



**Middlesex
University
Mauritius**

CST2550

**Software Engineering Management and
Development**

Coursework 2 - Data Structures and Algorithms

**Autumn/Winter term
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Table of Contents

Table of Contents.....	2
Introduction.....	3
Design.....	3
Data Structures.....	3
STL Vector (Dynamic Arrays).....	3
Array-based Binary Search Tree.....	3
Hash Table.....	3
Algorithms.....	4
Binary Search.....	4
Hashing.....	4
Search (Hash Table).....	4
Algorithm Analysis.....	5
Binary Search.....	5
Search (Hash Table).....	5
Testing.....	6
Unit Testing.....	6
Integration Testing.....	6
Table of test cases.....	7
Conclusion.....	8
Summary of Work Done.....	8
Limitations and Critical Reflection.....	8
Future Approach.....	8

Table of Figures

Figure 1:Recursive Binary Search Algorithm.....	5
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Introduction

This coursework introduces a Video Rental System, a software application developed in C++. The system is designed to modernise the video rental industry by streamlining the process of renting movies to clients and efficiently managing pricing and overdue accounts. The system leverages a binary tree data structure, enabling staff to swiftly locate movies by their names, significantly reducing the time spent on inventory management. Furthermore, it offers the flexibility to manage the video inventory effectively by providing features to add new videos, ensuring the system stays current with the ever-changing movie landscape.

The report is organised to provide a detailed insight into the Video Rental System. It begins with an introduction, followed by an in-depth discussion on the system's design. The report then presents an analysis of the system's key functionalities using pseudo code. The report concludes with a summary of the work done, discusses the limitations of the project, and reflects on how a similar project would be approached in the future. The final part of the report lists the references used to support the arguments made in the project. This systematic layout ensures a logical flow of information, making it easy for readers to understand the intricacies of the project and the value it brings to the video rental industry.

Design

Data Structures

STL Vector (Dynamic Arrays)

Similarly to dynamic arrays in C++, vectors also have the ability to be accessed and traversed via iterators. In addition to this, they offer the ability to dynamically change size based on space requirements (GeeksforGeeks, 2015). This makes the STL vectors an excellent choice for handling a large amount of movies, as the movies are ordered and can be iterated over, allowing for algorithms such as Binary Search to be applied to find a specified movie using a given ID.

Array-based Binary Search Tree

A binary search tree is a data structure that provides efficient insertion, deletion and searching operations for sorted data which can be helpful in monitoring and efficiently dealing with large sets of data (Geeksforgeeks, 2015). Using the STL vector, an array-based binary search tree is constructed to allow for quick finding of a movie with a given ID as it makes use of a recursive function to search for the ID by comparing it to the ID's to the left and ID's to the right within the array.

Hash Table

A hash table is a type of data structure in which the address/ index value of the data element is generated from a hash function. This enables very fast data access as the index value behaves as a key for the data value (Domino Data Lab, n.d). To facilitate the searching for a

movie by a given name, a hash table was used due to its constant access time, allowing for results to be returned quickly. Movie names were used as keys, with their associated values being the movie objects themselves.

Algorithms

Binary Search

Binary search is an efficient algorithm for finding an item from a sorted list of items using a divide and conquer approach, which makes searching through hundreds, if not thousands, of data points easier and more efficient (Khan Academy, n.d.).

Using a binary search on the sorted STL vector allows for quick identification of the required movie using an ID. The STL Vector is sorted upon instantiation using the provided csv data, however this is not necessary as the indexes can also be used to act as the movie ID's. However, through using an ID field, there is no need to go do a lookup within the STL vector to get the ID of a movie, which will result in unnecessary computation.

Hashing

The `std::unordered_map` makes use of the `std::hash` library to generate the required map (Borisov, 2013).

This data structure employs hashing techniques to get elements based on their associated keys, such as movie names. Essentially, hashing assigns each item a unique address, allowing for retrieval without the need for exhaustive searches.

Users can access movie information swiftly by simply providing the movie name, with the map handling the rest seamlessly. The time complexity for searching within an unordered map remains constant, irrespective of the dataset's size. This ensures good performance regardless of map size, adding to the scalability of the system.

Search (Hash Table)

Performing a lookup within a hash table is always of constant time complexity at best case, degrading to $O(n)$ at worst case, hence the use of a hash table as it can quickly and effectively locate a required element within a large amount of data (Fulber-Garcia, 2024).

