

30 points

You need to create a program that will download a list of appliances could be found in a typical home. With that list will be included the amount of power that an appliance consumes. The program will allow for price per kWh for electricity. As you turn on appliances you should see several text boxes on the form that display what the turned on appliance(s) that are turned on consume per hour, per day and per year.

For this assignment:

1. Create a GUI (PowerViewer) so that a customer's current electric rate and consumption can be displayed.
2. The appliances will be downloaded from a file. The class that takes care of this part is ApplianceDA and will return a List of Appliance objects.
3. In the form generate a button for each appliance returned from the ApplianceDA class. There may need to be several rows of buttons on the form. When a mouse over on a button occurs show a tool tip describing the appliance the power they consume.
4. When a button is pressed simulate the turning on of that appliance by turning the background of the button to green. Then update the current cost of the appliance(s) that are turned on the form.

Grading for program 1

Requirement	Points	Score
GUI allows entry of an order in an intuitive fashion	10	
GUI shows hourly, daily and yearly rate of those appliances	6	
All appliances represented by a button on the form	10	
Background color indicates if an appliance is on or off	2	
Follows 3 layer model of business classes	2	

Form View: