



## Creating a Personalized Budget Planner Using Excel and AI

**Instructions:** Complete the following steps.

### Step 1: Set Up Your Worksheet

1. **Open Excel:** Start by opening Microsoft Excel.
2. **Create a New Workbook:** Click on "File" > "New" > "Blank Workbook."

### Step 2: Enter Income Data

1. **Label Income Section:**
  - In cell A1, type "Income."
  - In cell A2, type "Source."
  - In cell B1, type "Amount."
2. **List Income Sources:**
  - In cells A3 to A6, list your income sources (e.g., "Part-time Job," "Allowance"). Adjust the column width to show all names.
  - In cells B3 to B6, enter the corresponding amounts.
3. **Total Income:**
  - In cell A8, type "Total Income."
  - In cell B8, enter the formula =SUM(B3:B6) to calculate the total income.

### Step 3: Format Your Data

1. **Bold Headers:**
  - Select cells A1 to G1.
  - Click on the "Bold" button in the "Font" group on the "Home" to make the headers bold. You can use the CTRL-B shortcut key combination as well.
  - Select cells A2, D2, D12, and G2. Add bold as well as underline.
2. **Format Numbers:**
  - Select cells B3 to B8, E3 to E12, and H2.
  - Click on "Home" > "Number" group > "Currency" option from the drop-down menu to format the prices and total costs as currency.

### Step 4: Enter Expense Data

1. **Label Expense Section:**

- In cell D1, type "Expenses."
  - In cell D2, type "Category."
  - In cell E2, type "Amount."
2. **List Expense Categories:**
    - In cells D3 to D10, list your expense categories (e.g., "Food," "Transportation," "Entertainment").
    - In cells E3 to E10, enter the corresponding amounts.
  3. **Total Expenses:**
    - In cell D12, type "Total Expenses."
    - In cell E12, enter the formula =SUM(E3:E10) to calculate the total expenses.

### **Step 5: Calculate Remaining Balance**

1. **Label Summary Section:**
  - In cell G1, type "Summary."
  - In cell G2, type "Remaining Balance."
2. **Calculate Balance:**
  - In cell H2, enter the formula =B8-E12 to calculate the remaining balance.

### **Step 6: Create Charts and Graphs**

1. **Select Data for Chart:**
  - Highlight cells D2 to E10 (expense categories and amounts).
2. **Insert Chart:**
  - Click on "Insert" > "Charts" > click the "Insert Pie or Donut Chart" to create a visual representation of your expenses.
  - Click on the "Chart Title" and change the chart title, such as "Expenses."
  - Move the chart so the left top right corner is at the top left corner of cell A14.

### **Step 7: Apply Conditional Formatting**

1. **Highlight Expenses:**
  - Select cells E3 to E10.
2. **Apply Formatting:**
  - Click on "Home" > "Styles" > "Conditional Formatting" > "Highlight Cell Rules" > "Greater Than."
  - Set a threshold amount (e.g., highlight expenses greater than \$100).

### **Step 8: Adding Final Touches**

1. **Name the Worksheet:**

- Double click the worksheet tab that says "Sheet1." Type in an appropriate name for the worksheet, such as "Budget Planner."

### Step 9: Integrate AI Recommendations

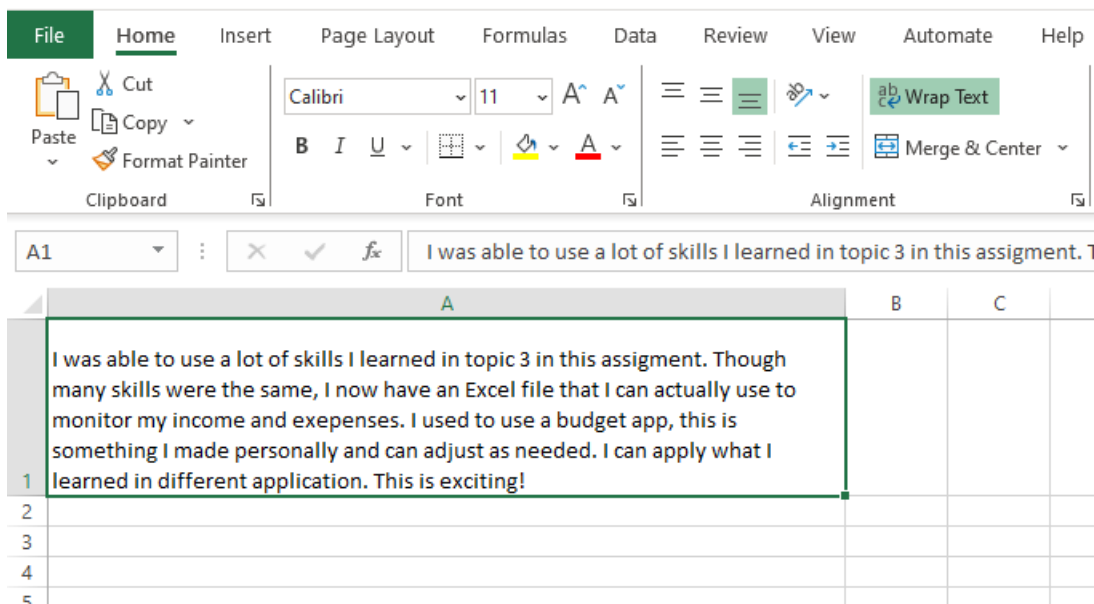
#### 1. Generate AI Insights:

