

JavaFX Movie Ticket Booking System

CSE-2112 (OOP) Final Project

- University of Dhaka

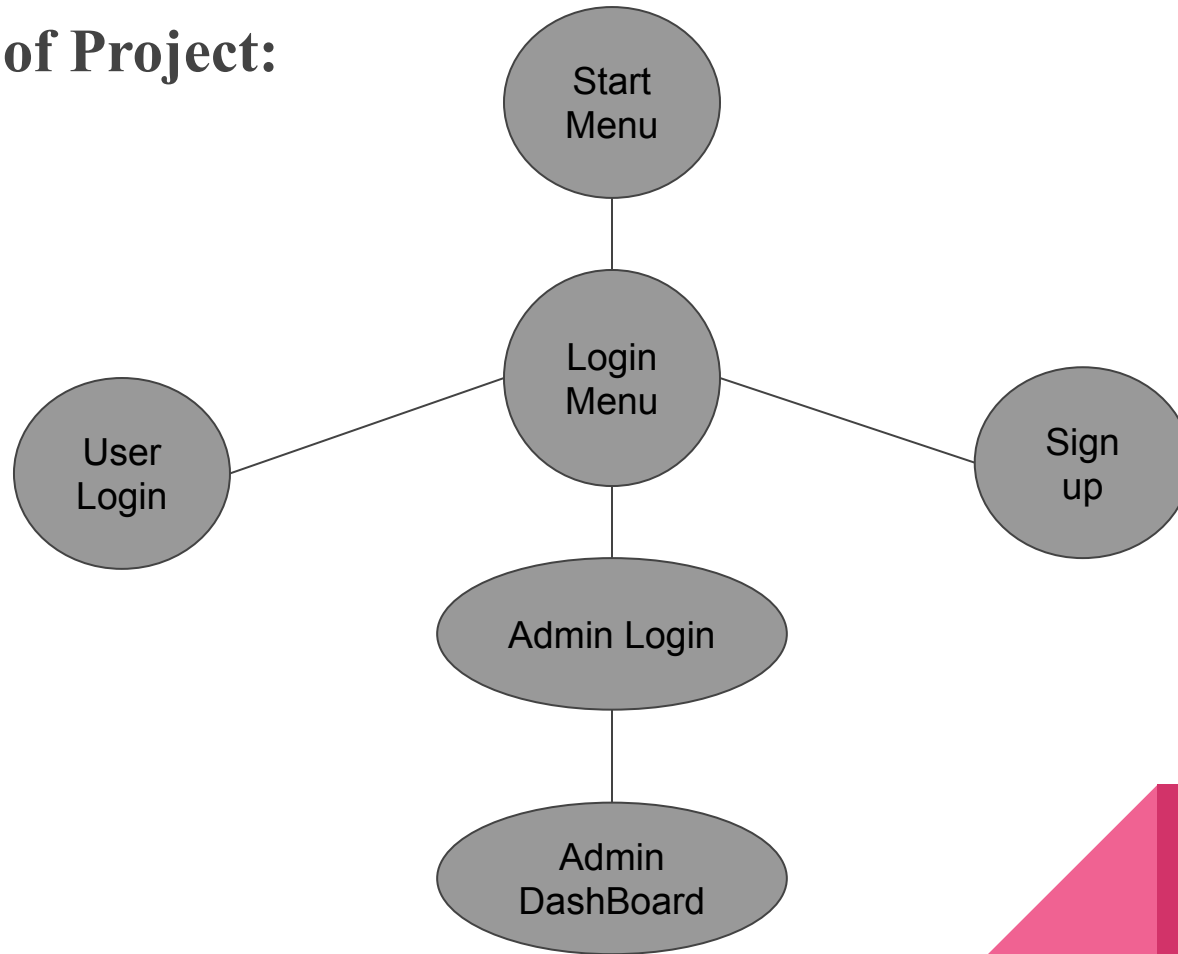
Key Features

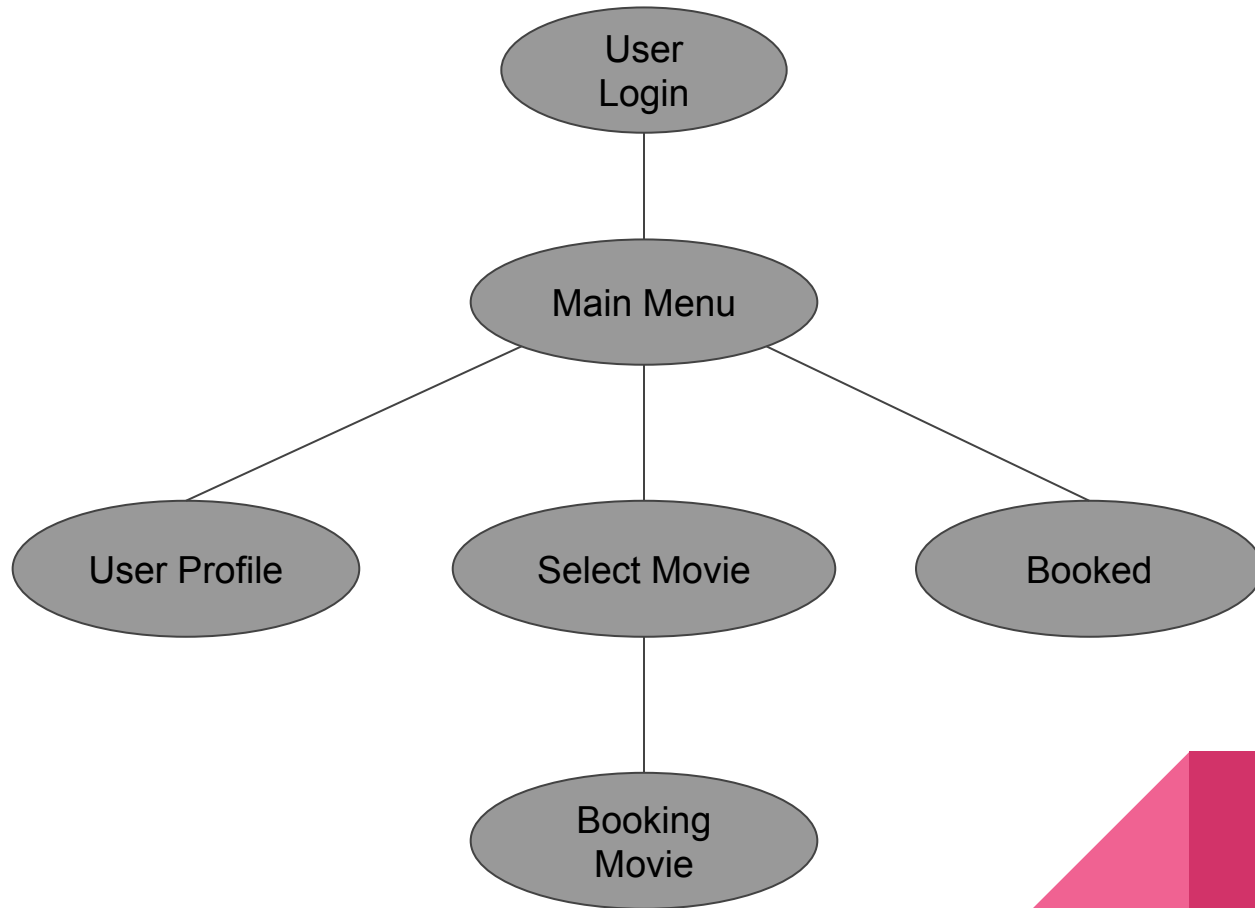
1. Text File based Database
2. Clean UI with Animation
3. Unique Username for each profile
4. Password Recovery Option
5. Admin Dashboard for control Movie Database
6. Logout/Back Button in all window
7. Booked Ticket Display
8. Easy Booking Option

