

Scenario

You are a junior data analyst working on the marketing analyst team at Bellabeat, a high-tech manufacturer of health-focused products for women. Urška Sršen, co-founder and Chief Creative Officer of Bellabeat, believes that analyzing smart device fitness data could help unlock new growth opportunities for the company. You have been asked to focus on one of Bellabeat's products and analyze smart device data to gain insight into how consumers are using their smart devices. The insights you discover will then help guide marketing strategy for the company. You will present your analysis to the Bellabeat executive team along with your high-level recommendations for Bellabeat's marketing strategy

ASK

The Problem that we are trying to solve is to analyze one of Bellabeat Products smart device fitness health data and gain knowledge on how customers use these devices. Our insights can help markets target a specific audience that we know our audience will be and how our marketing team will attract customers

Prepare

- Our Data is stored <https://www.kaggle.com/arashnic/fitbit>. Our data is organized by
 - Heart Rate
 - Calories_burned
 - Intensity per Hour
 - Steps Taken By HJour
 - MET-is the ratio of the rate of energy expended during an activity to the rate of energy expended
 - Sleep_day
 - Activity_Day
 - Weight_Day
- The dataset is generated from a survey Via Amazon Mechanical Turk , where 33 users were given consent to track their data.
- The data is Cited from A fitBit is a very reliable source

Process

The Tools that I will be using are SQL for analyzing the data, and Tableau for visualizations for the data.

We want to get the average calories per day

```
SELECT AVG(Calories) AS AverageCalories, FORMAT_DATE('%A',ActivityDay) As Day
FROM `delta-sanctum-331816.Bellabeat.Daily Calories`
GROUP BY Day
```

#To check how many users in this database

```
SELECT DISTINCT ID
FROM `delta-sanctum-331816.Bellabeat.Daly Activity` LIMIT 1000
```

#To see the average of minutes and distance the users run

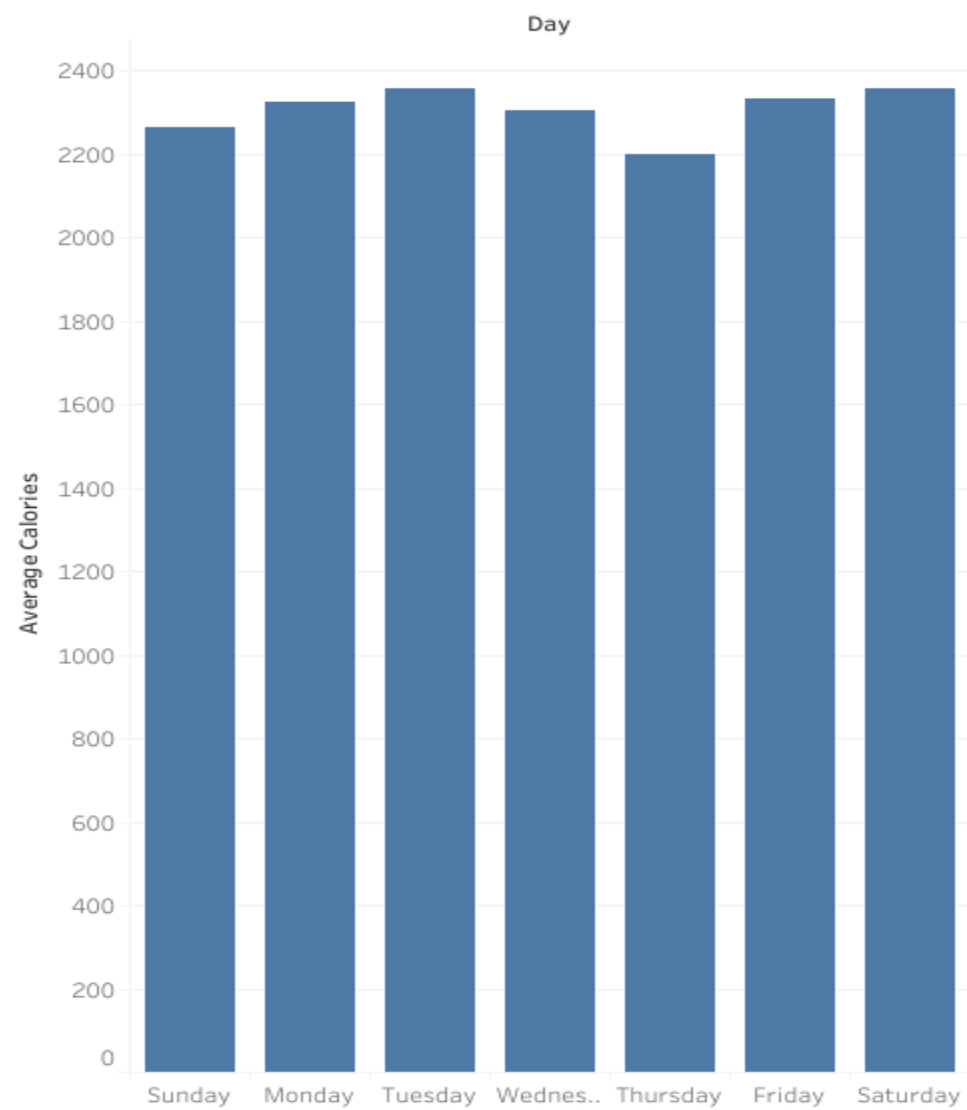
```
SELECT FORMAT_DATE('%A',ActivityDay) As Day,
Avg(LightlyActiveMinutes) AS LightAvgMinutes,
AVG(FairlyActiveMinutes) AS FairlyActiveMinutes,
AVG(VeryActiveMinutes) AS VeryActiveMinutes,
AVG(LightActiveDistance) AS LightDistance,
AVG(ModeratelyActiveDistance) AS ModeratelyActiveDistance,
AVG(VeryActiveDistance) AS VeryActiveDistance

FROM `delta-sanctum-331816.Bellabeat.Daily Intenesities`
GROUP BY DAY
```

