**Community Center Management System**

**Overview**

The Community Center Management System is a console-based application designed to manage events, reservations, and ticket purchases for a community center. The system includes functionalities for user login, event creation, event reservation, and ticket purchasing.

**Features**

User Login: Users can log in as either an admin or a customer.

Event Management: Admins can create events with details like event name, organizer, start time, end time, cost, layout style, and public/private status.

Event Reservation: Customers can reserve events.

Ticket Purchase: Customers can purchase tickets for events.

**Directory Structure**

CommunityCenterManagementSystem/

├── src/

│ ├── main.cpp

│ ├── User.cpp

│ ├── Event.cpp

│ ├── Reservation.cpp

│ ├── FacilityManager.cpp

│ └── Ticket.cpp

├── include/

│ ├── User.h

│ ├── Event.h

│ ├── Reservation.h

│ ├── FacilityManager.h

│ └── Ticket.h

├── data/

│ ├── users.txt

│ ├── events.txt

│ ├── reservations.txt

│ └── tickets.txt

└── Makefile

**Installation**

**Prerequisites**

- C++11 compatible compiler (e.g., g++)

- Make

Steps

1. Clone the repository:

git clone <repository-url>

cd CommunityCenterManagementSystem

2. Compile the project using Make:

make

3. Run the executable:

./bin/CommunityCenterManagementSystem

**Usage**

1. Login: Enter your username and password to log in. The initial users are:

- Admin:

- Username: `admin`

- Password: `admin123`

- Customer:

- Username: `john`

- Password: `john123`

- Username: `jane`

- Password: `jane123`

2. Menu Options:

- `1. Login`: Log in to the system.

- `2. Logout`: Log out of the system.

- `3. Create Event (Admin only)`: Create a new event (only accessible to admins).

- `4. Reserve Event`: Reserve a spot in an event.

- `5. Purchase Ticket`: Purchase a ticket for an event.

- `0. Exit`: Exit the application.

3. Create Event(Admin only): Follow the prompts to create an event. You will need to enter details such as Event ID, Event Name, Organizer, Start Time, End Time, Cost, Layout Style, and whether it is Public.

4. Reserve Event Enter the Reservation ID, Event ID, and Reservation Time to reserve a spot in an event.

5. Purchase Ticket: Enter the Ticket ID, Event ID, Price, and Confirmation status to purchase a ticket.

**License**

This project is licensed under the MIT License. See the `LICENSE` file for details.

**Contact**

For any inquiries or issues, please contact [your-email@example.com].

Make sure to replace `<repository-url>` with the actual URL of your repository and `[your-email@example.com]` with your actual contact email. This `README.md` file provides a comprehensive guide on setting up, running, and using the Community Center Management System.