Coffee Quality From Around the World

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RESEARCH QUESTION & COFFEE DATA

Question:

How do different growing and harvesting conditions affect the score for a cup of coffee?
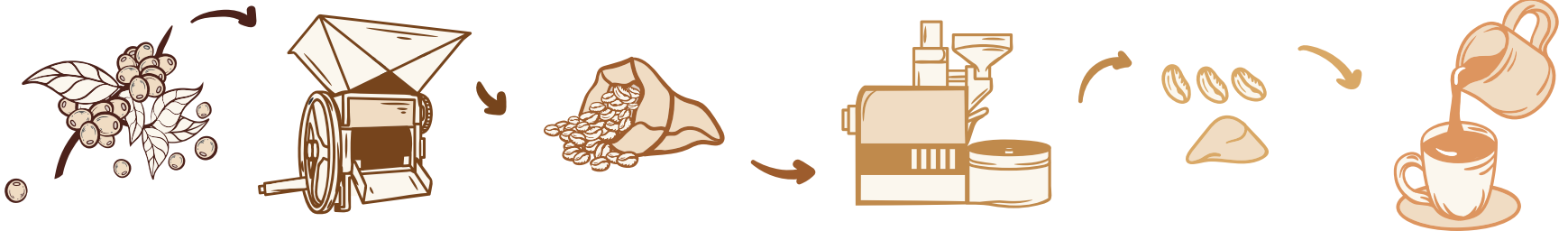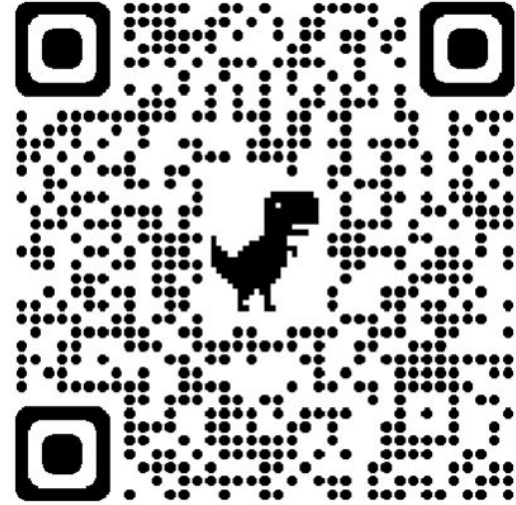
Data:

- Dataset from *Coffee Quality Institute*
- Contains reviews from specialized reviewers for both coffee species: arabica and robusta
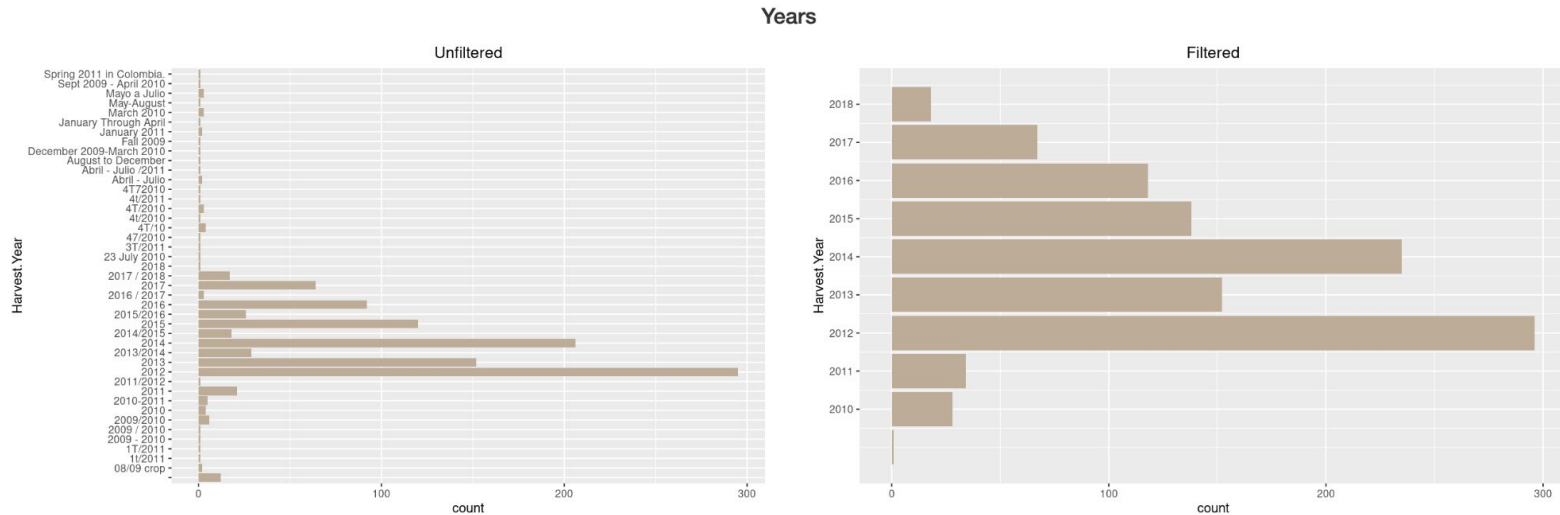- Includes information about growing conditions (year, altitude) as well as scores for flavor components and overall
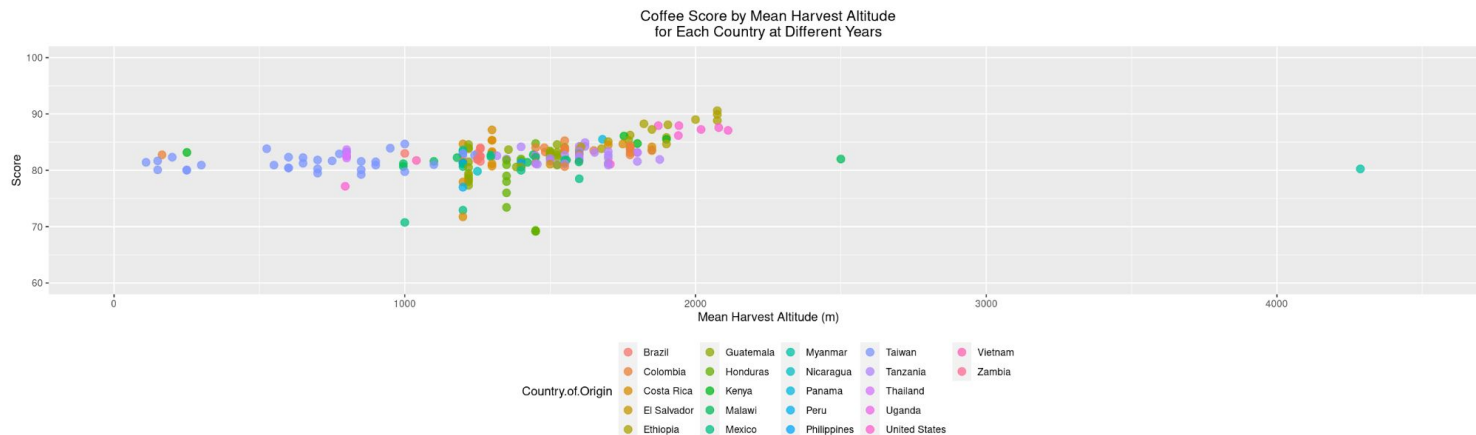
SHINY