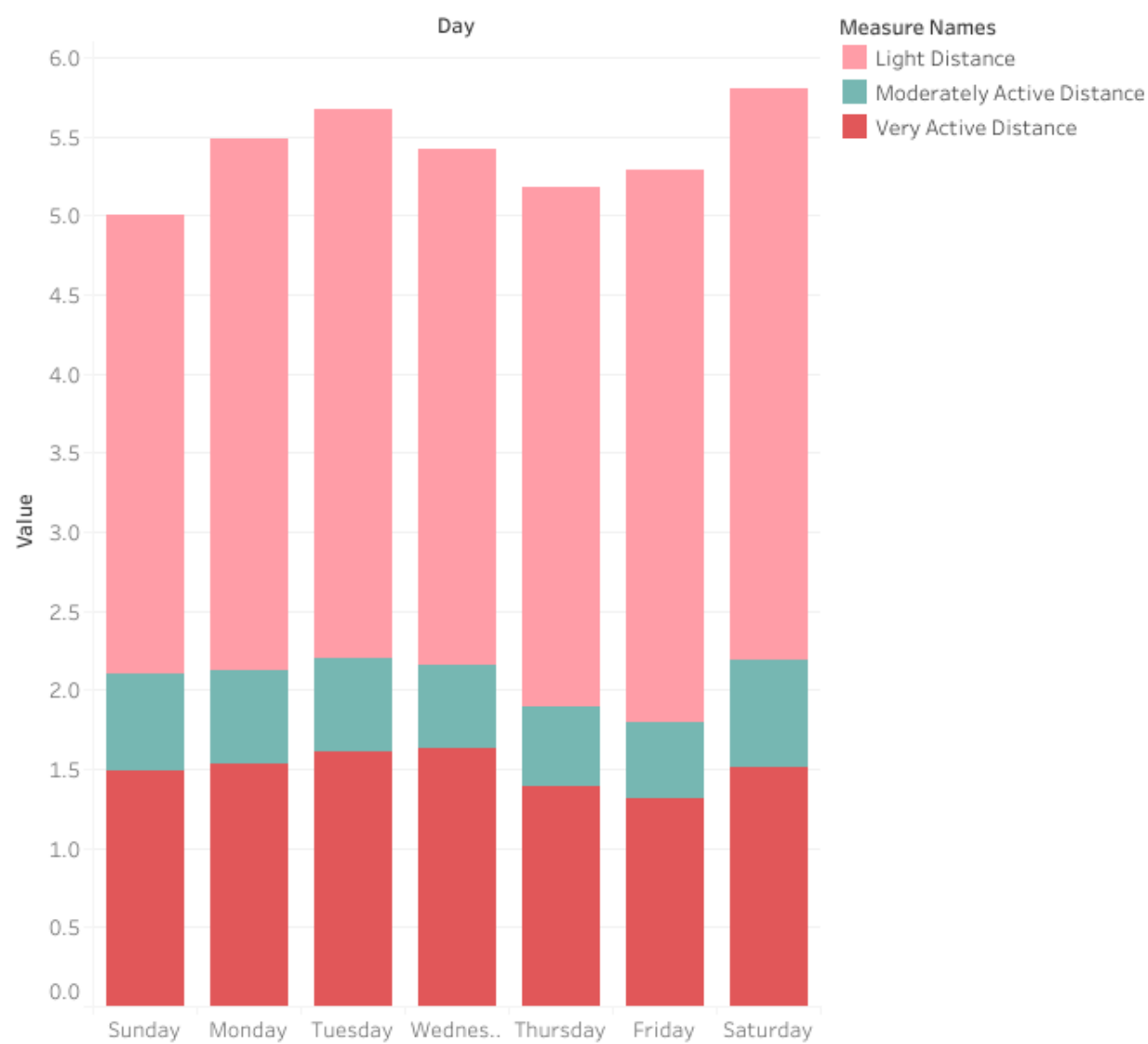
```
SELECT cast(ActivityHour as time) As Time, AVG(TotalIntensity) AS Intensity
FROM `delta-sanctum-331816.Bellabeat.Hourly Intensities`
group by time
```

