REC MOVIE BOOKING SYSTEM

A MINI PROJECT REPORT

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In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE

RAJALAKSHMI ENGINEERING COLLEGE (AUTONOMOUS)

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CHENNAI-602105

2023 - 24

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ACKNOWLEGEMENT

We are highly obliged in taking the opportunity to thank our Chairman Mr. S. Meganathan, Chairperson Dr.Thangam Meganathan and our Principal Dr.S.N.Murugesan for providing all the facilities which are required to carry out this project work.

We are ineffably indebted to our H.O.D Mr. Uma Maheshwar Rao M.E. for his conscientious guidance and encouragement to make this project a recognizable one.

We are extremely thankful to our faculty Mr.Vijaykumar M.Tech., for his valuable guidance and indefatigable support and extend our heartfelt thanks to all the teaching and non-teaching staff of Computer Science department who helped us directly or indirectly in the completion of this project successfully.

At last but not least gratitude goes to our friends who helped us compiling the project and finally to god who made all things possible.

Any omission in this brief acknowledgement doesn't mean lack of gratitude.

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ABSTRACT

The provided Python code utilizes Tkinter to create a Ticket Booking System GUI. It integrates with a MySQL database for ticket management.

The system allows users to view available movie tickets, select the number of tickets to book, and enter their name for reservation. Upon booking, it updates the database, generates a reservation summary, and stores it in a text file. The database script defines functions for connecting, creating, and updating ticket data.

The program ensures data integrity by managing ticket quantities and provides user-friendly feedback through error and success messages.

CHAPTER 1

1. Introduction

1.1 Introduction

The Movie Ticket Booking System is designed to streamline the process of booking movie tickets for users. It offers an intuitive and user-friendly interface that allows users to view available movies, select the desired number of tickets, and complete the booking process with ease. This system integrates a graphical user interface (GUI) built using Tkinter and CustomTkinter, and employs MySQL for backend database operations. By leveraging these technologies, the system ensures that users have a seamless experience while booking movie tickets.

1.2 Objectives

The objectives of the Movie Ticket Booking System include:

User Convenience: To provide a simple and efficient interface for users to book movie tickets.

Dynamic Ticket Management: To manage and update the availability of tickets dynamically based on user bookings.
Data Integrity: To ensure secure storage and retrieval of movie and ticket information from the database.

Booking Confirmation: To generate and display booking details for user reference and record-keeping.

Scalability: To design a system that can be easily scaled to handle more movies and larger datasets in the future.

1.3 Modules

The Movie Ticket Booking System comprises several key modules:

User Interface Module: Implements the GUI using Tkinter and CustomTkinter, allowing users to interact with the system visually.

Database Module: Utilizes MySQL for storing and managing movie and ticket information, ensuring efficient data handling.

Booking Module: Manages the booking process, updates ticket availability in the database, and generates booking confirmation details.
File Handling Module: Handles the generation of text files containing booking details for user reference.

CHATER 2

2.1 Software Description

The software for the Movie Ticket Booking System is developed using Python, which is known for its simplicity and efficiency. The graphical user interface is created using Tkinter and CustomTkinter, libraries that are popular for developing desktop applications in Python. MySQL is employed as the database management system to store and manage data related to movies and ticket availability. Together, these technologies create a robust and user-friendly application for booking movie tickets.

2.2 Languages

2.2.1 SQL

Structured Query Language (SQL) is a standard programming language used for managing and manipulating relational databases. In this project, SQL is used extensively to perform various database operations such as creating tables, inserting data, updating records, and fetching data from the database. The primary SQL operations involved in the project are:

Create Tables: SQL commands are used to define the structure of the database, creating tables to store ticket information.

Insert Data: SQL INSERT statements are used to add initial movie and ticket data into the database.

Update Data: SQL UPDATE statements are used to modify the number of available tickets after a booking is made

.

Select Data: SQL SELECT statements are used to retrieve the list of available tickets, which are then displayed in the GUI.