Algorithm Analysis

Binary Search

```
1 procedure binary_search(i, j, x: integers,  $1 \leq i \leq j \leq n$ )
2   m :=  $\lfloor (i+j)/2 \rfloor$ 
3   if  $x = a_m$  then
4     return m
5   else if  $(x < a_m \text{ and } i < m)$  then
6     return binary_search(i, m - 1, x)
7   else if  $(x > a_m \text{ and } j > m)$  then
8     return binary_search(m + 1, j, x)
9   else return 0
10 {output is location of x in  $a_1, a_2, \dots, a_n$  if it appears; otherwise it is 0}
```

Figure 1: Recursive Binary Search Algorithm (Chegg, n.d)

The Binary Search Algorithm that was implemented in this system was a recursive function that continuously divides the dataset to locate the **index** of a required movie by comparing the ID's of all the movies, already sorted within the array.

It starts by identifying the middle point of the dataset. It checks if the movie at the middle point has the required ID, and if it does, it then returns the **index** of the middle point.

In the case that the movie at the middle point does not have the desired ID, it compares the value of the required ID to the values of the ID's to the left and to the right, and searches in the appropriate direction (left if the required ID is smaller than the ID of the movie at the middle point, right if the required ID is larger than the ID of the movie at the middle point).

If the required ID is not found, it returns an indicator that it was not found. In the case of this project code, it returns -1 and not 0 as in the example.

Ultimately, this recursive function has a time complexity of **$O(\log(n))$** due to its logarithmic nature. This makes it an excellent choice for a large, sorted array of movies to quickly locate the **index** of a required movie.

Search (Hash Table)

Searching within a hash table has a time complexity of **$O(1)$** at best, and can degrade to **$O(n)$** at worst in the case of a poor hashing function or the need for rehashing of data. Due to its quick performance with large amounts of data, this algorithm was chosen in conjunction with a Hash Table to quickly search for and locate any movie that might be on the system using a given name.

Testing

The testing approach used for the Video Rental System involves a combination of unit testing and integration testing to ensure the correctness and robustness of the system. Below is an outline of the testing approach along with a table of test cases:

Unit Testing

- Unit tests are employed to validate individual components of the system in isolation.
- Each class and its methods are tested independently to ensure they behave as expected.
- Mock objects may be utilised to simulate dependencies and isolate units of code for testing.
- Focus is on verifying the correctness of methods, handling of edge cases, and adherence to specifications. (CodeFresh, 2022)

Integration Testing

- Integration tests are conducted to evaluate the interactions between different modules or components of the system.
- This ensures that the integrated components work together seamlessly and fulfil the overall system requirements.
- Tests cover scenarios where multiple modules collaborate to perform specific functionalities.
- Emphasis is placed on data flow, communication between modules, and the integrity of system interfaces. (CodeFresh, 2022)

Table of test cases

ID	Description	Expected Result	Actual Result	Pass/Fail
01	View All Movies	All movies in the inventory are displayed	All movies displayed correctly	Pass
02	Search Movies by Genre	Movies of the specified genre are displayed	Movies of the specified genre displayed correctly	Pass
03	Search Movie by ID	Movie details are displayed if found, otherwise error	Movie details displayed if found, error shown if not	Pass
04	View All Customers	All customer information is displayed	All customer information displayed correctly	Pass
05	Update Customer Membership Plan	Customer's membership plan is updated	Customer's membership plan updated successfully	Pass
06	Rent Movie to Customer	Rental transaction is processed, movie status is updated	Rental processed; movie status updated correctly	Pass
07	View All Rentals	All rental transactions are displayed	All rental transactions displayed correctly	Pass
08	Return a Movie	Movie is returned, rental status updated	Movie returned successfully, rental status updated	Pass

Conclusion

Summary of Work Done

1. Implemented classes for Customer, Movie, and Rental to represent entities in the video rental system.
2. Developed functionalities for adding, displaying, and updating customers, movies, and rentals.
3. Utilised CSV file reading to populate movie data, allowing for easy management of movie information.
4. Implemented algorithms such as binary search for efficient searching of movies by ID.
5. Incorporated error handling to manage cases of invalid input and data parsing errors.

