

Local Transportation Ticketing System

User guide

Users who claim to have an account with the Online Bus Ticketing System may verify their status by entering their credentials on this page. It provides a short form with only two fields:

- **Username**

The username must be typed precisely as it appeared on the account creation form the user completed. The error rate increases with every deviation.

- **Password**

The user must enter the password that was previously entered and verified during the account creation process. If the user enters an invalid password, an error message will be shown.

- **Login**

When the user is ready to send their credentials to the database server, they may do so by clicking this button. An invalid login is the consequence of database changes.

Customer booking

Only those who have signed up for the Online Bus Ticketing System will be able to view this website, and only then will they be able to reserve a "spot" for the desired time frame. There's a booking form there that must be filled out with specifics. Therefore, the fields that need input are:

- **Category**

The user may choose between performances by solo artists, choirs, and bands.

- **Location**

The user is obligated to indicate their current abode in the location form.

- **Type of booking**

Choose between audio, video, or audio-visual bookings from the drop-down menu.

- **Dates of booking**

Actual booking dates should be selected by the user.

- **Time-From-To**

The time frame in which the reservation will be made on the scheduled day. The time range, such as 10:00 a.m. to 11:00 a.m., is given.

- **Nature of bus company**

It is up to the user to choose whether the Online Bus Ticketing System is stationary or mobile.

- **Book**

To confirm a reservation, the user must fill out certain information and then click the book button, which sends the information to the database server.

Physical process designs

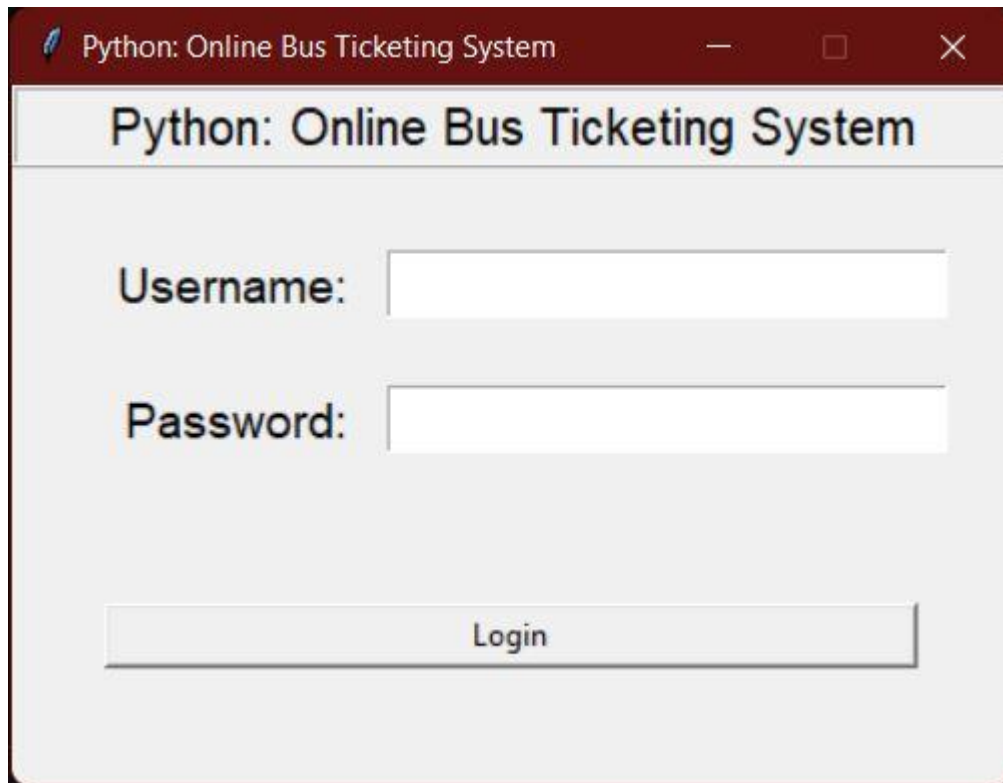
Everything that happens behind the scenes whenever a user interacts with the system is detailed here.

User registration, user login, user booking, user posting of payments, user checking of progress and payments, user logging out, administrator login, administrator update of progress and payments, administrator print available bookings, administrator posting and changing of bus company prices, administrator database manipulation, administrator logging out.

Storage needs might range from:

- ✓ User details of registration,
- ✓ User booking details and
- ✓ Admins authentication details.

User login Page:



Database design

The SQL-based customer database includes the following tables:

- customers
- ticket
- bus
- destination
- route
- timetable

Interface design

Users of the system will find the new interface straightforward and easy to use. There will be a graphical user interface with menus at its core. It will be up to the users to make the appropriate choices or input the necessary information.

Tools used for coding and testing

The following resources were invaluable over the course of the system's coding.

Coding tools

Editing: During the coding process, we used IDLE (Python 3.10 64-bit) software as the tool for editing the code using the various languages as discussed below.

- **SQL:** The full meaning of this acronym is "Structured Query Language." To make the Python code work with the database and to run the different queries, I utilized the SQL language.

Testing tools performance test

- This evaluation determines whether the produced system effectively addresses the specified issue. This system will undergo the following performance reviews.
- **Unit testing:** This necessitates checking out the parts that make up the whole system. Since each component was tested separately, this method aided in the detection of flaws.
- **Stress testing:** This kind of test is designed to verify how well a system handles out-of-the-ordinary scenarios. In my tests, the system was unable to proceed with execution when presented with erroneous input data like blank form fields.