Examples of SQL queries used in the project
include: CREATE TABLE IF NOT EXISTS Tickets
(ticket_id VARCHAR(10) PRIMARY KEY,

```
movie_name VARCHAR(100),      available_tickets
INT,
   ticket_price FLOAT
);
```

2.2.2 Python

Python is the primary programming language used to develop the Movie Ticket Booking System. It is widely known for its readability and ease of use, making it an ideal choice for both novice and experienced developers. Python's extensive library support allows for rapid development and integration of various functionalities.

Key Python components and libraries used in the project include:

Tkinter and CustomTkinter: These libraries are used to create the graphical user interface (GUI) of the application. Tkinter is the standard GUI toolkit for Python, while CustomTkinter provides additional customization options for creating modern and visually appealing interfaces.

MySQL Connector: This is a Python library that facilitates communication between Python and MySQL databases. It allows the execution of SQL queries from within the Python code, enabling seamless database operations.

File Handling: Python's built-in file handling capabilities are used to generate and save text files containing booking details, providing users with a tangible record of their transactions.

CHAPTER 3

3.HARDWARE AND SOFTWARE REQUIREMENTS

HARDWARE SPECIFICATION

PROCESSOR : INTEL i3

MEMORY SIZE : 4GB

HDD : 256GB

SOFTWARE SPECTFICATION

OPERATING SYSTEM : WINDOWS 11

GUI INTERFACE : PYTHON

BACKEND : MY SQL

CHAPTER 4

PROGRAM CODE :

