My app created in Shiny

Laura

Sunday, February 28, 2016

# Developing data Products

# Course Project Assignment

### Summary

For this assignment I have created a Shiny application that calculates the mean amount of Ozone based on the measured Solar.R. The app allows people who will visit New York from 1300 to 1500 hours and now the amount of Solar.R how good or bad the mean Ozone will be then.

### The model:

To be able to create the Shiny app I first had to determine the model that would be able to predict the amount of Ozone based on Solar.R. Therefore I used the airquality dataset from R and created a model based on Ozone and Solar.R. I used the coefficients as an input into my shiny app application so that the model doesn't need to run everytime. Anyone only has to add the amount of Solar.R that's in the air and the outcome will show. Because the model is based on values between 7 and 334 the amount of Solar.R that you can enter is also between those values, otherwise you won't receive any output.But will receive a warning. However, you can still see what value you entered.

Solar.R stands for Solar radiation in Langleys in the frequency band 4000–7700 Angstroms from 0800 to 1200 hours at Central Park and Ozone stand for Mean ozone in parts per billion from 1300 to 1500 hours at Roosevelt Island.

Below you see the code I used to create my model.

library(datasets)  
  
  
data<-airquality  
datamodel<-na.omit(data)  
quality<-lm(Ozone ~ Solar.R, data=datamodel)  
coef(quality)

## (Intercept) Solar.R   
## 18.5987278 0.1271653