http://tinyurl.com
/bdevxhy5

FILTERING

- Data required a bit of filtering given outliers and unexpected variables
- See "filter" tab of app to see how my filtering process modified the data
- Example below of harvest year options:

MEASURE

- "Measure" tab provides display of score as a function of harvest altitude for different countries
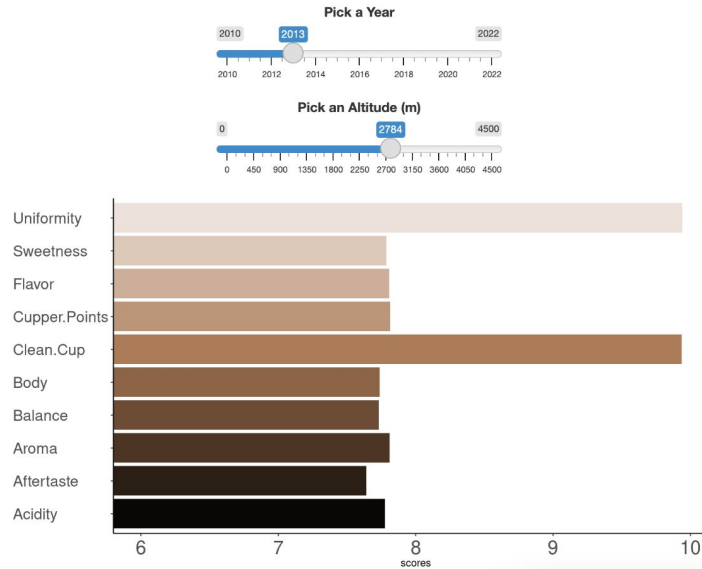- User selects year for measurement

BREW

- "Brew" tab allows user to input different growing conditions and see how it affects scores
- User inputs all four options

Brew Your Coffee!

Pick a Year

2010   [2013]   2022

2010 2012 2014 2016 2018 2020 2022

Pick an Altitude (m)

0   [2784]   4500

0 450 900 1350 2250 2700 3150 3600 4050 4500

Pick a Processing Method

Pulped natural / honey ▾

Pick a Coffee Species

Robusta ▾

Grade: 81.98 %

Uniformity
Sweetness
Flavor
Cupper.Points
Clean.Cup
Body
Balance
Aroma
Aftertaste
Acidity

6   7   8   9   10

scores

CONCLUSIONS

- Growing conditions definitely impact scores for different coffees
- Degree of impact depends on which category as well as which growing condition
- Linear model probably not the most effective because it generally implies that younger coffees at higher altitudes are better which isn't super great
- Would be interested to add interaction to the model or change from linear to higher degree polynomials