Video Sample: [Demo](#)



Overview of Project:





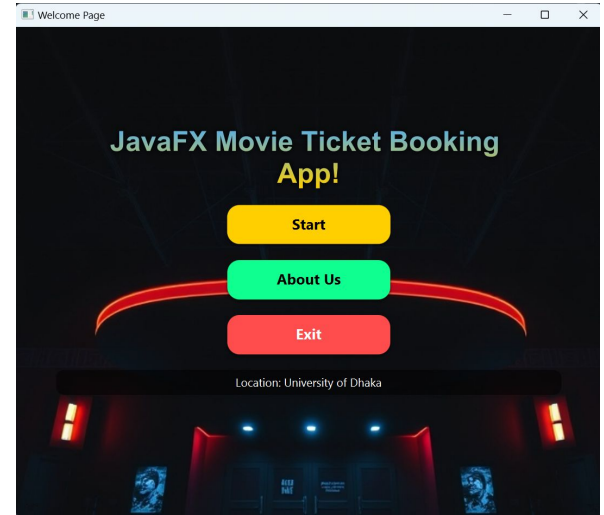
Start Menu

HelloApplication.java

```
public static void main(String[ ], args){  
    launch();  
}
```

Methods:

handle_Login, handle_About, handle_exit,
apply_animation



Start Window

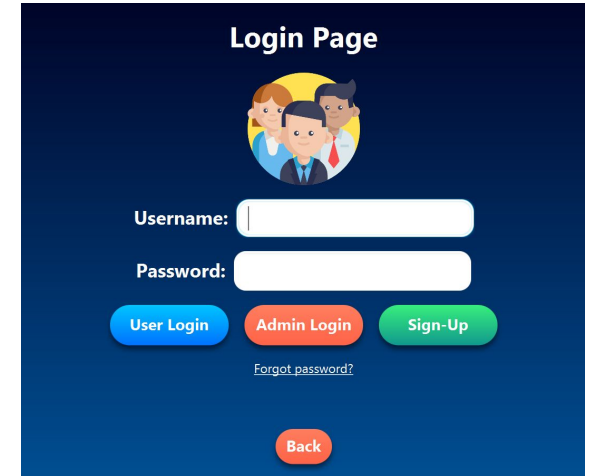
Login Menu

- **Text File Database format:**

Username|password|firstname|lastname|DOB|Due|Tickets

- Takes username and password and match in the **user_database.txt** file.

- After matching, create a user class object to pass all details.

A screenshot of a login page with a dark blue background. At the top, it says "Login Page" in white. Below that is a circular profile picture of three people. There are two input fields: "Username:" and "Password:". Below the password field are three buttons: "User Login" (blue), "Admin Login" (orange), and "Sign-Up" (green). Below these buttons is a link that says "Forgot password?". At the bottom is a "Back" button (orange).

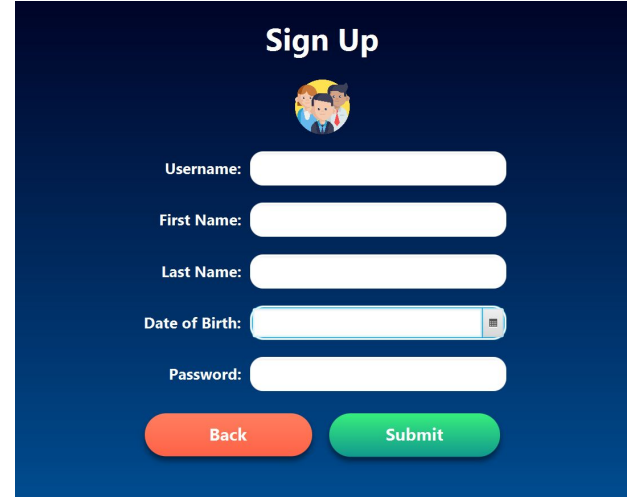
Login Window

Sign Up

- **Text File Database format:**

Username|password|firstname|lastname|DOB|Due|Tickets

- Takes input of **unique username**, firstname, last name, Date of birth and password.