Share

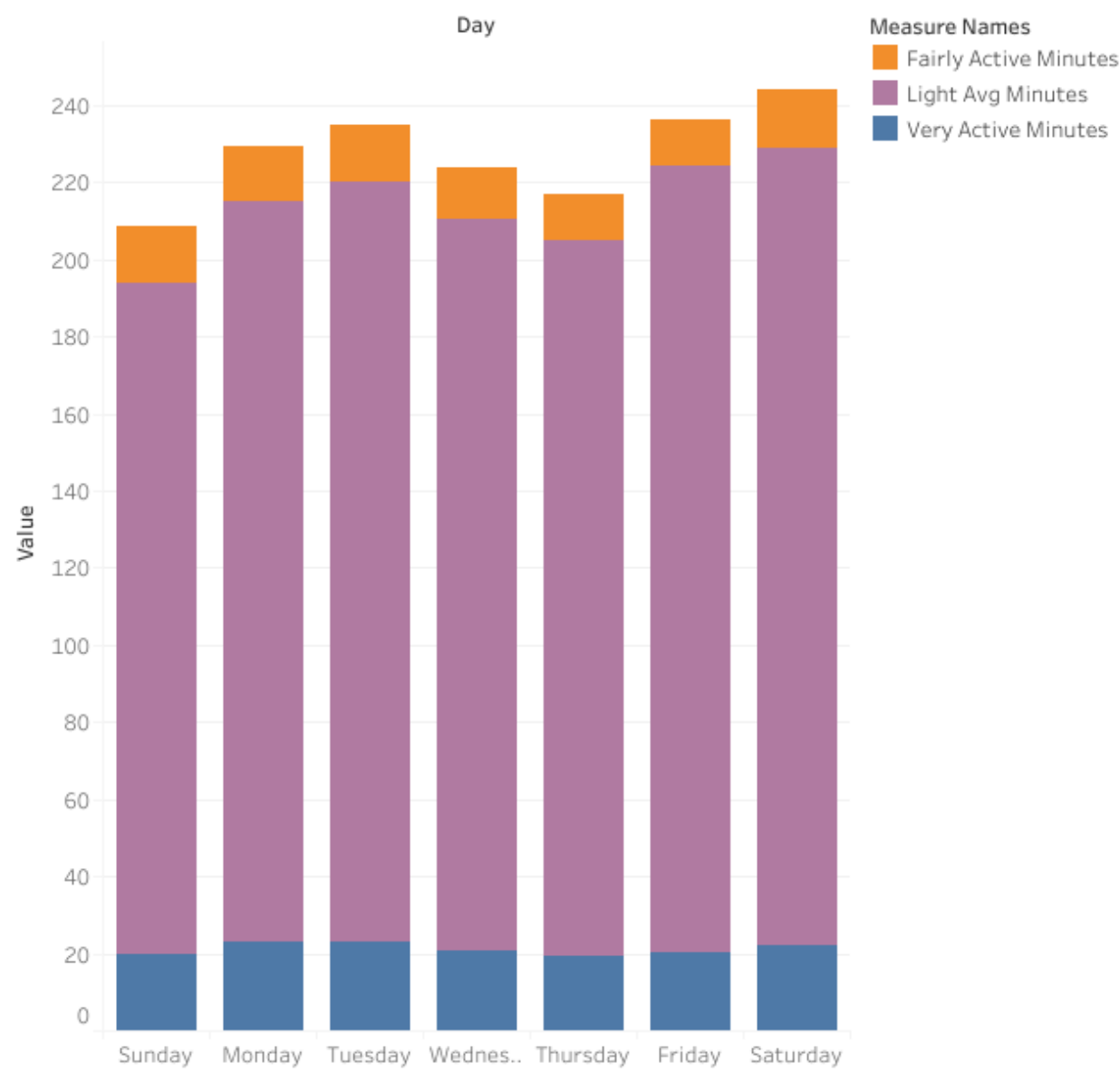
Average Calories Per Day

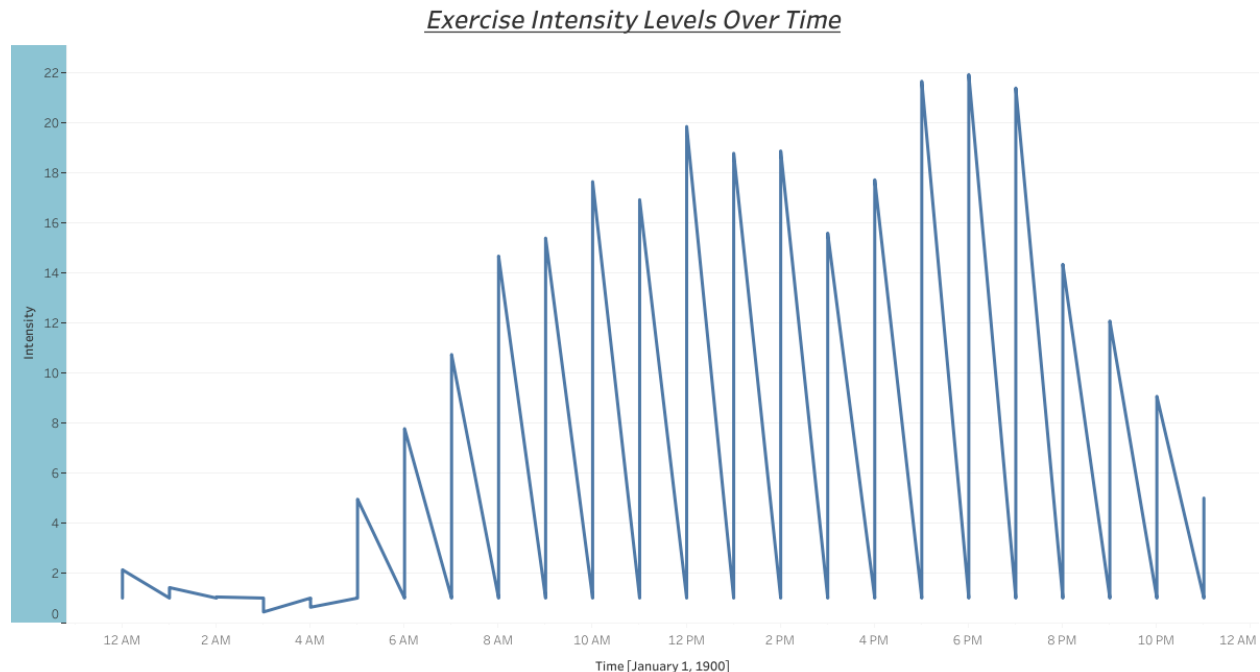


Average Distance Per Day



Average Minutes Per Day





ACT

Executive Summary

Key Finding- There are only 33 users in this Dataset, which is very small . The dataset is only for one month.

- Recommendation. To make this dataset more accurate you need to make the dataset longer. Which mean more users fom BellaBeat from Fitbit

Key Finding-Participants were the most active on Saturday which led to the largest distance they were active. The least active was on Sunday which lead to least distance they were active

- Recommendation-Although Sunday is a rest day where they have no work. It is best to send a notification to get them to reach their required goal for active minutes. Then congratulate when they reach their goal

KeyFinding- Participants had a high level Intensities working out between 6pm-8pm. Those times are probably when they are off from work and had a free time to do physical activity.

- Recommendation- Make a notification to show how much your heart beat is beating, also how much your calories you are doing when your physical intensity goes up. Make an alert when you reach a certain intensity so you can keep track of what activity, can you help you burn more calories.