//MAIN.PY

```
from tkinter import StringVar
import tkinter as tk from
tkinter import ttk from tkinter
import messagebox

import customtkinter
import db

app=customtkinter.CTk()
app.title("TICKET BOOKING SYSTEM")
app.geometry('1000x1000')
app.config(bg='#18161D')
app.resizable(False, False)

font1 = ('Arial', 25, 'bold')
font2 = ('Arial', 13, 'bold')
font3 = ('Arial', 18, 'bold')

def add_to_treeview():
    conn =
db.connect_to_database()
tickets = db.get_tickets(conn)
conn.close()
```

```
tree.delete(*tree.get_children())
for ticket in tickets:         if
ticket[2] > 0:
            tree.insert('', tk.END, values=ticket)

def reservation(name, movie, quantity, price):
    customer_name = name
movie_name = movie
booked_quantity = quantity
ticket_price = price      total_price =
ticket_price * booked_quantity


    frame = customtkinter.CTkFrame(app, bg_color='#18161D', fg_color='#292933',
corner_radius=10, border_width=2, border_color='#0f0', width=200, height=130)
frame.place(x=390, y=450)

    name_label = customtkinter.CTkLabel(frame, font=font3, text=f'Name:
{customer_name}', text_color='#fff', bg_color='#18161D')      name_label.place(x=10,
y=10)

    movie_label = customtkinter.CTkLabel(frame, font=font3, text=f'Movie:
{movie_name}', text_color='#fff', bg_color='#18161D')      movie_label.place(x=10, y=50)

    total_price_label = customtkinter.CTkLabel(frame, font=font3, text=f'Total:
{total_price}', text_color='#fff', bg_color='#18161D')      total_price_label.place(x=10,
y=90)

    return total_price

def book():
    customer_name =
name_entry.get()      selected_item =
tree.focus()      if not selected_item:
        messagebox.showerror('Error', 'Choose a ticket to book')
elif not customer_name:
```

```
        messagebox.showerror('Error', 'Enter Customer name')
else:
        row = tree.item(selected_item)['values']
if len(row) < 4:
            messagebox.showerror('Error', 'Ticket data is
incomplete')            return          ticket_id = row[0]
movie_name = row[1]


ticket_price = row[3]

        booked_quantity = int(variable.get())
if booked_quantity > row[2]:
            messagebox.showerror('Error', 'Not enough tickets')
else:
            conn = db.connect_to_database()
db.update_quantity(conn, ticket_id, booked_quantity)
conn.close()            add_to_treeview()

            total_price = reservation(customer_name, movie_name, booked_quantity, ticket_price)
with open('Ticket.txt', 'a') as file:
                file.write(f'customer_name: {customer_name}\n')
file.write(f'movie_name: {movie_name}\n')                file.write(f'Total:
{total_price}$\n==========\n')
messagebox.showinfo('Success', 'Tickets are booked')
print(f'Success: Booked {booked_quantity} tickets for {movie_name}')


ticket_label = customtkinter.CTkLabel(app, font=font1, text='Available Films',
text_color='#fff', bg_color='#18161D') ticket_label.place(x=360, y=20)

name_label = customtkinter.CTkLabel(app, font=font3, text='Customer name:',
text_color='#fff', bg_color='#18161D') name_label.place(x=330, y=300)
```

```
name_entry = customtkinter.CTkEntry(app, font=font3, text_color='#000',
fg_color='#fff', border_color='#AA04A7', border_width=2, width=160)
name_entry.insert(0, "Enter your name") name_entry.place(x=490, y=300)

number_label = customtkinter.CTkLabel(app, font=font3, text='No. of Tickets:', text_color='#fff',
bg_color='#18161D')
number_label.place(x=350, y=350)

variable = StringVar()
option = ['1', '2', '3']

duration_option = customtkinter.CTkComboBox(app, font=font3, text_color='#000',
fg_color='#fff', dropdown_hover_color='#AA04A7', button_color='#AA04A7',
button_hover_color='#AA04A7', border_color='#AA04A7', width=160, variable=variable,
values=option, state='readonly') duration_option.set('1') duration_option.place(x=490, y=350)

book_button = customtkinter.CTkButton(app, font=font3, text_color='#fff', text='Book
tickets', fg_color='#AA04A7', bg_color='#18161D', cursor='hand2', corner_radius=15,
width=200, command=book) book_button.place(x=390, y=400)

style = ttk.Style(app) style.theme_use('clam') style.configure('TreeView',
font=font2, foreground='#fff', background='#000',
fieldbackground='#292933') style.map('Treeview', background=[('selected',
'#AA04A7')]) tree = ttk.Treeview(app, height=8)

tree['columns'] = ('Ticket ID', 'Movie Name', 'Available Tickets', 'Ticket Price')

tree.heading('#0', text='', anchor=tk.CENTER) tree.heading('Ticket ID',
text='Ticket ID', anchor=tk.CENTER) tree.heading('Movie Name',
text='Movie Name', anchor=tk.CENTER) tree.heading('Available Tickets',
text='Available Tickets', anchor=tk.CENTER) tree.heading('Ticket Price',
text='Ticket Price', anchor=tk.CENTER)

tree.column('#0', width=0, stretch=tk.NO)
```

```
tree.column('Ticket ID', anchor=tk.CENTER, width=100)
tree.column('Movie Name', anchor=tk.CENTER, width=100)
tree.column('Available Tickets', anchor=tk.CENTER, width=100)
tree.column('Ticket Price', anchor=tk.CENTER, width=100)


tree.place(x=290, y=95)

add_to_treeview()

app.mainloop()
```