A screenshot of a 'Sign Up' form window with a dark blue background. At the top, the title 'Sign Up' is centered in white. Below it is a circular profile picture placeholder showing two cartoon characters. The form contains five input fields: 'Username:', 'First Name:', 'Last Name:', 'Date of Birth:', and 'Password:'. Each field is a white rounded rectangle. At the bottom, there are two buttons: an orange 'Back' button and a green 'Submit' button, both with rounded corners and white text.

SignUp Window

- Add all to the user_database.txt file used for login handle.

Admin Menu

- **Text File Database format:**

Movie|price|timeslot1|seats1|available1|timeslot2|
seats2|available2|timeslot3|seats3|available3

- Add, remove directly any data in
the **movie_database.txt** file

Change Movie details from this table

Title	Price(\$)	Timeslot 1	Seats	Available	Timeslot 2	Seats	Available	Timeslot 3	Seats	Available
Inception	10.0	10:00 AM	50	38 avail...	1:00 PM	40	21 availa...	3:00 PM	40	21 availa...
Avengers_Endgame	25.0	11:00 AM	60	30 avail...	2:00 PM	50	19 availa...	6:00 PM	50	19 availa...
The_Dark_Knight	15.0	9:30 AM	40	4 availa...	12:30 PM	35	10 availa...	8:00 PM	35	10 availa...
Intersellar	13.0	10:15 AM	50	5 availa...	1:15 PM	40	8 available	4:15 PM	40	8 available
Parasite	26.0	11:45 AM	50	21 avail...	3:00 PM	30	5 available	7:00 PM	30	5 available
Joker	10.0	12:00 PM	55	15 avail...	4:00 PM	45	6 available	8:30 PM	45	6 available
Titanic	90.0	9:00 AM	60	20 avail...	2:30 PM	50	10 availa...	6:30 PM	50	10 availa...
The_Godfather	15.0	1:00 PM	35	4 availa...	5:00 PM	30	5 available	9:00 PM	30	5 available
Shutter_Island	10.0	10:30 AM	50	10 avail...	3:30 PM	45	5 available	7:30 PM	45	5 available
CSSEDU	100	8:30 AM	60	9 availa...	10:00 AM	10	3 available	6:00 PM	10	3 available
Moana_2	1000.0	10:00 AM	100	25 avail...	3:00 PM	60	25 availa...	6:00 PM	60	25 availa...
Barbie_2	90.0	9:00 AM	60	20 avail...	2:30 PM	50	10 availa...	6:30 PM	50	10 availa...

Add Movie **Delete Movie** **Save Changes**

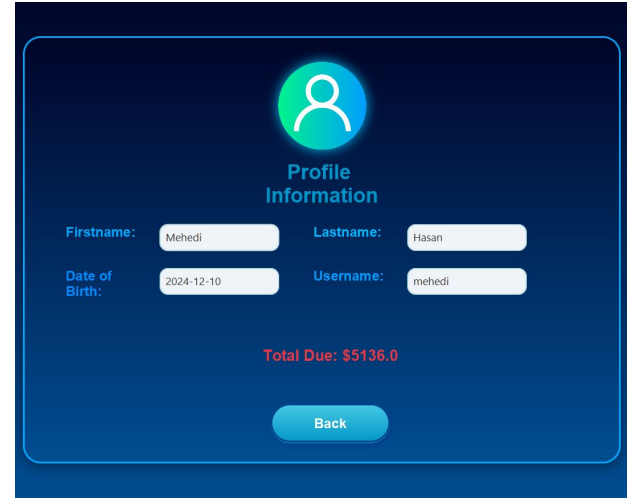
For making any change, press enter to save

