DB4 (Ch. 12) – create a GUI application

Total: 30 pts

► Create an application that calculates a car's gas mileage.
► The formula for calculating the miles that a car can travel per gallon of gas is: **MPG = miles/gallons**
► **(Design)** The application should have textfield controls that let the user enter the number of gallons of gas the tank holds and the number of miles that car can be driven on a full tank.
  ► Set up the tile bar as: **Miles per Gallon Calculator**
  ► Use JPanel to arrange GUI components. Also, set up different Layout Managers for panels.
► **(Event Handlers)** When the *Calculate MPG* button is clicked, the application should display the number of miles that the car can be driven per gallon of gas.
  ► Display the result with two decimal places
► **(Event Handlers)** The program should also have a *Clear* button that clears the input and result, and an *Exit* button that ends the application.
► **(Exception Handling)** If the user fails to enter numeric values, display an appropriate error message and do not attempt to perform calculations. As well as, the user cannot enter 0 value for gallons for Arithmetic exception.
► GUI should appear as shown in the following figures.