T.A.L.A Systems

Tony Boos, Alec Mirambeau, Lydia Castilhos, Asa Rowntree

Project Overview

Grocery Store management system

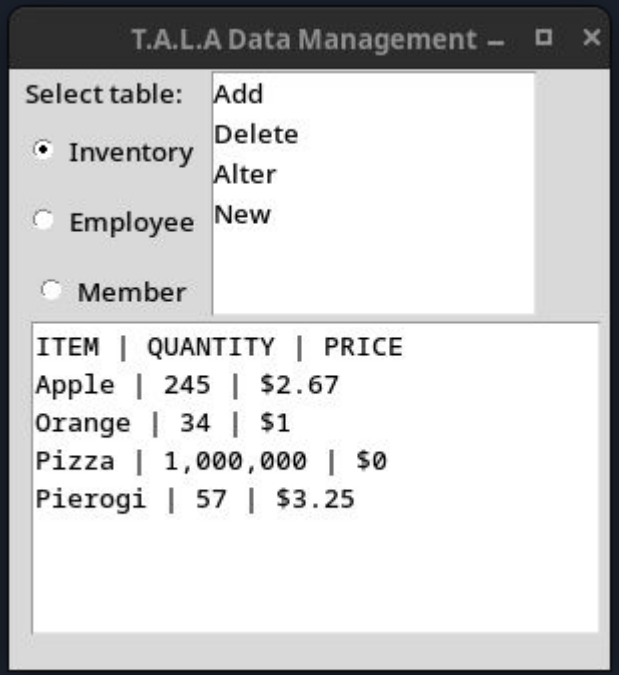
Database with three tables: Inventory, Employees, Members

Simple GUI that people who don’t know SQL can use

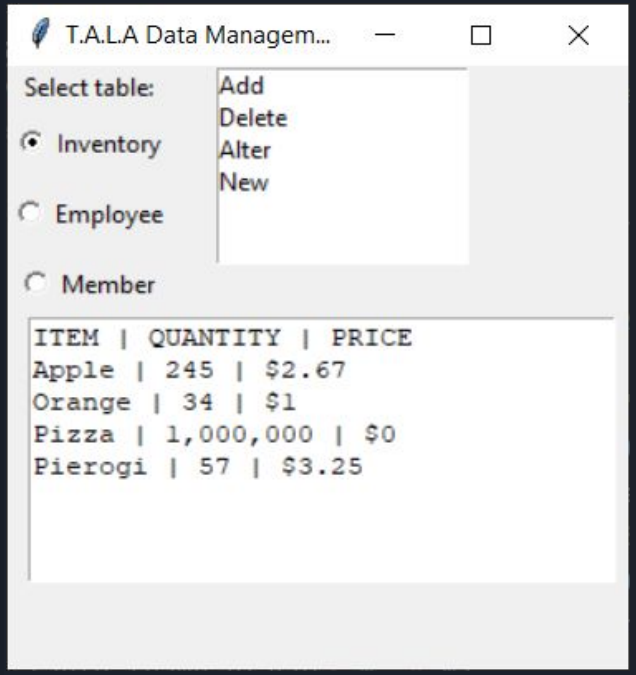
Python 3 (Tkinter and SQLite 3)