Limitations and Critical Reflection

1. CSV Data Reading: The system relies on CSV data for movie information. However, it has limitations in handling data with extra commas, which can lead to incorrect data parsing. Improvements in data validation and handling are necessary to mitigate this issue.
2. List Structure: The system utilises a list structure for storing movies, which may result in slower search operations compared to a linked list or other data structures. This limitation affects the efficiency of movie retrieval and management, especially in large datasets (Mehlhorn & Tsakalidis, 2014).
3. No Removal of Movies: The system lacks functionality for removing movies from the dataset. While it allows for adding and updating movie information, there is no provision for removing outdated or irrelevant movies. This limitation necessitates manual removal of movies from the CSV data itself, which can be inconvenient and error-prone.

Future Approach

1. Enhanced Data Validation: Implement robust data validation mechanisms to handle various data formats and errors more effectively, ensuring accurate parsing of CSV data (Abba & Hassan, 2018).
2. Optimised Data Structure: Consider utilising more efficient data structures such as linked lists or hash tables for storing and retrieving movie information, improving search and manipulation operations (Tapia-Fernández et al., 2022).
3. Comprehensive Functionality: Expand the system's functionality to include features for removing movies from the dataset, providing a comprehensive solution for movie management.

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Daily Standup Meeting 1

Project Name: Video Renting system	Group Name: Group
Sprint Number:1	Date and Time: 26/02/24 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: none to be declared

2. What will you do today?

Answer: Research on project

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: none to be declared

2. What will you do today?

Answer: Research on project

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: none to be declared

2. What will you do today?

Answer: Research on project

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: none to be declared

2. What will you do today?

Answer: Research on project

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: none to be declared

2. What will you do today?

Answer: Research on project

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Daily Standup Meeting 2

Project Name: Video Renting system	Group Name: Group
Sprint Number: 1	Date and Time: 27/02/24 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Discussion on project

2. What will you do today?

Answer: Research on project what could be useful based on discussion

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Discussion on project

2. What will you do today?

Answer: Carry an in depth search on project after meeting

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (3): Name: Dristi Bhugun

Answer: Discussion on project

2. What will you do today?

Answer: Will be looking at more projects with similar outcomes

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Discussion on project

2. What will you do today?

Answer: Research on project and how to work it out

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Discussion on project

2. What will you do today?

Answer: Research on project and features that can be used

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 3

Project Name: Video Renting system	Group Name: Group
Sprint Number: 1	Date and Time: 28/02/24 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Research on project

2. What will you do today?

Answer: analysing the distribution of work based off on team strength

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Research work

2. What will you do today?

Answer: More in depth research work

3. What obstacles are impeding your progress?

Answer: to find similar project

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Research work

2. What will you do today?

Answer: Meticulous research work

3. What obstacles are impeding your progress?

Answer: difficult to find similar project

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Research works

2. What will you do today?

Answer: Find resources on project

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Research work

2. What will you do today?

Answer: watching tutorials on similar project

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 4

Project Name: Video Renting system	Group Name: Group
Sprint Number: 2	Date and Time: 29/02/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: distribution of work based on team strength

2. What will you do today?

Answer: start with report writing

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: In depth research

2. What will you do today?

Answer: Gather research work and analyse who they work

3. What obstacles are impeding your progress?

Answer: finding projects to understand outcome

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Thorough research of the project and its requirements

2. What will you do today?

Answer: Gather research work

3. What obstacles are impeding your progress?

Answer: couldn't find projects in the same category

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Research

2. What will you do today?

Answer: Gather more research material based off on project requirements

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: More research carried out

2. What will you do today?

Answer: Deepen understanding of the assignment

3. What obstacles are impeding your progress?

Answer: None

Daily Standup Meeting 5

Project Name: Video Renting system	Group Name: Group
Sprint Number: 2	Date and Time: 1/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Research on error handling

2. What will you do today?

Answer: Look up ways to implement error handling seamlessly

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Gather research work

2. What will you do today?

Answer: Assigned task for DSA

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Gather research works

2. What will you do today?

Answer: Assigned task header files

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Researching potential security vulnerabilities we could face.

2. What will you do today?

Answer: Researching implementing measures to mitigate risks.

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Researching data validation mechanisms that could be implemented

2. What will you do today?

Answer: More research to be conducted

3. What obstacles are impeding your progress?

Answer: None so far

Daily Standup Meeting 6

Project Name: Video Renting system	Group Name: Group
Sprint Number: 2	Date and Time: 04/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Investigated algorithms and data structures relevant to optimizing search and retrieval operations.

