Baking an App

1. Oven – VS Code
2. Ingredients: Data other content
3. Azure: Public Storefront/Warehouse: Permanent or temp storage

Cooking Utensils

4. Objects/Classes/Arrays: data structures to hold content – Scoop and Filter
5. Methods: Cut/Slice/Dice/ - do things to content
    a. String slicing for example: Google
    b. Packages/Modules are how you obtain additional "Cooking Utensils".

Taste Test

6. Interactive window: Execute the code in pieces instead of "Run" entire app.
7. Measuring Cup or "Measures": Always numbers

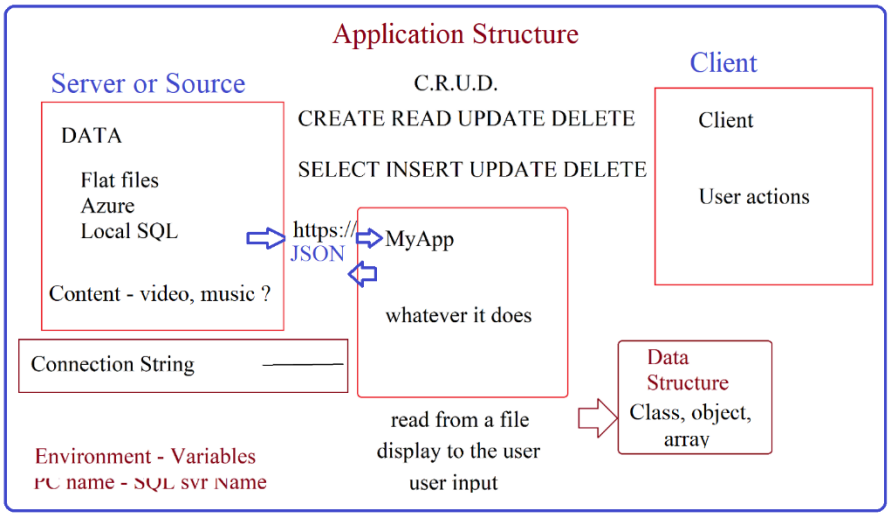
The App: The Cake

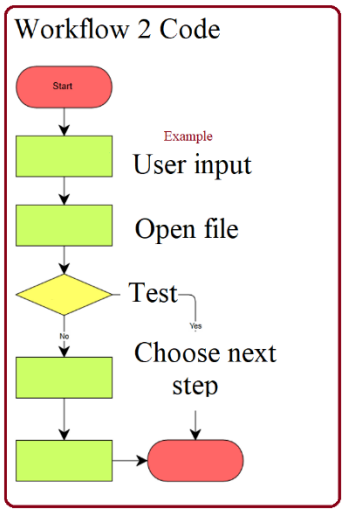
8. View Results: Did it really happen from end to end (UI to content is in correct files – not only that a process occurred – you MUST VERIFY NOT GUESS as odd things happen.
    a. Computing is a science based on math but we have the neat word "Anomaly".
9. Is it pretty? Icing – UX – are the stakeholders/users happy with navigating/searching/working with app?

It tastes bad

10. Debug: Find and fix – use CTL F in VS Code, the search tool as needed.
    a. Finding things like: Uninitialized or undefined variable (no value), calls to undefined functions, missing parentheses; etc
    b. [Get Started Tutorial for Python in Visual Studio Code]

Did I get to know the Recipe before mixing and cooking? (Diagram or Whiteboard: Parts/Workflows)





Build a Tic-Tac-Toe Game With Python and Tkinter – Real Python – no external data – is an MVC app

The "Oven" and starter recipes

1. Get Started Tutorial for Python in Visual Studio Code
    a. About the "Oven" to bake your app and cooking techniques.
    b. Python Program to Make a Simple Calculator (programiz.com)
        i. Start with this one.
        ii. "Console" app: Simplest user interface – not pretty.
    c. How To Make a Calculator Program in Python 3 | DigitalOcean
        i. "Console" app – very step by step to discuss "why".
    d. Python | Simple GUI calculator using Tkinter - GeeksforGeeks
        i. Python with Tkinter outputs the fastest and easiest way to create GUI applications.
        ii. Still a "Console" app – note the styling for appearance in code.

The Core of Data Science: Data scientists use Python to explore, visualize, and manipulate data.

2. Pandas Tutorial (w3schools.com)
    a. Using Python to discover "Trends" – not an app but using modules and a workflow to analyze numbers.
    b. Explore and analyze data with Python - Training | Microsoft Learn

Python Apps with "Pretty" Client (front end for user) – UI: User Interface that is not a console app, UX:Web User Experience

3. Introduction to Flask - Install and Create a Hello World app in Flask - AskPython
    a. Setup Flask – like setting up Python sort of.
4. Python and Flask Tutorial in Visual Studio Code
    a. Python framework for web applications that provides the basics for URL routing and page rendering.
5. Python and Django tutorial in Visual Studio Code
    a. Django is a Python framework for web development; uses URL routing, page templates, and works with data.

Database & C.R.U.D. Ops (which OS are you using – Windows, Mac, Linux?)

6. Explore and analyze data with Python - Training | Microsoft Learn
7. Create a single database - Azure SQL Database | Microsoft Learn
    a. Data "Ingredients" are stored in databases, storage, flat files, etc.
8. Use Python to query a database - Azure SQL Database & SQL Managed Instance | Microsoft Learn

More Examples

9. How to Create a Tic-Tac-Toe Game in Python? (geekflare.com)
10. **inventwithpython.com/chapter10.html
    a. Good discussion about designing
11. **The Classic Tic-Tac-Toe Game in Python 3 | by James Shah | Byte Tales | Medium