//DB.PY import

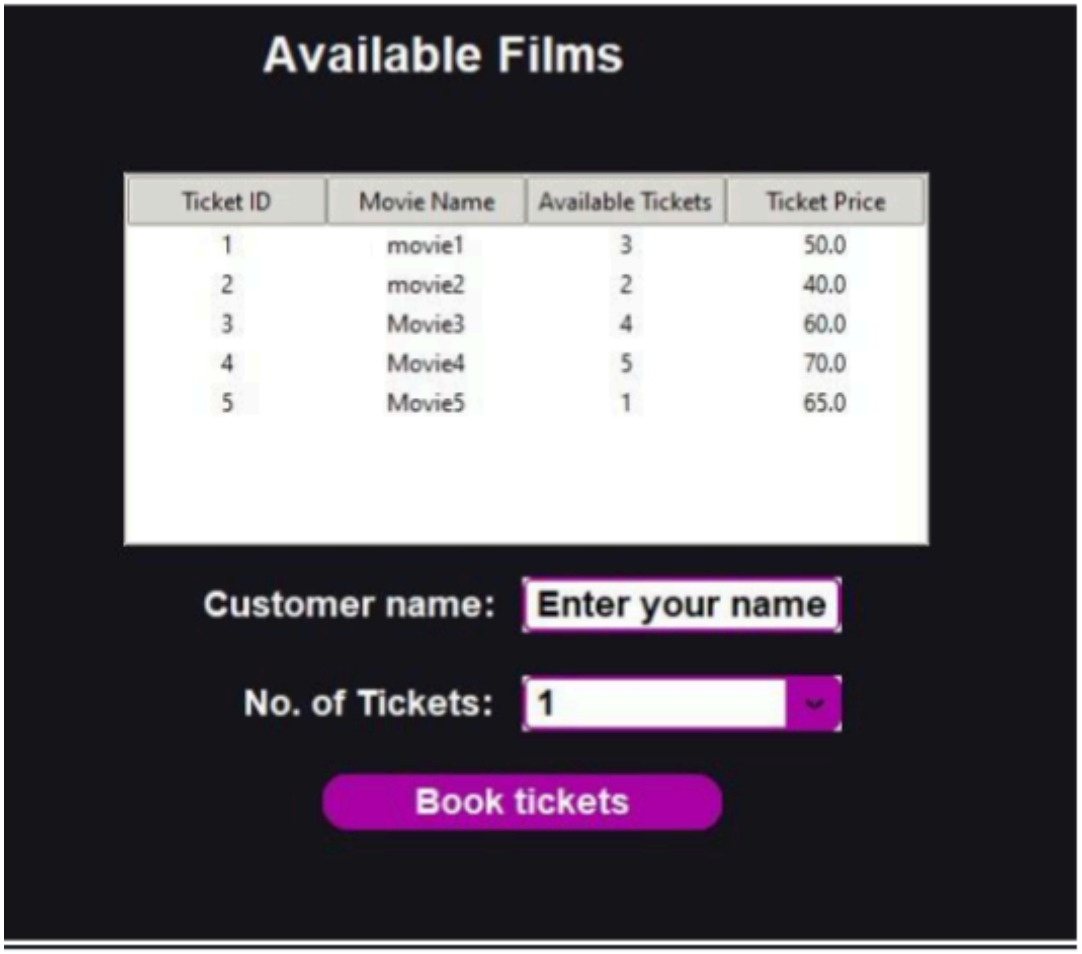
```
mysql.connector

def connect_to_database():     conn
= mysql.connector.connect(
host="localhost",        user="root",
password="safee123",
database="movie_booking_db"
   )
   return conn

def drop_tables(conn):     cursor = conn.cursor()
cursor.execute("DROP TABLE IF EXISTS Tickets")
conn.commit()     cursor.close()

def create_tables(conn):
cursor = conn.cursor()
cursor.execute("""
      CREATE TABLE IF NOT EXISTS Tickets (
ticket_id VARCHAR(10) PRIMARY KEY,
movie_name VARCHAR(100),
available_tickets INT,            ticket_price FLOAT
      )
   """)
```

```
    conn.commit()
cursor.close()

def clear_table(conn):     cursor =
conn.cursor()     cursor.execute("DELETE
FROM Tickets")     conn.commit()
cursor.close()

def insert_tickets(conn):
cursor = conn.cursor()
tickets_data = [
        ('1', 'movie1', 3, 50),
        ('2', 'movie2', 2, 40),
        ('3', 'Movie3', 4, 60),
        ('4', 'Movie4', 5, 70),
        ('5', 'Movie5', 1, 65)
    ]
    cursor.executemany("INSERT INTO Tickets (ticket_id, movie_name,
available_tickets, ticket_price) VALUES (%s, %s, %s, %s)", tickets_data)
conn.commit()     cursor.close()

def get_tickets(conn):     cursor =
conn.cursor()     cursor.execute('SELECT *
FROM Tickets')     tickets = cursor.fetchall()
cursor.close()     return tickets

def update_quantity(conn, id, reserved_quantity):
    cursor = conn.cursor()
    cursor.execute('UPDATE Tickets SET available_tickets = available_tickets - %s WHERE ticket_id
= %s', (reserved_quantity, id))

conn.commit()

    cursor.close()

if _name_ == "_main_":
```

```
    conn = connect_to_database()     drop_tables(conn)  #
Drop existing tables     create_tables(conn)  # Create
tables from scratch     insert_tickets(conn)  # Insert
initial ticket data     tickets = get_tickets(conn)  #
Retrieve tickets     update_quantity(conn, 'T1', 2)  #
Update ticket quantity     conn.close()
```

