

Java Eclipse MPG

Time required: 120 minutes

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Comment each line of code as shown in the tutorials and other code examples.

Follow all directions carefully and accurately. Think of the directions as minimum requirements.

Pseudocode

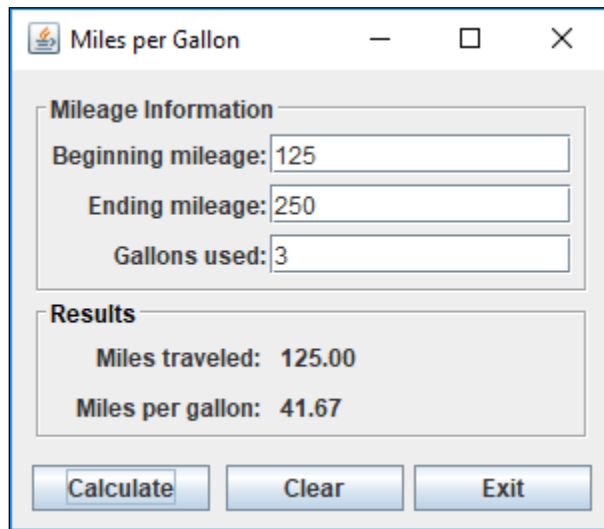
1. Write pseudocode for the exercise.
2. Save it in a document.
3. Submit with the assignment.

Create MPG with Eclipse

Use Eclipse to create a GUI Java program that calculates miles per gallon.

1. In Eclipse, go to **File → New → Java Project**. Project Name: **MPG** Click Finish.
2. Right click the **src** folder, **New → Other → WindowBuilder → Swing Designer → JFrame**. Click **Next**.
3. Name: **MPG** Click **Finish**.
4. Delete **module-info.java**.
5. Click the **Design** tab.
6. Click the **JFrame** to set its properties.
 - a. Title: **MPG**

7. Click the **contentPane**.
 - a. Layout: **Absolute Layout**
8. Go to **Containers**, add 2 **JPanel**'s. Draw them like the sample application.
9. Click the top **JPanel**. Click the ... button to the right of border.
 - a. Border type: **TitledBorder**
 - b. Title: **Mileage Information**
 - c. Border: **EtchedBorder**
10. Click the bottom **JPanel**. Click the ... button to the right of border.
 - a. Border type: **TitledBorder**
 - b. Title: **Results**
 - c. Border: **EtchedBorder**
11. Set each JPanel Layout: **Absolute Layout**



Requirements

The application should let the user enter the beginning and ending mileage, and the gallons used. When the **Calculate** button is clicked, the application should display the number of miles that the car may be driven per gallon of gas.

NOTE: Your project can look different than the example shown.

- Include data validation by using **Try Catch** blocks for user input.
- **Miles traveled** and **Miles per gallon** should be rounded and displayed to 2 decimal places.
- The **Clear** button should clear all text boxes and set the focus on the **Beginning Mileage** text box.
- Create a Jar file from the project.

Assignment Submission

1. Zip up the Eclipse project folder and the Jar.
2. Submit it to Blackboard.