GUI Prototype

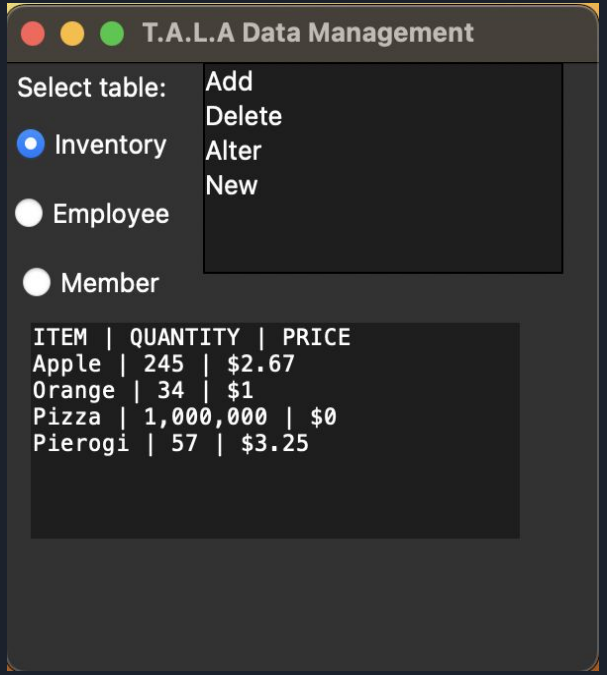
Linux



Windows



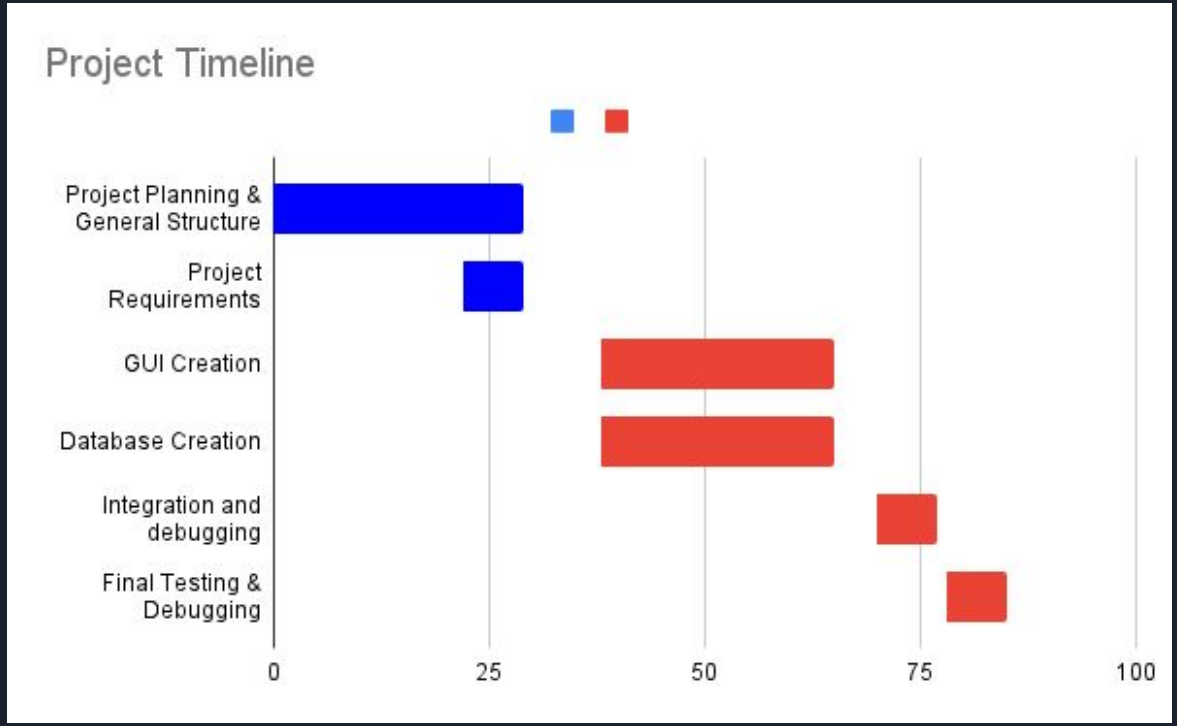
Mac



Database

- Database receives information that will be used to determine what sort of SQL command we want to execute
- Database will execute the command.
- GUI will update with new database values.
- The database never directly interacts with the user, only the GUI. The GUI interacts with the user and also interacts with the database.
- Problem?
  - There are people who may try to drop data, or perform any sort of SQL injections
- How do we prevent this?
  - Parameterized Queries
  - Ex: `cursor.execute("INSERT INTO employee (name) VALUES (?)", (user_input,))`
  - Parameterized Queries treat the user_input as data and not as a part of the SQL command.

Timeline


Project Timeline
Project Planning & General Structure
Project Requirements
GUI Creation
Database Creation
Integration and debugging
Final Testing & Debugging
0
25
50
75
100

Questions?