in', which then redirects to google authentication.
- **Oauth:** This component requires the user to input google credentials, and an authentication token is generated. The database is checked to see if the user is new or existing. If the user is new, the user is added to the database.
- **User Page:** This component takes the authentication token, uses it to access the user's google calendar. The calendar is displayed and options for importing calendars is provided.

Form of Incremental Testing

We chose to implement **top-down testing** because it better overlapped with the program's design time frame. It was more efficient test as modules were created rather than create all the models prior to performing bottom-up testing. Because we are using top-down testing, stubs were created for each module to verify outputs.

Incremental and Regression Testing

Automation

Running *mvn test* will run all of the regression tests, and the Selenium tests can be loaded and executed with a browser plugin. There is currently some degree of manual browser setup with the Selenium incremental tests.

Defect Log (5 most severe, 1 least severe)

Module	Main

Incremental Testing

Defect No.	Description	Severity	How to Correct
1	Clicking logo in Navigation component does not take user back to User Page	2	Instead of directing the user to '#', which does not reload the page, direct the user to '/', which will reload the page.

Module	User Page

Incremental Testing

Defect No.	Description	Severity	How to Correct
1	The 'Import Calendars' page dropdown does not populate with any calendars to import.	3	Make an endpoint that verifies and returns access token to the User. Code Below:

			``java
			@RequestMapping({"/user","/me"})
			public Map<String, String> user(Principal principal) throws Exception{....}
			``

Regression Testing

Defect No.	Description	Severity	How to Correct
1	We were having trouble loading the clientID and secret from the environment	5	Added the clientID and secret it to the .yml file, with security privileges, and OAuth scopes.
			See application.yml

Module	Login

Incremental Testing

Defect No.	Description	Severity	How to Correct
1	User cannot sign out without deleting session cookies	3	Add a logout route to the server and connect a front-end button to the route.

Update Product Backlog

Product backlog updated, and table included here for your convenience.

Backlog Id	Functional Requirement	Hours	Status
1	As a new user, I would like to be able to create a new user. (only Google OAuth login, includes setup)	~~12~~ 20	Completed sprint 1
2	As an existing user, I would like to be able to log into the app. (only Google OAuth Login)	~~3~~ 5	Completed sprint 1
3	As an existing user, I would like to be able to import my Google Calendar.	~~6~~ 10	In-progress: moved to sprint 2
4	As an existing user, I would like to be able to rate how stressful or de-stressing certain events are on my calendar.	12	Incomplete: moved to sprint 2
5	As an existing user, I would like to see how stressful each day in my upcoming week will be.	14	Planned for sprint 2
6	As an existing user, I would like to be able to see suggestions popup to help me make my extremely stressful days less stressful. (aka. modify schedule)	8	Planned for sprint 2
7	As an existing user, I would like to be able to synchronize my calendars.	5	Planned for sprint 2
8	As an existing user, I would like to be able to manually set my stress level of an event	3	Planned for sprint 2
	Total:	~~63~~ 77	