2. What will you do today?

Answer: More research to be conducted

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Understanding DSA

2. What will you do today?

Answer: Analysing DSA useful for project

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: understand header files

2. What will you do today?

Answer: writing header files

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Investigated database management systems and techniques.

2. What will you do today?

Answer: More research on efficient data storage and retrieval.

3. What obstacles are impeding your progress?

Answer:

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Researched different testing methodologies and tools

2. What will you do today?

Answer: More research to ensure software quality and reliability.

3. What obstacles are impeding your progress?

Answer: None so far

Daily Standup Meeting 7

Project Name:Video Renting system	Group Name: Group
Sprint Number: 2	Date and Time:05/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: In depth search in algorithm that can be useful

2. What will you do today?

Answer: Discussing algorithm part with team

3. What obstacles are impeding your progress?

Answer: need team advice on the chosen algorithm

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Coming up with proposed DSA that can be useful for the project

2. What will you do today?

Answer: Meet ups with the team to discuss the DSA which can be useful

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Gathered ideas based on DSA

2. What will you do today?

Answer: Brainstorm session based on the DSA with the team

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Had a research on the data structure and algorithm part

2. What will you do today?

Answer: will be having a meeting with the team to discuss on the dsa chosen

3. What obstacles are impeding your progress?

Answer: difficult to choose a data structure and an algorithm

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: helped in analysing the data structure part

2. What will you do today?

Answer: will be in a meeting with the team to talk about the data structure

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 8

Project Name: Video Renting system	Group Name: Group
Sprint Number: 3	Date and Time: :06/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Researched different types of software testing. This will broaden our knowledge and mitigate risks.

2. What will you do today?

Answer: More research will be conducted on their applicability to the project's requirements. Once satisfied, we will implement.

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Researched version control systems. Our focus was for code management.

2. What will you do today?

Answer: More research on branching strategies for managing code changes effectively. This will allow for parallel development.

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Researched encryption algorithms and techniques

2. What will you do today?

Answer: More research on securing sensitive user data.

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Research on chosen dsa was carried out.

2. What will you do today?

Answer: Gather more information on dsa.

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Made research on ctime.

2. What will you do today?

Answer: Gather more information on ctime.

3. What obstacles are impeding your progress?

Answer: None to be declared

Daily Standup Meeting 9

Project Name: Video Renting system	Group Name: Group
Sprint Number: 3	Date and Time: 07/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Understanding of the testing of functions using catch2

2. What will you do today?

Answer: Research on different types of testing that can be made based on project

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Research on branches and how they can be used for coding.

2. What will you do today?

Answer: Research on how to initialise github for the team.

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Research on key data structures and functions

2. What will you do today?

Answer: Designing the movie data

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Analyse the building block of the project

2. What will you do today?

Answer: Start with header files

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Started with the header file

2. What will you do today?

Answer: Completing header file

3. What obstacles are impeding your progress?

Answer: None to be declared

Daily Standup Meeting 10

Project Name: Video Renting system	Group Name: Group
Sprint Number: 3	Date and Time: 08/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Research on how we would carry out the testing

2. What will you do today?

Answer: Start with report introduction

3. What obstacles are impeding your progress?

Answer: None to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Gathered information for team leader to initialise the github

2. What will you do today?

Answer: Make the .cpp for header

3. What obstacles are impeding your progress?

Answer: Waiting for team members to finish header

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Design of movies data

2. What will you do today?

Answer: Designing the header file

3. What obstacles are impeding your progress?

Answer: Finding movies data

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Designing header file

2. What will you do today?

Answer: continue with the header file

3. What obstacles are impeding your progress?

Answer: bugs fixing

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: making header file

2. What will you do today?

Answer: fixing the header file and adding for data

3. What obstacles are impeding your progress?

Answer: bugs issues

Daily Standup Meeting 11

Project Name: Video Renting system	Group Name: Group
Sprint Number: 4	Date and Time: 11/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Researched various sections and formats for structuring the project report

2. What will you do today?

Answer: Begin drafting the introduction section of the project report.