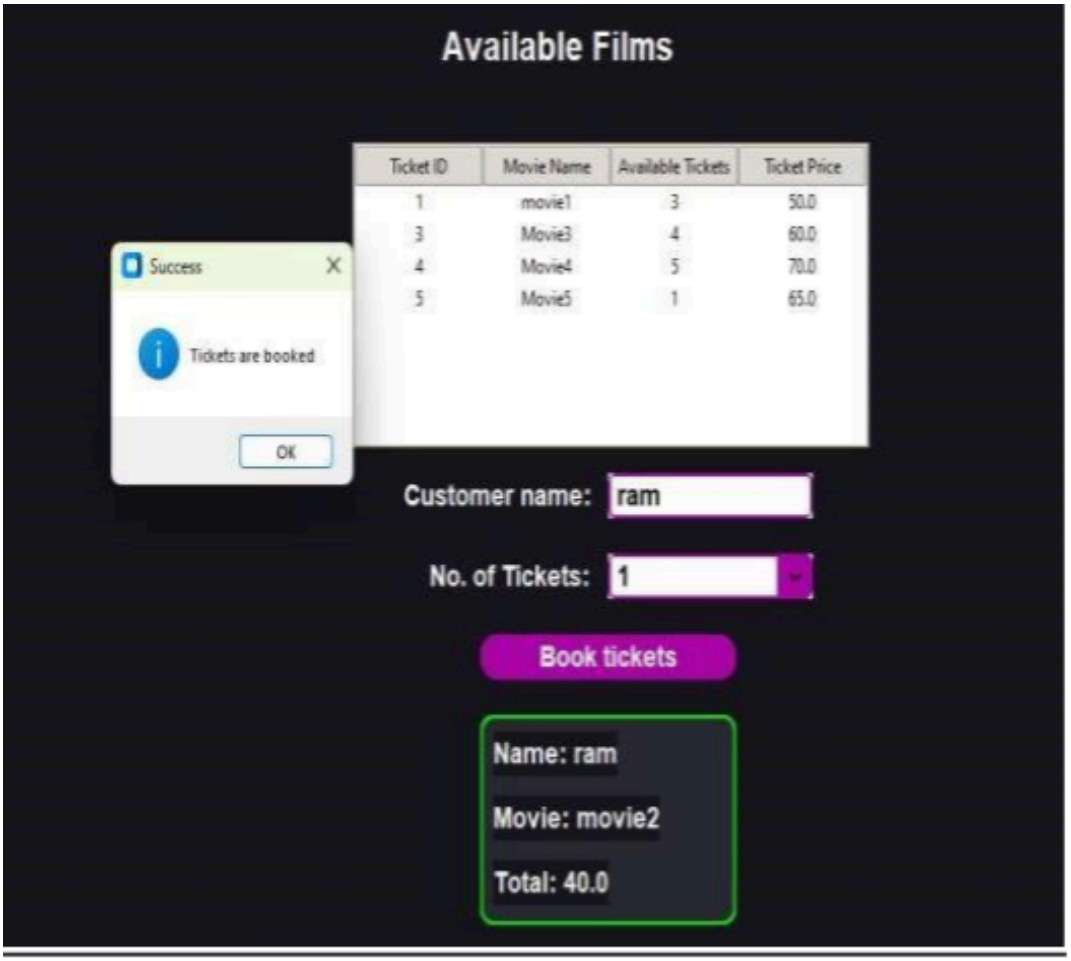
4.1 RESULT :

