Artifact 6

Feature:

- Features to adding incrementality

GUI design and User test cases:

- for testing the analytics

Taskboard:

- Done list of last sprint
- ToDo task list for the next sprint

Incremental Analytics & Test Cases:

- **Analytic 1:** Average Revenue
- **Analytic 2:** Average Rating
- **Analytic 3:** Average Budget
- **Analytic 4:** Popular Movies
- **Analytic 5:** Popular Keywords
- **Analytic 6:** Popular Release Time (?)
- **Calculating Averages**
    - **Test Case 1:** When I update/edit data, I want to make sure that the changes are updated on the back end
        - Correct Output: Return the dataframe with the updated information.
    - **Test Case 2:** When I update/edit data, I want to see the most recent changes reflected in the analytics
        - Correct Output: Ensure that the most updated dataframe is used to display the analytics.
    - **Test Case 3:** I want to make sure that incremental analytics is more efficient.
        - Correct Output: Run two average functions and keep track of runtime. The first would be with incremental analytics and the other would be through iterating through the dataframe one by one, updating "total" each time. Incremental analytics should be faster.
- **Calculating Superlatives**
    - **Test Case 1:** When I make an update/edit, I want to make sure from the backend, the changes are updated.
        - Correct Output: backend returns updated information
    - **Test Case 2:** When I update/edit data, I want to see the most recent changes reflected in the analytics
        - Correct Output: Want to see the most updated changes displayed in the analytic.
    - **Test Case 3:** As a user, when I make an update/edit, I want to be able to see the changes reflected in the analytics

        - Correct Output: Create a function that prints the difference in runtime and assert new runtime is less than before.

Features (user stories) to implement in next sprint:

