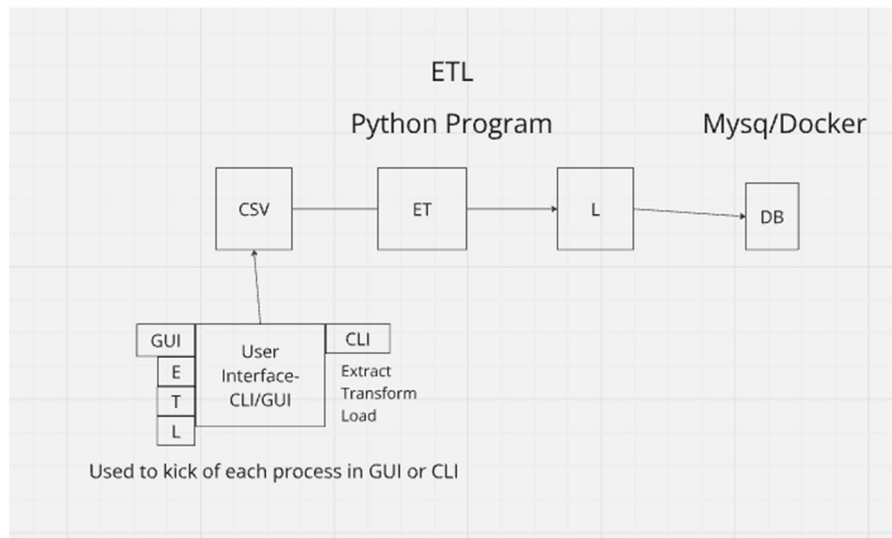


Architecture Diagram



Requirement

You have been approached by a local Café chain to help them explore moving from their paper-based Order Record System to a Local Database System. They have asked that you use a Microsoft Windows or MAC infrastructure.

Using Python, Docker and a MySQL database, build a simple data pipeline made up of **'Extract'**, **'Transform'** and **'Load'** functions that will extract information from a CSV data source, clean the data of any incorrect or badly formed records and remove any PII (Card Number, Name etc..) then upload it to a Local MySQL database for storage.

Your application must have the ability to print to the screen, clear the screen, accept user input, and allow them to trigger the **'Extract'**, **'Transform'** and **'Load'** functions of the ETL Pipeline manually.

They wish you to design, two different User Interfaces they could use, to get an idea of how they will use it when it goes live, they want you as a minimum to create a simple CLI based menu as well as a Windows GUI menu as a POC (Proof of Concept) for it.

The record structure and data types you need to consider, should be based on the following record structure.

Products - Customer Name, Drink, Qty, Price, Branch, Payment Type, Card Number, Date/Time

Dave, "Latte, 2, £3.50", Epsom, Card, 0123456, 12/08/2024

Delivery Deadline - 4 Weeks from Project Initiation

Final Deliverables to the Client –

1. Deliver a Product demo of the applications functions (5 Mins)
2. Create and Deliver a Client Facing Presentation on the benefits to the customer of you application (5 Mins)
3. Create and Deliver a White board session with the Client, explaining how the Application Works and your design decisions with alternatives. (5 mins)

Source Control - You must use GIT and GIT hub for source control, there is no need to use branches unless you wish to, you must also use the ReadMe on the Repo as documentation of your project progress, reflections and user instructions.