

Using shiny application for interactive analysis of
MTCARS dataset: project for the 'Developing
Data Products' Coursera class.

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Description of the shiny application

This application performs a regression of MTCARS dataset to determine if transmission type impacts miles per gallon (MPG).

The UI allows user to select which variables are used in a regression, and then displays some output from that regression.

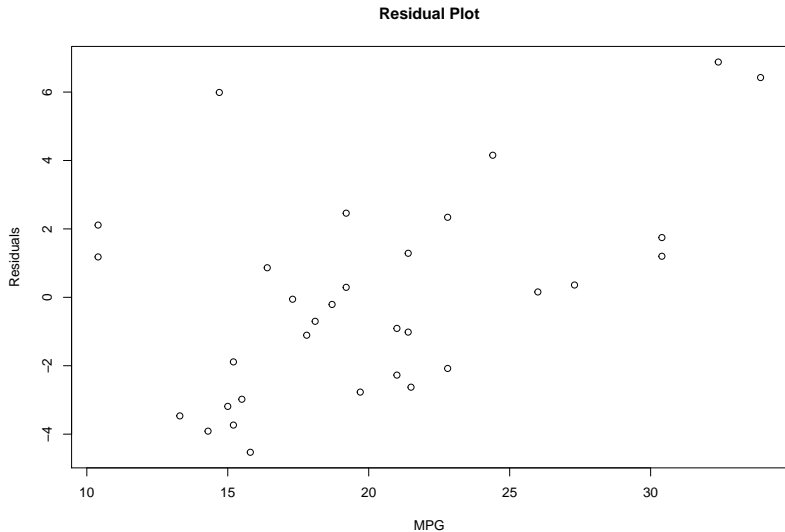
Selectable variables are all but AM (which is always used) and MPG (which is being predicted).

Output is a residual plot, and 3 values: AM regression coefficient, its P-value, and STD of the residuals.

Benefits of using shiny

- ▶ Visual presentation of the results
- ▶ Immediate response
- ▶ Ability to try multiple approaches
- ▶ Flexible structure of result output
- ▶ Ability to distribute the application to a wide audience

Sample output



```
## [1] "Increase in MPG for a manual transmission:"
```

Conclusion

Shiny allows quick development and deployment of interactive applications.

Application developed for this presentation illustrates basic capabilities of shiny, and can be used as a starting point for further development.