

Fictional Chocolate House using SQLite and Python

This project is a Python-based database management application designed to help a fictional chocolate shop keep track of seasonal flavors, ingredient stock levels, and customer feedback. The application uses SQLite for local data storage and is equipped with a command-line interface that allows users to easily add, update, and view data in each of the main tables.

Features:

1. Seasonal Flavour Management

- Add New Flavour: Allows users to add seasonal chocolate flavours, specifying the name and the season (e.g., "Winter").
- View Flavors: Provides a list of all available seasonal flavours, including details like ID, name, and associated season.

2. Ingredient Inventory Management

- Add Ingredient Stock: Enables users to add ingredients to inventory with a specified quantity.
- View Stock Levels: Displays a list of current ingredient inventory, including item name and stock quantity.
- Update Ingredient Stock: Lets users update stock levels for ingredients as supplies are added or used.

3. Customer Feedback Management

- Record Customer Feedback: Allows entry of customer-provided flavor suggestions along with any noted allergy concerns (e.g., "Nuts").
- View Feedback: Displays all customer feedback entries, providing details such as customer name, flavor suggestion, and allergy information.

Requirements:

- Python 3.x
- SQLite3 (comes bundled with Python)

Installation:

1. Clone or download this repository.
2. Make sure you have Python 3 installed on your machine.
3. Save the file as `chocolate_shop.py` (or an alternative preferred name) in a directory of your choice.

Usage

1. Run the script by opening a terminal in the project directory and executing:

```
```bash  

python chocolate_shop.py

```
```

2. The application will display a menu with options to manage flavours, ingredients, and feedback.

3. Use the numbered options in the command-line menu to navigate the system:

- 1: to add a new seasonal flavour.
- 2: to view all seasonal flavours.
- 3: to add an ingredient with its stock quantity.
- 4: to view ingredient stock levels.
- 5: to update the stock level for an existing ingredient.
- 6: to record customer feedback.
- 7: to view customer feedback.
- 8: to exit the application.

Database Schema

The application uses the following tables in the SQLite database (`chocolate_shop.db`):

- `seasonal_flavours`: Stores chocolate flavours along with their associated season.
- `ingredient_stock`: Holds data on ingredients, including the name and quantity in stock.

- ``customer_feedback``: Records customer-suggested flavours and any noted allergy information.

Example Usage

Here's a quick example workflow:

1. Start the application and choose option 1 to add a new seasonal flavour, entering the flavour name and season.
2. Choose option 3 to add ingredients to the stock, specifying names and quantities.
3. Use option 6 to record a customer's flavour suggestion, including any relevant allergy information.
4. Use options 2, 4, and 7 to review the entries you've made.

Closing the Application

The database connection will close automatically when you select option 8 (Exit) from the main menu.

This README provides an overview of the application's functionality, setup, and usage instructions, offering clear guidance on how to operate each feature without requiring prior knowledge of the code structure.