Client Report - [Project 1: What is in a name?]

Course CSE 250 James Lule

Elevator pitch

paste your elevator pitch here

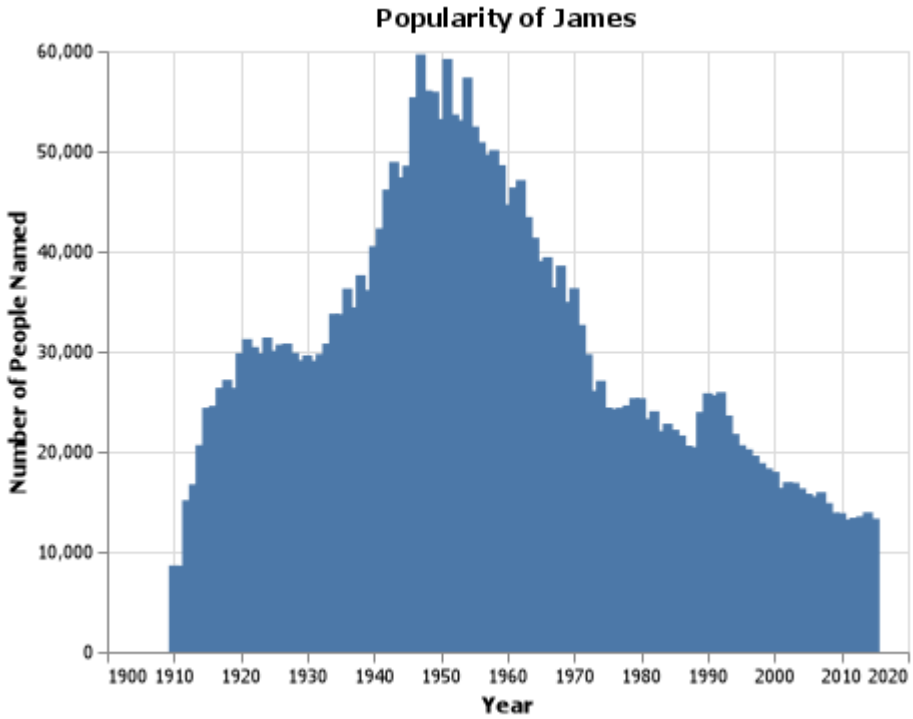
GRAND QUESTION 1

How does your name at your birth year compare to its use historically?

type your results and analysis here

TECHNICAL DETAILS

```
james = names.query('name == "James"')
james
total_james = james.sum()
total_james
utah = total_james[["UT"]]
utah
alabama = total_james[["AL"]]
alabama
georgia = total_james[["GA"]]
georgia
idaho = total_james[["ID"]]
idaho
```



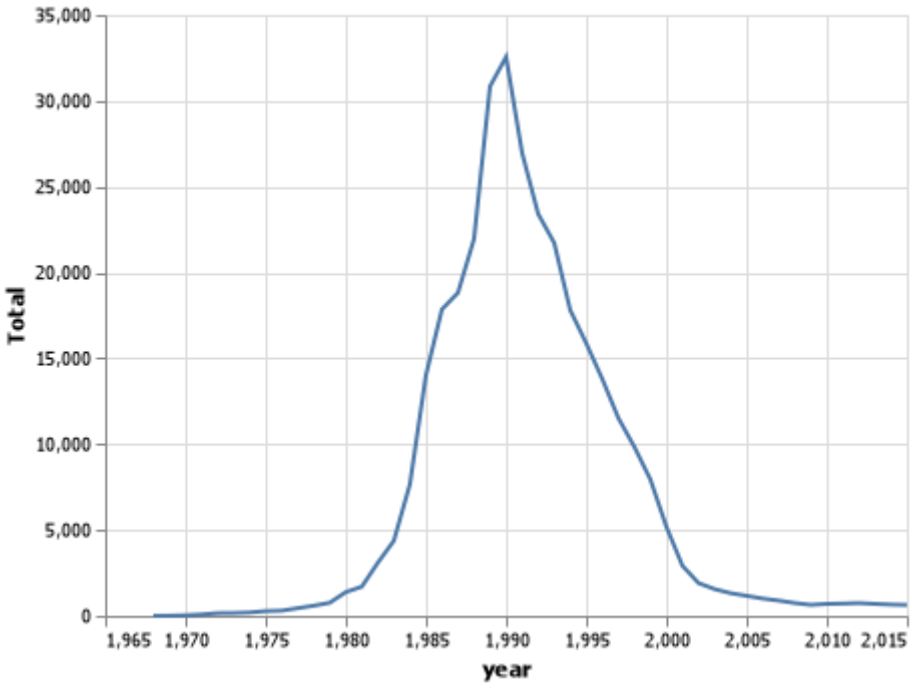
GRAND QUESTION 2

 # If you talked to someone named Brittany on the phone, what is your guess of their age?

type your results and analysis here

TECHNICAL DETAILS

```
brittany = names.query('name == "Brittany"')[["name", "year","Total"]]
brittany
chart = (alt.Chart(brittany).mark_bar().properties(title="Given Name of
Brittany")).encode(
x=alt.X('year', axis = alt.Axis(format="d", title="Year")),
y=alt.Y('Total', axis= alt.Axis(title="Number of People Named Brittany Over
Time")))
chart
```



