DELI-cious Capstone Planning Worksheet

Step 1: Understand the Problem

Instructions: In your own words, summarize what this program needs to do.

- What kind of business is this for?
- What are customers/employees supposed to do with the application?
- What should happen after the customer finishes their order?

Step 2: Identify Requirements

Instructions: Make a list of broad requirements based on the project description.
Look for the **key features** the application must support. Use bullet points.

Tip: Scan the project text and highlight all the **nouns** and **verbs**—this can help identify possible classes and actions.

Step 3: User Flow (What Happens First, Next, Then?)

Instructions: Imagine you're a customer or employee using this app from start to finish.
Write a **numbered list** of the steps a typical user would take.

Example (do not copy):

1. Start the program
2. Choose to place an order
3. Add first sandwich
4. ...

Step 4: Design Test Cases

Instructions: Write down at least 5 scenarios where you would want to test your program.
Include:

- A sample action (e.g., customer adds 2 sandwiches, both toasted, one with extra cheese)

- What you expect to happen (e.g., order shows correct total, receipt saves to correct location)
- Remember, we like using actual numbers and doing real calculations

Note: These tests will help guide your coding later.

Step 5: Brainstorm Potential Classes

Instructions: Based on what the program needs to do and the nouns you found earlier, list at least 4-6 possible classes you may need.

You are NOT writing code—just brainstorming.

Once you have a list, check in with your instructor to get feedback

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Step 6: Define Responsibilities

Instructions: For each class you listed above, write what that class might be responsible for.
Think about:

- What does this class *know*?
- What does this class *do*?

Class Name What it knows (data) What it does (behavior/methods)

Step 7: Relationships Between Classes

Instructions: Now think about how the classes relate to each other.

- Are there classes that contain or use other classes?
- Are there 1-to-many or has-a relationships?
- Inheritance? Interfaces? Abstract classes?

Write your thoughts or draw lines between classes on paper. You'll use this in the next step.

Step 8: Create a UML Diagram (Draft)

Instructions: Using your brainstormed classes, draw a UML diagram showing:

- Class names
- Attributes (variables)
- Methods (just the important ones)
- Relationships (e.g., arrows for associations or dependencies)

Don’t worry about being perfect—this is a draft to help guide your design. Present your UML diagram to your instructor for final approval. You may change it while you’re doing your Capstone but at least you have a start.