Diamond Cost Predictor

diamond data analysis

How much cost a Diamond?

For this assignment, I did prepared a Shiny application in which the user will input the Carats of a Diamond stone and it will get its price based on the statistical data.

Loading of the packages

The first part is the declaration of the package which will be used.

```
library(shiny)
library(UsingR)
```

Reading of the Data

We began by reading in the data.

The data is in SIN$ but the final results will be in US$ (at a change rate based on the date at Dec. 20 2014 of: USD/SGD = 0.77134)

```
data(diamond)
```

Fitting the Model

I created a novel prediction algorithm to predict the cost in US$dollars for each diamond stone.

```
fit= lm(price ~ carat, data = diamond)
```

A quick look at the data :

```
summary(diamond)
```

```
##      carat            price      
##  Min.   :0.1200   Min.   : 223.0  
##  1st Qu.:0.1600   1st Qu.: 337.5  
##  Median :0.1800   Median : 428.5  
##  Mean   :0.2042   Mean   : 500.1  
##  3rd Qu.:0.2500   3rd Qu.: 657.0  
##  Max.   :0.3500   Max.   :1086.0
```

The following is the source used to create the application:

The Interactive Application using the Shiny package

A shiny project is a directory containing at least two parts One named ui.R (for user interface) controls how it looks. One named server.R that controls what it does.
Here are the files:
ui.R
server.R

Following link is the application Diamond Price Calculation

Diamonds Cost Predictor.