insert your chart png here

```
#paste your table code in this snippet box
```

GRAND QUESTION 3

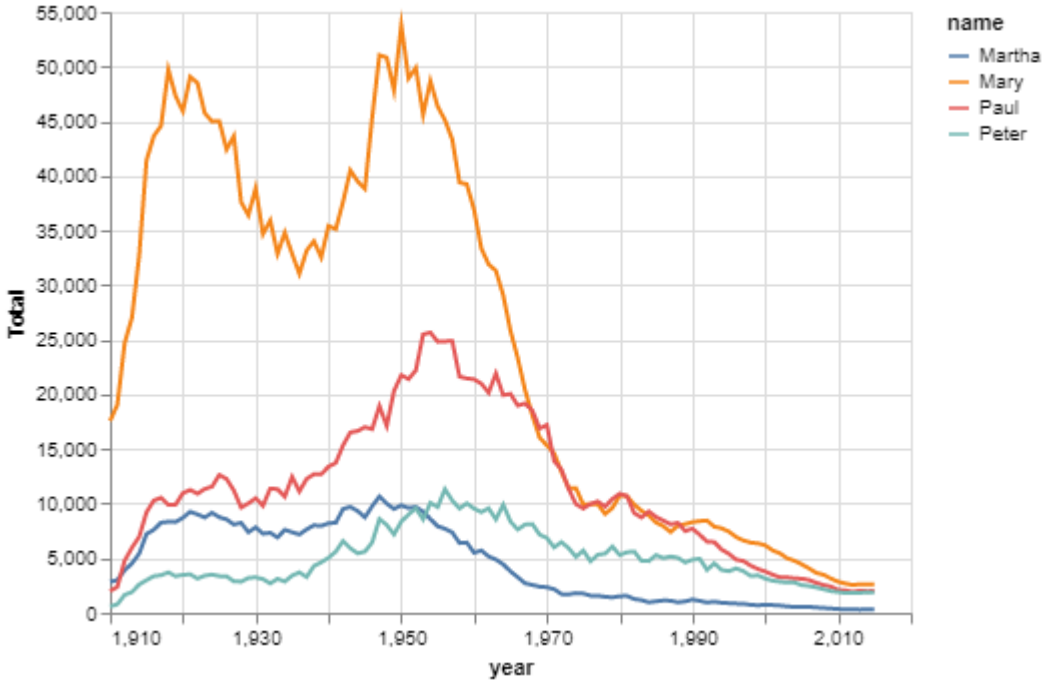
Mary, Martha, Peter, and Paul are all Christian names. From 1920 - 2000, compare the name usage of each of the four names.

type your results and analysis here

TECHNICAL DETAILS

```
#paste chart code in this snippet box
```

```
christiannames = names.query("name == 'Mary' or name == 'Martha' or name ==
'Peter' or name == 'Paul'")
christiannames
chart1 = (alt.Chart(christiannames).mark_line().properties(title="Popularity of 5
Biblical names")).encode(
x=alt.X('year', axis = alt.Axis(format="d", title="Year"))),
y=("'Total', color = 'name'")
chart1
```



GRAND QUESTION 4

Think of a unique name from a famous movie. Plot that name and see how increases line up with the movie release