3. What obstacles are impeding your progress?

Answer: None so far

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: writing .cpp files for the header

2. What will you do today?

Answer: keep on writing .cpp for the header

3. What obstacles are impeding your progress?

Answer: bugs fixes

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: bug fixing in header files for movies

2. What will you do today?

Answer: write .cpp for the header

3. What obstacles are impeding your progress?

Answer: bugs fixing

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: wrote header file

2. What will you do today?

Answer: will start with main file

3. What obstacles are impeding your progress?

Answer: bug fixing

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: done with header files

2. What will you do today?

Answer: will be helping in designing functions for .cpp file based on header file

3. What obstacles are impeding your progress?

Answer: bug fixing

Daily Standup Meeting 12

Project Name: Video Renting system	Group Name: Group
Sprint Number: 4	Date and Time: 12/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Continued with report writing

2. What will you do today?

Answer: will be analysing the header files and implement comments

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: completed the .cpp files

2. What will you do today?

Answer: start with building the data structure part

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: made fixes in bugs pertaining to header and .cpp

2. What will you do today?

Answer: helping in making data structure part

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: started with main.cpp

2. What will you do today?

Answer: fixing bugs in functions

3. What obstacles are impeding your progress?

Answer: bug fixes

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: helped Adolf with main.cpp

2. What will you do today?

Answer: working on main.cpp

3. What obstacles are impeding your progress?

Answer: bug fixes and crashes

Daily Standup Meeting 13

Project Name: Video Renting system	Group Name: Group
Sprint Number: 4	Date and Time: 13/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer:

Continue working on header files and implementing comments

2. What will you do today?

Answer: Continue working on the report by outlining the methodology section.

3. What obstacles are impeding your progress?

Answer: None

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Made progress on building the data structure part.

2. What will you do today?

Answer: Continue working on the data structure implementation

3. What obstacles are impeding your progress?

Answer: None

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Assisted in developing the data structure part

2. What will you do today?

Answer: Research on writing test cases for the functionalities we brought up.

3. What obstacles are impeding your progress?

Answer: None

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Continued fixing bugs in functions.

2. What will you do today?

Answer: Focus on resolving any remaining bugs in the main.cpp file.

3. What obstacles are impeding your progress?

Answer: Dealing with complex bugs.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Assisted in researching test cases for the functionalities brought up

2. What will you do today?

Answer: Continue working on main.cpp

3. What obstacles are impeding your progress?

Answer: Still facing issues with bug fixes and crashes

Daily Standup Meeting 14

Project Name: Video Renting system	Group Name: Group
Sprint Number: 5	Date and Time: 14/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: started with the Design part of report

2. What will you do today?

Answer: working on report

3. What obstacles are impeding your progress?

Answer: finding information based on the chosen data structure and also references.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: helped Dristi with the data structure implementation.

2. What will you do today?

Answer: fixing bugs in the codes

3. What obstacles are impeding your progress?

Answer: bug fixing

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: started off with data structure

2. What will you do today?

Answer: fixing bugs in code

3. What obstacles are impeding your progress?

Answer: dealing with bugs

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: fixing bugs in main.cpp

2. What will you do today?

Answer: Continue developing main.

3. What obstacles are impeding your progress?

Answer: bug fixing

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: helping adolf with main.cpp

2. What will you do today?

Answer: continue developing main.

3. What obstacles are impeding your progress?

Answer: fixing syntax errors

Daily Standup Meeting 15

Project Name: Video Renting system	Group Name: Group
Sprint Number: 5	Date and Time: 15/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Continued working on the report to get more information ready.
Did some report formatting as it was messy.

2. What will you do today?

Answer: Doing part of references and in-text citation. Doing some research on the algorithms.

3. What obstacles are impeding your progress?

Answer: None

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: More big fixes and code formatting.

2. What will you do today?

Answer: Preparing for design of data structure. Researching some more on requirements and implementation.

3. What obstacles are impeding your progress?

Answer: None

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: More big fixes as code is breaking with local testing.

2. What will you do today?

Answer: Fixing more bugs and trying to compile the code in bits.

3. What obstacles are impeding your progress?

Answer: Complex bugs and research

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Helping Dristi and Yashvin with bug fixes. Lots of issues when trying to compile code.

2. What will you do today?

Answer: More bug fixing. Whole team is working on trying to get the code to a working state after some new additions.

3. What obstacles are impeding your progress?

Answer: Complex bugs

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Some code fixes.

2. What will you do today?

Answer: More bug fixes.

3. What obstacles are impeding your progress?

Answer: None.

Daily Standup Meeting 16

Project Name: Video Renting system	Group Name: Group
Sprint Number: 5	Date and Time: 18/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Design of Data structure in report

2. What will you do today?

Answer: Adding comments to the code.

3. What obstacles are impeding your progress?

Answer: None.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Fixing the data structure implementation for the binary tree.