- Use a generative AI tool to analyze your expense categories and provide personalized saving tips.
- Enter these tips in a new section (e.g., cells J1 to J5).

### Step 10: Reflection Question

In cell A1 in a new sheet (click the plus sign in circle next to the worksheet tab and name it "Reflection"), write a 50- to 100-word reflection addressing what you learned about using Excel and how you might use it in the future.

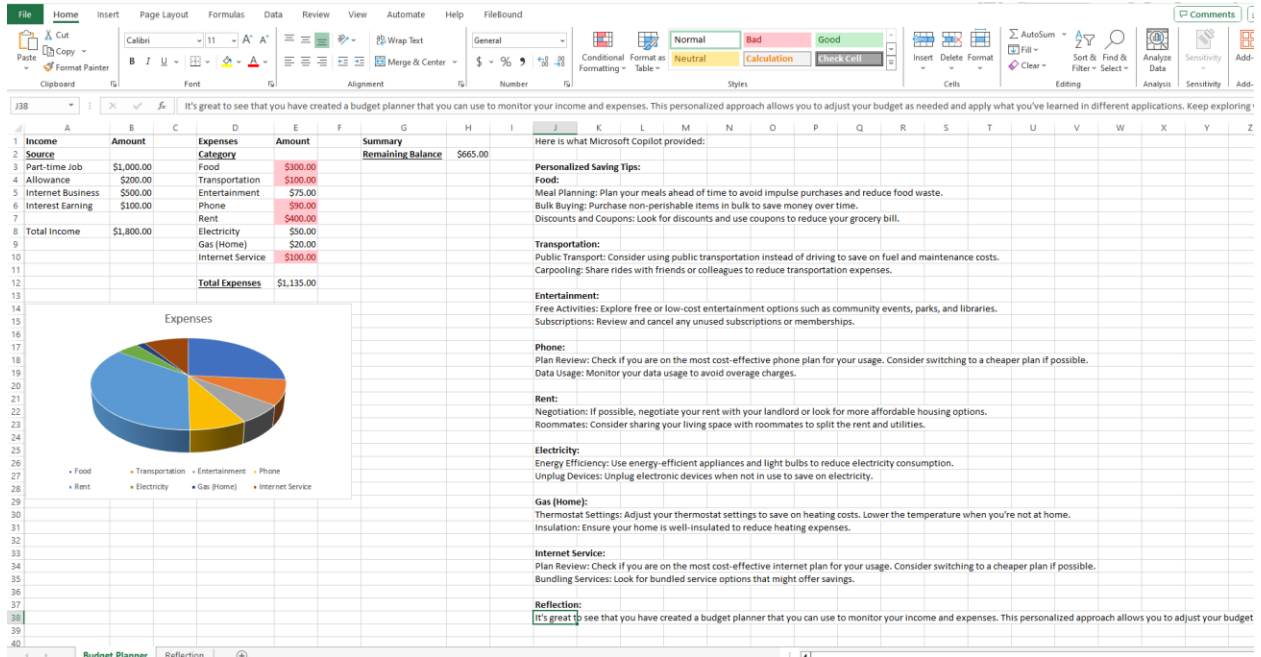
- Use the "Wrap Text" function so your reflection is kept in a narrower column width. Adjust the column and row width as needed.
- Your "Reflection" sheet should look like this:



### Step 11: Save Your Work

#### 1. Save Your Work:

- Your Excel worksheet should look somewhat like this:



- Click on "File" > "Save As" to save your workbook with this file name format: **Firstname\_Lastname - Topic 4 Budget Planner Excel Assignment.xlsx**