Step 1: Create a MySQL Database

To create a MySQL database and tables, you can use a tool like MySQL Workbench or execute SQL statements in your Python code. Here's an example of how to create a database and tables:

python

Copy code

import mysql.connector

# Create a connection to the MySQL server

db\_connection = mysql.connector.connect(

host="localhost",

user="your\_username",

password="your\_password"

)

# Create a cursor object to interact with the database

cursor = db\_connection.cursor()

# Create the Little Lemon database

cursor.execute("CREATE DATABASE IF NOT EXISTS little\_lemon")

# Switch to the Little Lemon database

cursor.execute("USE little\_lemon")

# Create tables for bookings, customers, etc.

cursor.execute("""

CREATE TABLE IF NOT EXISTS bookings (

booking\_id INT AUTO\_INCREMENT PRIMARY KEY,

customer\_id INT,

date DATE,

status ENUM('booked', 'confirmed', 'canceled')

)

""")

# Create other tables as needed (e.g., customers, rooms, etc.)

# Commit the changes and close the connection

db\_connection.commit()

db\_connection.close()

Step 2: Implement Procedures

You mentioned several procedures like GetMaxQuantity, ManageBooking, UpdateBooking, AddBooking, and CancelBooking. Here's a basic example of how to implement a procedure (e.g., AddBooking) in Python using the MySQL connector:

python

Copy code

def add\_booking(customer\_id, date):

try:

db\_connection = mysql.connector.connect(

host="localhost",

user="your\_username",

password="your\_password",

database="little\_lemon"

)

cursor = db\_connection.cursor()

# Example: Insert a new booking

cursor.execute("""

INSERT INTO bookings (customer\_id, date, status)

VALUES (%s, %s, 'booked')

""", (customer\_id, date))

db\_connection.commit()

return "Booking added successfully"

except Exception as e:

return f"Error: {str(e)}"

finally:

cursor.close()

db\_connection.close()

You can create similar functions for other procedures, and remember to replace your\_username and your\_password with your actual MySQL credentials.

Step 3: Data Analysis in Tableau

To perform data analysis in Tableau, you need to connect Tableau to your MySQL database and create worksheets and dashboards. Unfortunately, I can't provide the code for this part, as Tableau primarily uses a graphical interface for creating data visualizations. You can find extensive Tableau documentation and tutorials online to guide you through the process.

Once you have completed these steps, you can commit your project to GitHub and share the link with your peers for review. If you have any specific questions or need further assistance with a particular aspect of the project, feel free to ask.