

Project 1 Proposal-Group 8

1. Introduction

- a. Dataset is a summary of mobile phone usage among demographics
- b. <https://www.kaggle.com/datasets/valakhorasani/mobile-device-usage-and-user-behavior-dataset/data>

2. Reason for data set chosen

- a. Our group chose this Data Set due to the fact we use smartphones and were interested in seeing mobile phone usage data from outside domestic usage.

3. Research questions

- a. Comparing Age, Gender of users compared to data usage, phone brand (Do certain Genders/Ages prefer particular phone brand
Ages broken down into brackets (Box plot) (pie chart)
T-test- Null data, As age goes up, Data down usage goes
Alternative: Age and Data usage account for no difference in usage
- b. App usage time Compared to battery time, Does the more apps installed = to less battery time? (Scatter plot), Linear plot)

3. Research Question 3

Analyze each gender and age vs number of installed apps

Gender (M/F) vs number of apps

Age vs number of apps

Plots/Chart-

Scatter plot (2)

Age/app installed

Gender M/app installed

Gender F/app installed

Bar chart

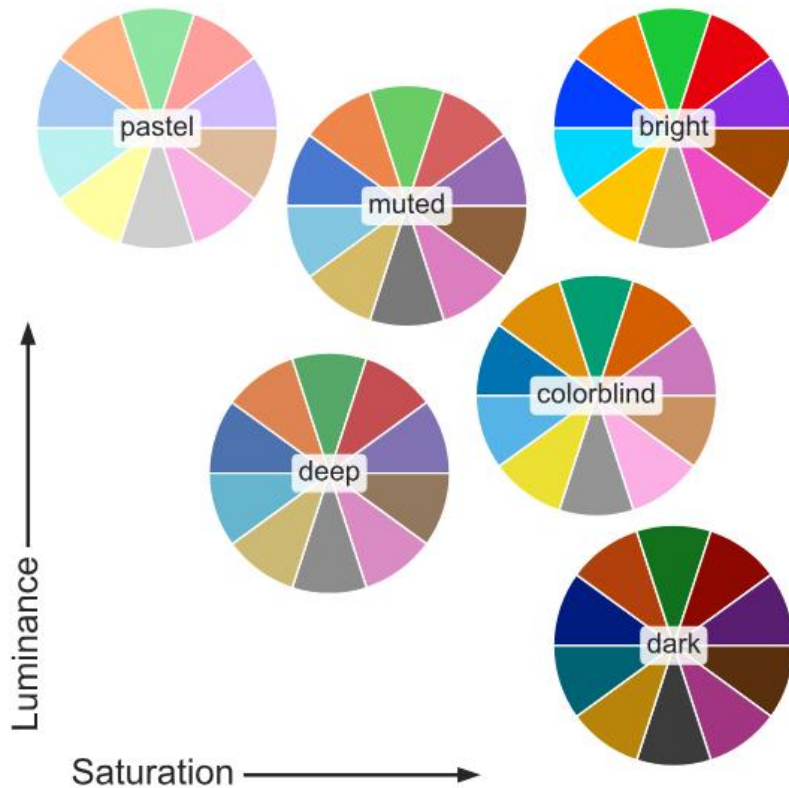
y axis Installed apps

x axis Age groups/2 bars for gender

- ## **4. Inspiration-**
- With the shift to a more digital world with smart phones in our pockets, there is a lot of data collected by companies related to usage and demographic information. With all that information, we wanted to use this data to ask the questions above to better understand consumer preferences and data usage to

better understand what different users experience day to day with their smartphones, especially with a data set that appears to be outside of the USA.

5. Color theme



Color theme= Bright in Seaborns

6. Possible Visuals

Box Plot

Donut chart

Scatter Plot

Linear plot

Violine chart

+More TBD

Linear Regression

App usage time compared to battery time

Data usage compared to age brackets

7.Roles and Responsibilities

- a. **Question 1-Brian**
- b. **Question 2 – Edward**
- c. **Question 3-Victor**
- d. **Regression – Byren?**
- e. **Slides and write ups - ALL**

Slide Presentation-

Introduction

Objective

Data set

High Level Questions

Question 1

Question 2

Question 3

Regression

Bias and limitations

Conclusion/questions