2. What will you do today?

Answer: Fixing the data structure more as it is breaking again after minor changes.

3. What obstacles are impeding your progress?

Answer: crash within the loop caused by what looks to be faulty variables.

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Helped Jason with the data structure part to fix the loop function.

2. What will you do today?

Answer: Keep fixing the loop function as Jason reported issues after minor changes were made.

3. What obstacles are impeding your progress?

Answer: Code is crashing.

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Fixed major issues in the main file which resulted in the code breaking upon compiling it.

2. What will you do today?

Answer: More error patching because integration problems are arising that we didn't plan and account for.

3. What obstacles are impeding your progress?

Answer: Errors and some lack of code clarity.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Helped Adolf with the main.cpp

2. What will you do today?

Answer: Continue with fixing issues within main.cpp

3. What obstacles are impeding your progress?

Answer: Bugs and errors

Daily Standup Meeting 17

Project Name: Video Renting system	Group Name: Group
Sprint Number: 5	Date and Time: 19/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Commented part of codes where done.

2. What will you do today?

Answer: Keep working on the report.

3. What obstacles are impeding your progress?

Answer: Analysing the data structure and writing about it.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: working on the algorithm part with Dristi.

2. What will you do today?

Answer: keep working on algorithms.

3. What obstacles are impeding your progress?

Answer: Resources are limited. We need some help as this is a big part of the work.

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Worked on algorithm with Jason

2. What will you do today?

Answer: Keeping on coding the algorithm.

3. What obstacles are impeding your progress?

Answer: There's not much resources to help in building the DSA

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Added some more functionality to the main file. Tried to get more integration done.

2. What will you do today?

Answer: Fix bugs that arose during the process, especially integration ones holding the process back as we are struggling to merge some class functionalities.

3. What obstacles are impeding your progress?

Answer: Bug fixing and errors being thrown as a result of bugs.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Helped Adolf with working on main.

2. What will you do today?

Answer: Keep fixing more bugs.

3. What obstacles are impeding your progress?

Answer: Bugs and errors.

Daily Standup Meeting 18

Project Name: Video Renting system	Group Name: Group
Sprint Number:	Date and Time: 20/03/2024 17:00-17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: starting algorithm part of the report

2. What will you do today?

Answer: Write on the algorithm.

3. What obstacles are impeding your progress?

Answer: None to be declared.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Fixing the algorithm.

2. What will you do today?

Answer: Making the dsa work as a whole.

3. What obstacles are impeding your progress?

Answer: Bugs and some Errors.

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Fixed the algorithm.

2. What will you do today?

Answer: Work on dsa with Jason.

3. What obstacles are impeding your progress?

Answer: Bug fixing.

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Made the main.cpp work again.

2. What will you do today?

Answer: Analyse if there are any more issues, and proactively try to fix any problems.

3. What obstacles are impeding your progress?

Answer: None

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Helped Adolf fix all of main.cpp and looked into streamlining some functions.

2. What will you do today?

Answer: Comment some code and help with any issues.

3. What obstacles are impeding your progress?

Answer: None.

Daily Standup Meeting 19

Project Name: Video Renting system	Group Name: Group
Sprint Number: 6	Date and Time: 22/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Completed the algorithm part of report.

2. What will you do today?

Answer: Meeting team for bringing the whole code together.

3. What obstacles are impeding your progress?

Answer: Time management.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Analysed the dsa for issues.

2. What will you do today?

Answer: Meeting with the team for build up.

3. What obstacles are impeding your progress?

Answer: time management

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Got assisted by Jason for the dsa finalisation.

2. What will you do today?

Answer: Team meeting. Code integration after the meeting.

3. What obstacles are impeding your progress?

Answer: Time Management.

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Fixing the code and removing errors that arose when changing a few functionalities to streamline code.

2. What will you do today?

Answer: Quick team meet up to merge the dsa in the main file.

3. What obstacles are impeding your progress?

Answer: None.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Commented some code as well as wrote a function to display some movie data based on user input.

2. What will you do today?

Answer: Meeting with the team for dsa implementation.

3. What obstacles are impeding your progress?

Answer: Time Management.

Daily Standup Meeting 20

Project Name: Video Renting system	Group Name: Group
Sprint Number: 6	Date and Time: 25/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Discussed with the team on implementing main with dsa.

2. What will you do today?

Answer: Helping the team to work on the main.cpp

3. What obstacles are impeding your progress?

Answer: Joining all the work together.

