Building an App for the Retail Customer Pipeline
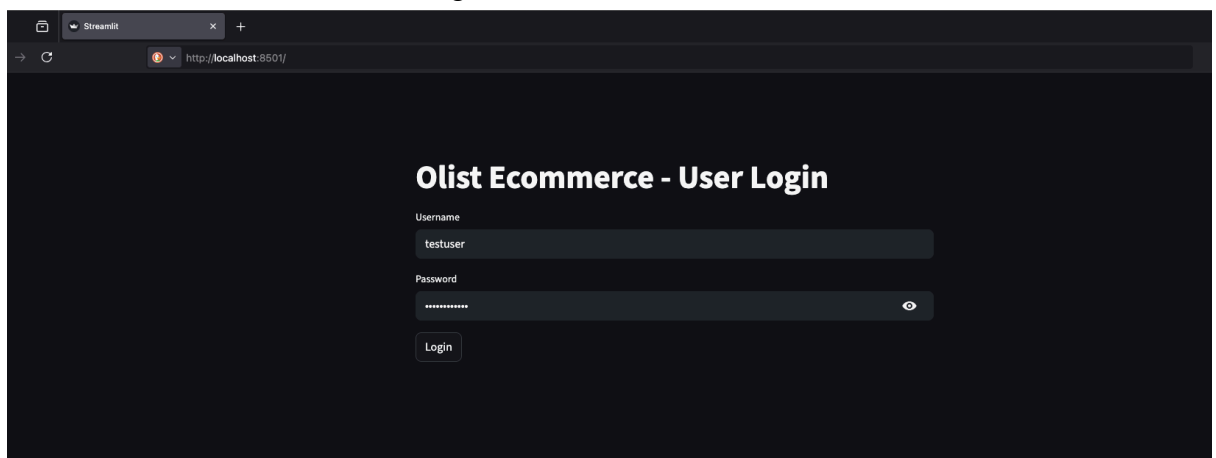
Next we will build a simple app for our retail e-commerce dataset.

- To build our app we will Streamlit.
    - **Streamlit is** an open-source Python framework for data scientists and AI/ML engineers to deliver interactive data apps - in only a few lines of code.

Using our App, Users can login and add products to the cart and checkout. Once the product is checked out an order is created in the database.

Install these packages into your machine.
1. Install these packages onto your machine.
    a. pip install psycopg2-binary pandas sqlalchemy streamlit

2. Use the ecommerceApp.py to create a stream lit app front end that will connect to the Redshift database and pull the products from the database.

3. `streamlit run ecommerceApp.py`

4. `Stream lit will open in your browser`
    a. http://localhost:8501/

5. Enter username/Password to login.

Add a product to cart and then checkout.

Olist Ecommerce - User Login

Username

testuser

Password

••••••••••• 👁

Login

Logged in successfully!

Product Catalog

Product ID: 1e9e8ef04dbcff4541ed26657ea517e5 - Category: perfumery

Quantity for Product ID 1e9e8ef04dbcff4541ed26657ea517e5

| 0 | − | + |

Add to Cart 1e9e8ef04dbcff4541ed26657ea517e5

Product ID: 3aa071139cb16b67ca9e5dea641aaa2f - Category: Art

Quantity for Product ID 3aa071139cb16b67ca9e5dea641aaa2f

| 0 | − | + |

Add to Cart 3aa071139cb16b67ca9e5dea641aaa2f

Product ID: 96bd76ec8810374ed1b65e291975717f - Category: sport leisure

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Proceed to Checkout

	product_id	quantity	product_category_name	product_name_length	tota
0	3aa071139cb16b67ca9e5dea641aaa2f	0	Art	44	

Total Amount: $88.00

Transaction completed and stored in Redshift!

Order placed successfully! Order ID: 1687fb2b-805b-442f-8177-49a1ed2de7f0

The latest order ID is: 1687fb2b-805b-442f-8177-49a1ed2de7f0

We can also check in the Redshift database that our order is successfully created.
Order_Purchase_timestamp: '2025-09-15 20:49:58'

See the Streamlit App video in code repo.