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Design-Template – House Cleaning Cost Program

**Requirements:**

Create a program that calculates the cost of cleaning a house that takes in user input, offers two or more packages of cleaning, and calculates the total cost. There should be three sizes for house size (small, medium, large), each costing more than the last tier.

**Design:**

Display welcome message and continue to take in user input. This user input is for the amount of rooms needed to be cleaned, and what package of cleaning (Basic – windows and floors $100 + house size, Deluxe – Basic package + bathrooms and dusting $300 + house size) the user would like. These will be stored in variables. Using a conditional statement, find what range this job falls in according to house size (1-2 rooms $250, 3-4 rooms $400, 5 or more rooms $550). Create a cost variable initialized at 0 and add the cost of the package selected. Using a conditional statement, determine the size of the house by room. Add the price of the size of the house to the cost variable. Return that information as text to the UI as the final cost of the cleaning.

Note: Additionally there will be checks along the way to ensure that the user input is in the range of acceptability. There is no limit to how many rooms but it must be > 0, furthermore the package selection will be 1, denoting Basic, or 2, denoting Deluxe, otherwise it is invalid and will prompt exit().

**Test Plan:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test #** | **Number of Rooms** | **Package Selected Input (1 or 2)** | **Expected Output** |
| **1** | **1** | **1** | **$350 total cost** |
| **2** | **4** | **2** | **$700 total cost** |
| **3** | **10** | **2** | **$850 total cost** |
| **4** | **-2** | **2** | **Error Message, Invalid Input** |

**Test 1:**

Graphical user interface, text, application

Description automatically generated

**Test 2:**

Graphical user interface, text, application

Description automatically generated

**Test 3:**

Text

Description automatically generated

**Test 4:**

Graphical user interface, text

Description automatically generated