LogOut

Admin Window

User Profile

- User class object from login, pass all data.
- Display all the details (without password)
- Dashboard Type window



A screenshot of a user profile dashboard with a dark blue background. At the top center is a circular profile icon with a white person silhouette on a blue-to-green gradient. Below the icon is the text "Profile Information". The form contains four input fields: "Firstname:" with the value "Mehedi", "Lastname:" with the value "Hasan", "Date of Birth:" with the value "2024-12-10", and "Username:" with the value "mehedi". Below these fields, the text "Total Due: \$5136.0" is displayed in red. At the bottom center is a blue rounded button labeled "Back".

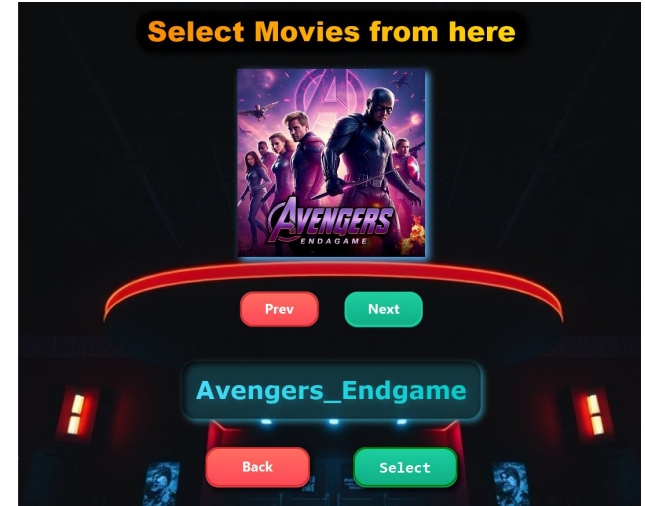
Field	Value
Firstname:	Mehedi
Lastname:	Hasan
Date of Birth:	2024-12-10
Username:	mehedi

Total Due: \$5136.0

Back

Movie Selection (UI-1)

- A Movie class was made for handle movie.
- AI Generated Thumbnails were stored in a file,
With the same name of my folder.
- An ArrayList() was made for store thumbnails
with the same name of files.

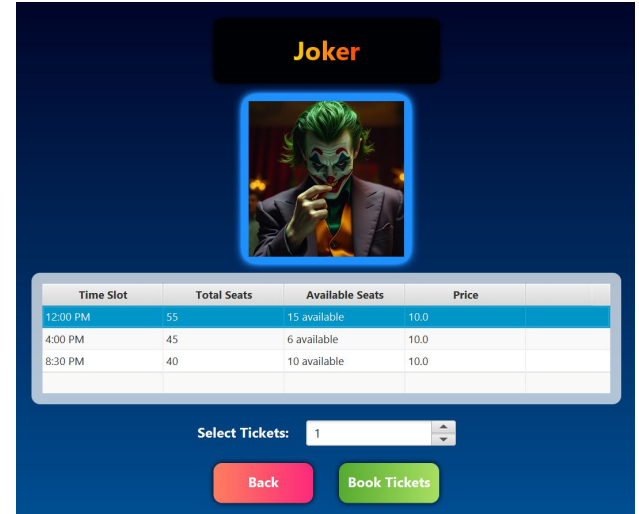


Ticket Booking (UI-2)

- Handles booking mechanism
- Selects tickets from the movie object selected

In previous window.

- Update again user_database.txt for tracking
The booked movie objects



Future Enhancements

- Database integration (e.g., MySQL) for scalable data management.
- Payment gateway integration for online ticket booking.
- Graphical seat selection interface.



References

1. All the movie thumbnails were generated from the website: [AI Image Generator](#)
2. Icons that has been used, collected from a free website: [Flaticon](#)
3. **Reference Book:** JavaFX 9 by Example, Carl Dea, Gerrit Grunwald, Jose Pereda, Sean Phillips, Mark Heckler



End

