Teamwork Breakdown Plan

After completion of each task, updated codes are uploaded to the shared replit file.

| Name and Method of contact | Expected Task | Expected to Finish | Finish Date |
| --- | --- | --- | --- |
| Paarth  Email: 761094@pdsb.net  Instagram: redacted  Discord: redacted | * Responsible for creating the sorting, searching, and object classes for the program. Ensure each class works accordingly as they will drive the program. * After task completion, assist in developing the Graphical User Interface. | Expected to complete the main sorting class containing the sort feature and the object class -  Jan. 15  Expected to refine and complete the Sorting, Object, and other related tasks- Jan. 19  Expected to assist with GUI and help competition - Jan. 25 | Completed first part - Jan. 17  Completed second part-Jan. 21  Completed third part -Jan. 26 |
| Meekail  Email: 884205@pdsb.net  Instagram: redacted  Discord: redacted | * Responsible for creating the file reading and writing classes that deal with data being read and written to the CSV and TXT files. * Also responsible for developing the recommendation system to implement during the later stages of the project. * After task completion, assist in developing the Graphical User Interface. | Expected to complete the Login file and CSV reading and writing sorted info class. The validator for login and creating new accounts - Jan. 15  Expected to complete the rating system and update all files after rating - Jan. 21  Expected to build recommendation system and assist with GUI - Jan. 27 | Completed first part -  Jan. 18  Second part - reassigned,  Completed - Jan. 26  Third part - reassigned,  Completed - Jan. 24  Assist with GUI touchups - Jan.26-27 |
| TJ  Email: 626845@pdsb.net  Instagram: redacted  Discord: redacted | * Responsible for creating the Graphical User Interface. This includes the main page of movies, login and sign-up pages, rating pages, and recommendation pages. * The GUI class includes numerous buttons and attributes to make it user-friendly. | Expected to complete Login/Sign-Up page and main display with 5 movies - Jan. 15  Expected to complete different sorted movies, recommendation page, and rating page - Jan. 24  Expected to refine and link all pages to each other - Jan. 27 | N/A-  Did not contribute |

Actual Task Completed:

**Meekail**: Created the login and sign up methods which allow the users to log in by username and uses the check login class to check if the user exists or not. Both classes are linked to the GUI. Worked on the file writer class that deals with updating and writing to the main CSV file, reading and writing to the Login TXT file, and writing sorted arrays to an external file.

**Paarth**: Created the GUI. Developed the Data Object class, and the Sorting class that deals with sorting the different array in the chosen manner (A-Z, Z-A, avg rating increasing or decreasing). Also built the recommendation system that uses the dot product and multiplies to each rating and divides by the number of non-zero reviews to find the movies for a user. For new users, the algorithm recommends unwatched movies with the highest average ratings. Created the WriteFile class that deals with updating the CSV file after receiving a rating. Writes to login and CSV file upon new user entry and writes sorted information to an external file. Managed the whole project, ensuring the linking of all classes and files that make the program run fluidly. Linked all components created by everyone to create a finished product.

**TJ**: Did not contribute to the project.