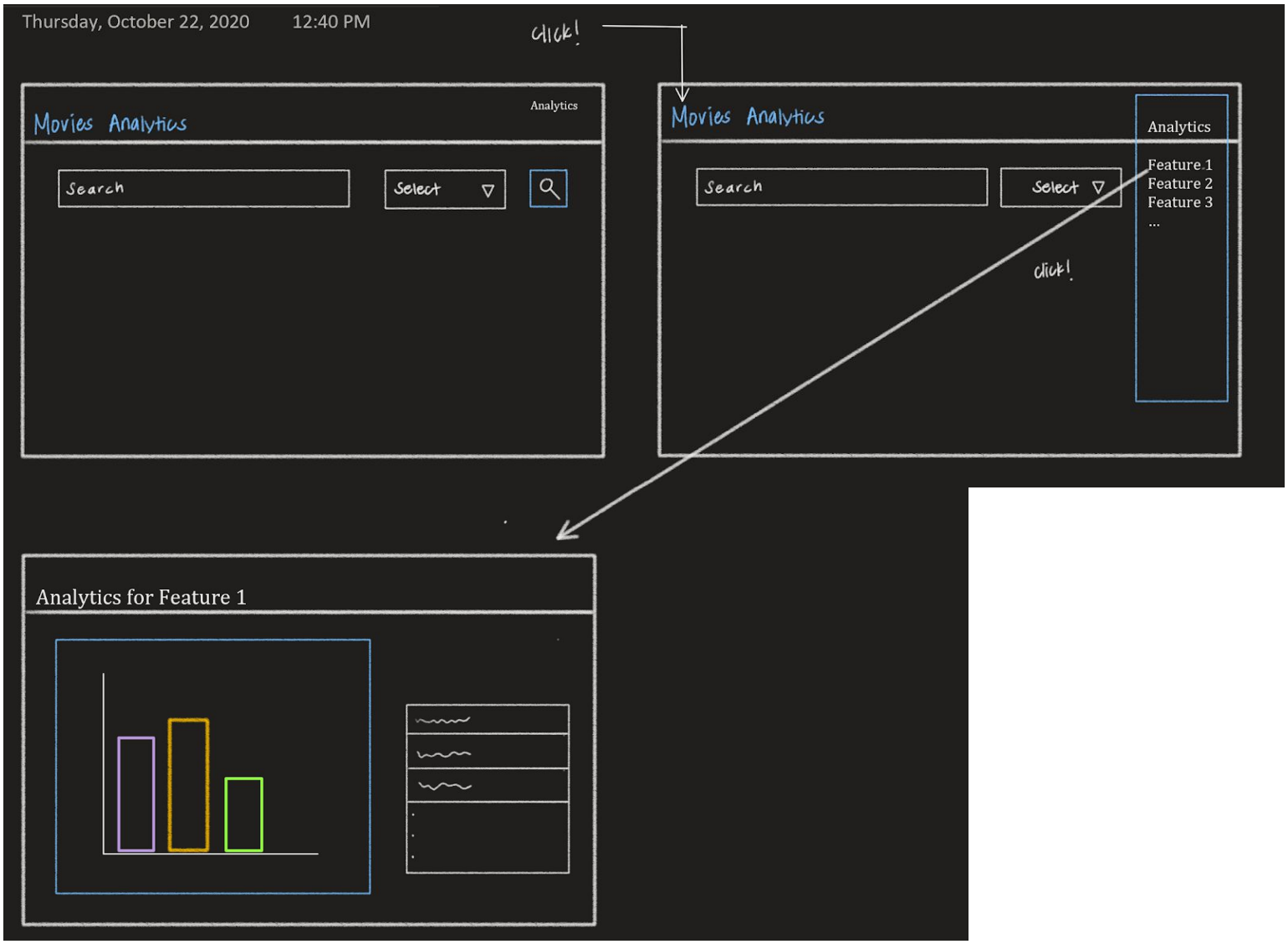
- **Feature 1:** As a user, I would like to interact with the most popular movies for a certain genre analytic.
    - Allow front-end instances of a sort from highest rated movie to lowest.
- **Feature 2:** As a user, I would like to interact with correlation between budget and revenue analytic.
    - Allow front-end interactions with the scatter plot between budget and revenue.
- **Feature 3:** As a user, I would like to interact with the most popular keywords.
    - Allow front-end interaction with the bar graph so that users can click on it and it does something
- **Feature 4:** As a user, I would like to interact with the most popular times to release movies by month(?)
    - Allow front-end interaction with the bar graph so that users can click on it and it does something
- **Feature 5:** As a user, I would like to interact with the correlation between movie ratings and the number of languages it is released in.
    - Allow front-end interaction that outputs some sort of statistical analysis to the user.
- **Feature 6 (NEW ADDITIONS):** As a user I would like to interact with the average budget per genre analytic.
    - Allow front-end instances/interactions to sort from highest to lowest average budget.
- **Feature 7 (NEW ADDITIONS):** As a user I would like to interact with the average budget per genre analytic.
    - Allow front-end instances/interactions to sort from highest to lowest average rating.
- **Feature 8 (NEW ADDITIONS):** As a user I would like to interact with the average revenue per genre analytic.
    - Allow front-end instances/interactions to sort from highest to lowest average revenue.

Test Cases

- **Feature 1 Test Cases:** As a user, I would like to interact with a data visualization of what the most genres are.
    - **Test Case 1:** As a user, on the most popular genres graph, I can click on certain bars displaying the number of movies that fall under a particular genre.