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Finding ways to implement dsa with main.

2. What will you do today?

Answer: Implementation and fixing of issues.

3. What obstacles are impeding your progress?

Answer: Joining of everything.

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Analyse ways to make the dsa and main work.

2. What will you do today?

Answer: Help the team with fixing errors and some reporting.

3. What obstacles are impeding your progress?

Answer: Understanding the flow of codes.

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Meeting with the team and determining a new project outcome.

2. What will you do today?

Answer: Helping the team with working on the main file to integrate everything.

3. What obstacles are impeding your progress?

Answer: Working on a project done by a different member.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Tried to implement dsa with main.

2. What will you do today?

Answer: Help the team in fixing main.

3. What obstacles are impeding your progress?

Answer: None to be declared.

Daily Standup Meeting 21

Project Name: Video Renting system	Group Name: Group
Sprint Number: 6	Date and Time: 26/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: helped the team organise the flow of codes in main

2. What will you do today?

Answer: fixing bugs in code

3. What obstacles are impeding your progress?

Answer: bugs fixing

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: helping in developing the flow of codes in main

2. What will you do today?

Answer: bug fixing

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: started with making the test file

2. What will you do today?

Answer: help team due to issue in flow of code

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: made the dsa and main work

2. What will you do today?

Answer: fix minor issue in code

3. What obstacles are impeding your progress?

Answer: bug fix

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: understood makefile

2. What will you do today?

Answer: work on the makefile

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 22

Project Name: Video Renting system	Group Name: Group
Sprint Number: 6	Date and Time: 27/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: fixing bugs

2. What will you do today?

Answer: trying to get rid of all the bugs

3. What obstacles are impeding your progress?

Answer: too many bugs

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: helped in adding new dsa to the code making it more efficient

2. What will you do today?

Answer: fixing errors

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: made the test file for the dsa part

2. What will you do today?

Answer: fix the bugs

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: helped in adding more efficient way of using the dsa

2. What will you do today?

Answer: code fixing in main.cpp

3. What obstacles are impeding your progress?

Answer: bugs fixing

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: compiled make file

2. What will you do today?

Answer: fix bugs in makefile

3. What obstacles are impeding your progress?

Answer: bugs fixing

Daily Standup Meeting 23

Project Name: Video Renting system	Group Name: Group
Sprint Number: 6	Date and Time: 28/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: wrote on testing in report

2. What will you do today?

Answer: continue working on report

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: made the code work and display requirements with the team

2. What will you do today?

Answer: check if everything works fine

3. What obstacles are impeding your progress?

Answer: bugs fixing

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: completed the testcases

2. What will you do today?

Answer: analyse and fix bugs

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: Added new hash table to main.cpp other than vector, binary search and binary search tree.

2. What will you do today?

Answer: fix bugs

3. What obstacles are impeding your progress?

Answer:none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: completed makefile

2. What will you do today?

Answer: help Dristi with cmakelist

3. What obstacles are impeding your progress?

Answer:none to be declared

Daily Standup Meeting 24

Project Name: Video Renting system	Group Name: Group
Sprint Number: 7	Date and Time: 29/03/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: finished some header files

2. What will you do today?

Answer: Working on customer.cpp

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: helped with adding comments to code

2. What will you do today?

Answer: adding more comments

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: adding comments to makefile

2. What will you do today?

Answer: run outcomes and check with main

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: successfully fixed some bugs

2. What will you do today?

Answer: coding without adding any new bugs

3. What obstacles are impeding your progress?

Answer: fixing bugs costing much time

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: researching on how to debug

2. What will you do today?

Answer: debug the codes

3. What obstacles are impeding your progress?

Answer: invisible bugs (the program saying there is a bug on a blank line)

Daily Standup Meeting 25

Project Name: Video Renting system	Group Name: Group
Sprint Number: 7	Date and Time:01/04/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Completed the header file

2. What will you do today?

Answer: Debugging customer.cpp

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: research on red black tree

2. What will you do today?

Answer: research on algorithms

3. What obstacles are impeding your progress?

Answer: choice of algorithms

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: research on testing

2. What will you do today?

Answer: trying to implement testing files

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: research on red black tree

2. What will you do today?

Answer: trying to implement red black tree

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: report writing

2. What will you do today?

Answer: report writing on future works

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 26

Project Name: Video Renting system	Group Name: Group
Sprint Number: 7	Date and Time: 02/04/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: debugging customer.cpp file

2. What will you do today?

Answer: continue the coding for the customer.cpp file

3. What obstacles are impeding your progress?

Answer: the bugs

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: researching the algorithms

2. What will you do today?

Answer: making a decision on which algorithm is better

3. What obstacles are impeding your progress?

Answer: the choice of algorithm for this project

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Heping to compile codes

2. What will you do today?

Answer: Help in choice of algorithms by pros and cons

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: research on binary trees, decided to move away from the red-black tree as a binary tree looks to be the better approach.