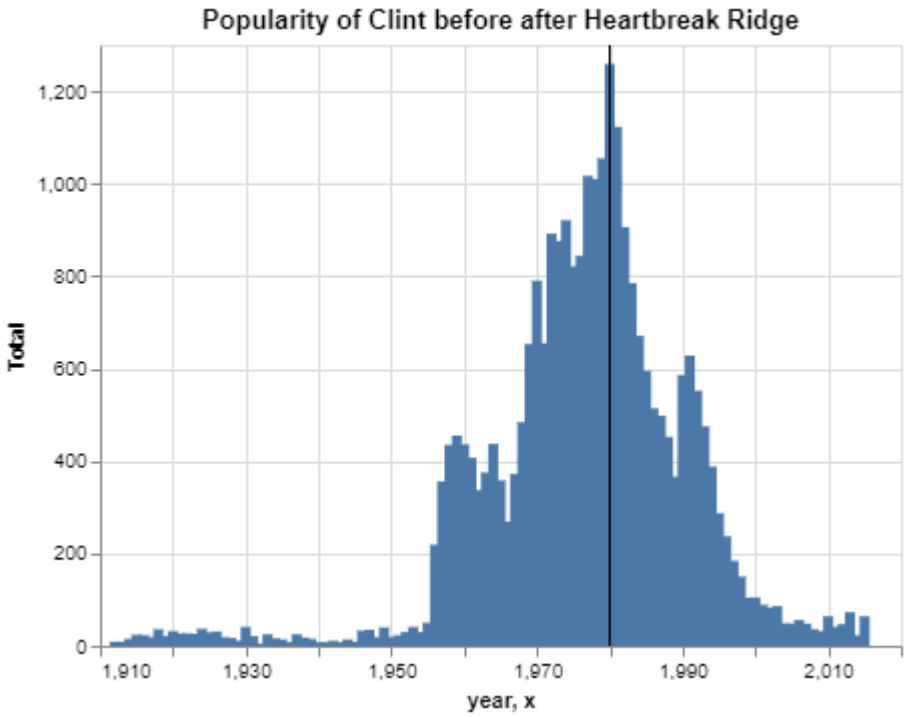
type your results and analysis here

TECHNICAL DETAILS

Looking at the chart before clint eastwood is pretty old so i assumed his glory days as an actor were in the 80's or 90's which is true but his highest grossing movie as as a director was in the in the early 2010's which is american sniper. His still popular but directors are behind the scenes while actors are the face of the movie so thats why his name was so popular then but not so much as time went forward.

```
clint = names.query("name == 'Clint'")
chart2 = alt.Chart(clint).mark_bar().properties(title = "Popularity of
Clint").encode(x='a')
```

```
y='Total',
# The highlight will be set on the result of a conditional statement
color=alt.condition(
alt.datum.year == 1955, # If the year is 1810 this test returns True,
alt.value('red'), # which sets the bar orange.
alt.value('steelblue') # And if it's not true it sets the bar steelblue.
).properties(width=600)
```



APPENDIX A (PYTHON CODE)

```
# %%
#import libraries
import pandas as pd
import altair as alt

from altair import datum
alt.data_transformers.enable('json')
# %%
#import data
url = "https://raw.githubusercontent.com/byuidatascience/data4names/master/data-raw/names_year/names_year.csv"
names = pd.read_csv(url)
# How does your name at your birth year compare to its use historically?
james = names.query('name == "james"')
james
total_james = james.sum()
total_james
utah = total_james[["UT"]]
utah
alabama = total_james[["AL"]]
alabama
```

```
georgia = total_james[["GA"]]
georgia
idaho = total_james[["ID"]]
idaho
# %%
#create table of all entries
table = total_james.head(60)
print(table.to_markdown(tablefmt="grid"))
# %%
# How does your name at your birth year compare to its use historically?
james = names.query('name == "james"')[["name", "year","Total"]]
james
chart = (alt.Chart(james).mark_bar().properties(title="Popularity of
james")).encode(
x=alt.X('year', axis = alt.Axis(format="d", title="Year")),
y=alt.Y('Total', axis= alt.Axis(title="Number of People Named")))
chart
chart.save("james.png")
# %%
# If you talked to someone named Brittany on the phone, what is your guess of
their age?
brittany = names.query('name == "Brittany"')[["name", "year","Total"]]
brittany
chart = (alt.Chart(brittany).mark_bar().properties(title="Given Name of
Brittany")).encode(
x=alt.X('year', axis = alt.Axis(format="d", title="Year")),
y=alt.Y('Total', axis= alt.Axis(title="Number of People Named Brittany Over
Time")))
chart
chart.save("Brittany.png")
# %%
# Mary, Martha, Peter, and Paul and James are all religious names
christiannames = names.query("name == 'Mary' or name == 'Martha' or name ==
'Peter' or name == 'Paul'")
christiannames
chart1 = (alt.Chart(christiannames).mark_line().properties(title="Popularity of 5
Biblical names")).encode(
x=alt.X('year', axis = alt.Axis(format="d", title="Year"))),
y=("'Total', color = 'name'")
chart1

# %%
#Think of a unique name from a famous movie. Plot that name and see how increases
line u
clint = names.query("name == 'Clint'")
chart2 = alt.Chart(clint).mark_bar().properties(title = "Popularity of
Clint").encode(x='a')
y='Total',
# The highlight will be set on the result of a conditional statement
color=alt.condition(
alt.datum.year == 1955, # If the year is 1810 this test returns True,
alt.value('red'), # which sets the bar orange.
alt.value('steelblue') # And if it's not true it sets the bar steelblue.
).properties(width=600)
```

```
# %%
```