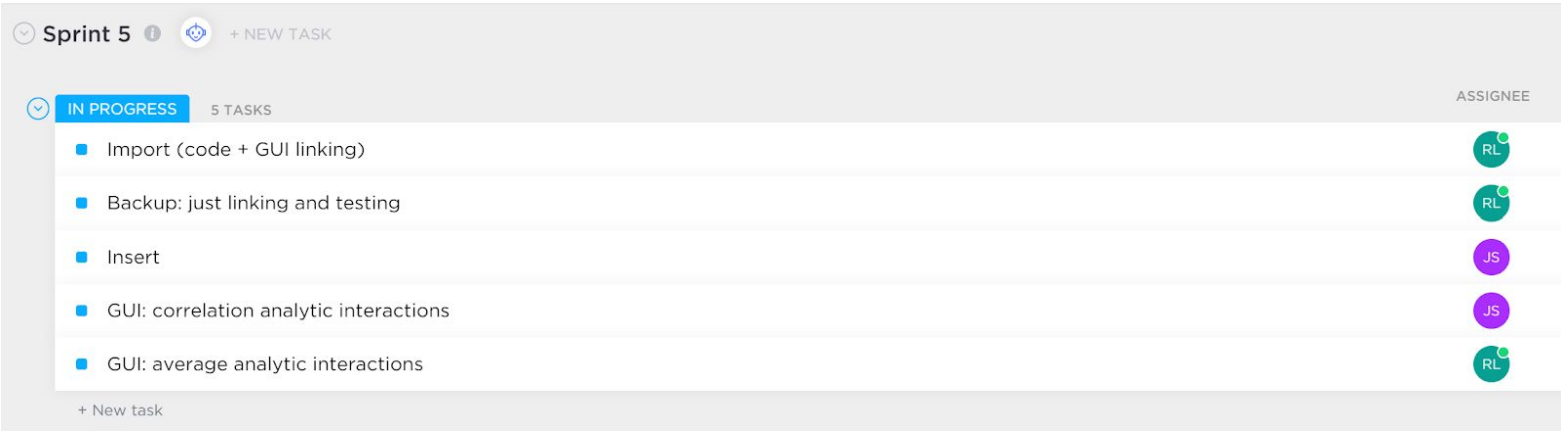
        - Correct Output: A list of movies in that genre are outputted to the user.
- **Feature 2:** As a user, I would like to interact with the correlation between movie budget and revenue.
    - **Test Case 1:** As a user, on the Correlation Between Budget and Revenue page, I click on the analytics button.
        - Correct Output: An explanation of the correlation is outputted to the user in a small paragraph.
- **Feature 3 Test Cases:** As a user, I would like to interact with a data visualization the most popular actors/actresses based on movie appearance
    - **Test Case 1:** As a user, on the Most Popular Actors/Actresses page, I press on one bar representing an actor/actress.
        - Correct Output: A list of movies that features that actor is output to the user.
- **Feature 4 Test Cases:** As a user, I would like to interact with the most popular keywords.
    - **Test Case 1:** As a user, on the most popular keywords graph, I can click on certain bars displaying the number of times certain keywords are mentioned.
        - Correct Output: A list of movies that include those keywords are outputted to the user.
- **Feature 5 Test Cases:** As a user, I would like to interact with a data visualization of the most popular times to release movies by month(?)
    - **Test Case 1:** As a user, on the Movie Releases by Month bar graph, I can click on a bar that represents a month.
        - Correct Output: A list of movies released in that month are outputted to the user.
- **Feature 6 Test Cases:** As a user, I would like to interact with the correlation between movie ratings and the number of languages it is released in.
    - **Test Case 1:** As a user, on the Correlation Between Ratings and Languages page, I click on the analytics button.
        - Correct Output: An explanation of the correlation is outputted to the user in a small paragraph.

GUI



Task Board

- **Done list of last sprint** → Sprint 5: (SK: Selma, EM: Emily, JS: Jihad, RL: Ricardo, BV: Briana(dropped))
    - Artifact 4 (all of us)
    - Backup: linking and testing: Ricardo
    - Create demo (all of us)



- **ToDo task list of next sprint** → Sprint 6: (SK: Selma, EM: Emily, JS: Jihad, RL: Ricardo)
    - Implement correlation analytic for release time: Selma
    - Create general function for superlative analytic: Emily
    - Incremental analytic for superlatives: Selma, Emily
    - Incremental analytic for average: Selma, Emily
    - Import (code + GUI linking): Ricardo
    - Insert (code + GUI linking): Jihad
    - GUI: correlation analytic interactions: Jihad
    - GUI: average analytic interactions: Ricardo