1.Ticket interface

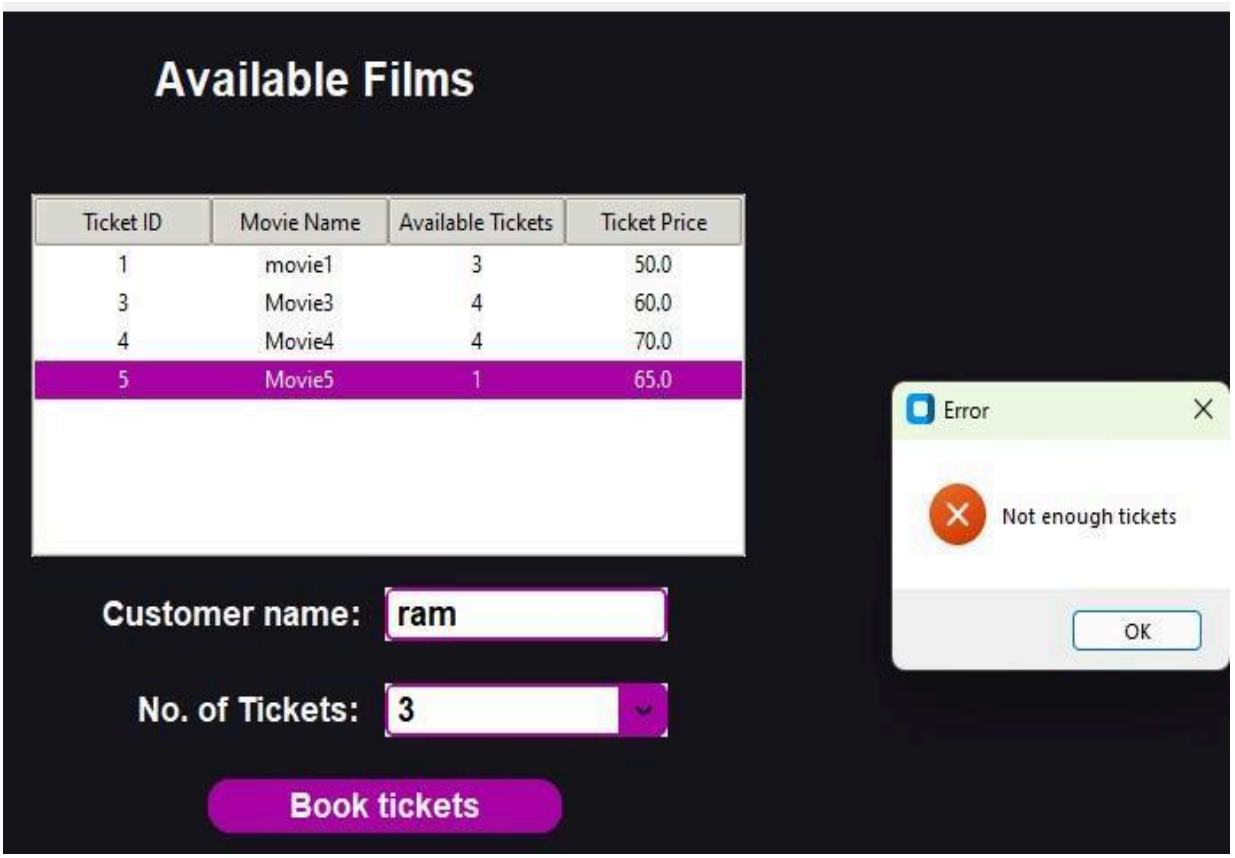


2.choose ticket

3,book ticket



4.Not enough ticket



4.2CONCLUSION:

The Ticket Booking System project presents a comprehensive solution for streamlining the process of booking movie tickets. Leveraging Python with Tkinter for the graphical user interface and MySQL for database management, this system offers users an intuitive platform to browse available films, select desired ticket quantities, and provide their information for reservation. By integrating error handling mechanisms and ensuring data integrity through normalization up to Third Normal Form (3NF), the system provides a seamless and reliable booking experience. The user-friendly interface, coupled with detailed documentation and modular code organization, enhances usability and maintenance. With its scalability and potential for future enhancements, the Ticket Booking System stands as a versatile tool for effectively managing movie ticket reservations, catering to the needs of both users and administrators alike.

4.3 REFERENCES

ADD LINKS ,BOOKS,REFERED TO DEVELOP THIS PROJECT

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