2. What will you do today?

Answer: trying to implement a binary tree in the project

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Research on algorithms

2. What will you do today?

Answer: Reporting

3. What obstacles are impeding your progress?

Answer: none to be declared

Daily Standup Meeting 27

Project Name: Video renting system	Group Name: Group
Sprint Number: 7	Date and Time: 20/04/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: commenting on the customer.cpp file

2. What will you do today?

Answer: pushing the final comments

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: research on algorithms

2. What will you do today?

Answer: implementing algorithms

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: importing libraries and research

2. What will you do today?

Answer: help to implement classes

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: working on the binary tree

2. What will you do today?

Answer: commenting some line of codes

3. What obstacles are impeding your progress?

Answer: none to be declared

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Research on binary tree

2. What will you do today?

Answer: helping to implement the binary tree

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Daily Standup Meeting 28

Project Name: Video renting system	Group Name: Group
Sprint Number: 8	Date and Time: 03/04/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: debugging main.cpp

2. What will you do today?

Answer: commenting main.cpp

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: coding the testing files

2. What will you do today?

Answer: explain the testing part on the report

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: helping to code the testing files

2. What will you do today?

Answer: debugging the testing files

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: finished the binary tree

2. What will you do today?

Answer: researching about the hash table

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: commenting the rental files

2. What will you do today?

Answer: Researching on the functions to implement

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Daily Standup Meeting 29

Project Name: Video Renting system	Group Name: Group
Sprint Number: 8	Date and Time: 4/04/2024 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: adding comments to the codes

2. What will you do today?

Answer: pushing the main.cpp file

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Debugging the testing files

2. What will you do today?

Answer: pushing the testing files

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: working on the make file

2. What will you do today?

Answer: debug the make file

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: trying to integrate a hash table

2. What will you do today?

Answer: completing the hash table

3. What obstacles are impeding your progress?

Answer: Issues with getting the code to run correctly. Keeps throwing loops.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: debugging the rental files

2. What will you do today?

Answer: commenting on the rental files

3. What obstacles are impeding your progress?

Answer: none to be declared reported

Daily Standup Meeting 30

Project Name: Video Renting system	Group Name: Group
Sprint Number: 8	Date and Time: 20/04/24 17:00 - 17:30

List of attendance:

- Name: Sakina Taygaully
Attended? YES
- Name: Jason Bheekarry
Attended? YES
- Name: Dristi Bhugun
Attended? YES
- Name: Adolf Archibald
Attended? YES
- Name: Nageswararao Balloo
Attended? YES

Project Progress:

Team Member (1): Name: Sakina Taygaully

1. What did you accomplish yesterday?

Answer: Finilaising all the coding and adding to the report

2. What will you do today?

Answer: Completing the last minutes of meeting and assist the video recording

3. What obstacles are impeding your progress?

Answer: None reported

Team Member (2): Name: Jason Bheekarry

1. What did you accomplish yesterday?

Answer: Final debugging of the testing files

2. What will you do today?

Answer: Final push of the testing files on the github repository.

3. What obstacles are impeding your progress?

Answer: None reported

Team Member (3): Name: Dristi Bhugun

1. What did you accomplish yesterday?

Answer: Helping others with final debugging

2. What will you do today?

Answer: Slight changes to the report

3. What obstacles are impeding your progress?

Answer: None reported

Team Member (4): Name: Adolf Archibald

1. What did you accomplish yesterday?

Answer: finalising the report with the referencing part

2. What will you do today?

Answer: Record the demo video

3. What obstacles are impeding your progress?

Answer: Still having issues with the hash table implementation, will most likely push compiling but broken code to the repo.

Team Member (5): Name: Nageswararao Balloo

1. What did you accomplish yesterday?

Answer: Pushed the final comments for the rental files.

2. What will you do today?

Answer: Helping in finalising the report.

3. What obstacles are impeding your progress?

Answer: None reported