Data Dashboard Midterm Project

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Introduction

A startup called Sales_Rocket wants to analyze the data they've been collecting on their sales across the nation. Management has a few questions they'd like easy access to. Currently, they answer these questions through spreadsheets scattered about and a variety of different tools. Unfortunately, none of the spreadsheets and tools neatly combine all their answers into one.

They would like a dashboard designer to go through each question and try to come up with a way to display their data in a way that is neat and intuitive, even for the less data-savvy among them.

Project Overview

In this project, you will apply what you have learned about designing with your audience in mind to build a useful dashboard prototype. To complete the project, you will need to create a prototype that allows users to intuitively answer the series of questions below. You can use any modern dashboarding tool you would like. You are free to use Tableau. For this project, you will be using the __Superstore dataset. __

Questions:

Using the Superstore data file, you'll need to create dashboards to answer each of the following questions.

- Your dashboard should display the data such that the audience can arrive at the answer.
- What is the most profitable City in the State of Tennessee?
- What's the average annual profit for that city across all years in that city?
- What's the most profitable product category on average in Iowa across all years?"
- What is the most popular product in that category across all states in 2016?
- What was the most profitable month in 2018 overall?
- How widely did monthly profits vary in 2018?

Project Instructions:

Below are steps you can follow to complete each component of this project.

Step 1. Download and Set up
- Download the Sample Superstore data file on the next page
- If using Tableau, open the CSV file within Tableau and explore the data
- If using PowerBI, download and install the latest version of Power BI Desktop on your machine.

Step 2. Explore and Create a Sketch
- Read through every question to first understand what data you will need.
- Create a **sketch** of the charts that you think will appropriately answer the user's question.
- Take photos of your sketches and add them to the Data Dashboards_Project 1_Template for Project Submission file located **here**

Step 3. Create Wireframes
- Create multiple **wireframes** until you have your charts neatly organized
- Take photos of your wireframes and add them to the Data Dashboards_Project 1_Template for Project file
- You can use **Google's PhotoScan** to take a high resolution image too.

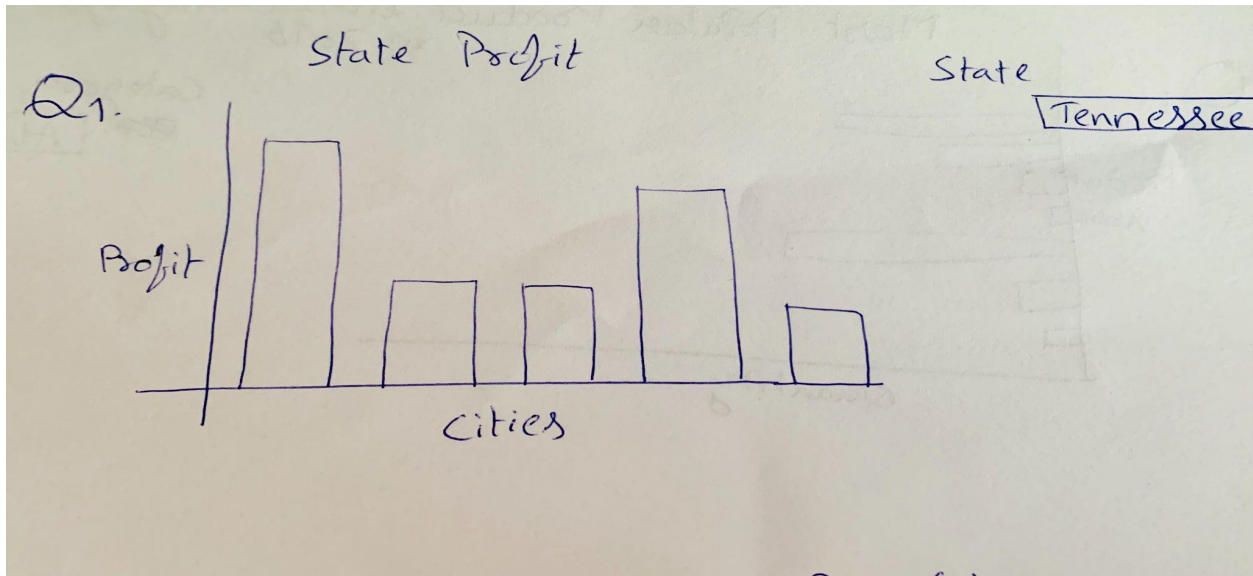## Step 4. Create Proof of Concept Dashboard
- Your charts should be able to answer multiple questions
    - *Hint:* Use filters and toggles to allow the user to explore the data in multiple ways
- Be sure to respect the constraint of "getting it right in black and white"
- Develop your proof of concept dashboard in your tool of choice
- Remove unnecessary charts where appropriate
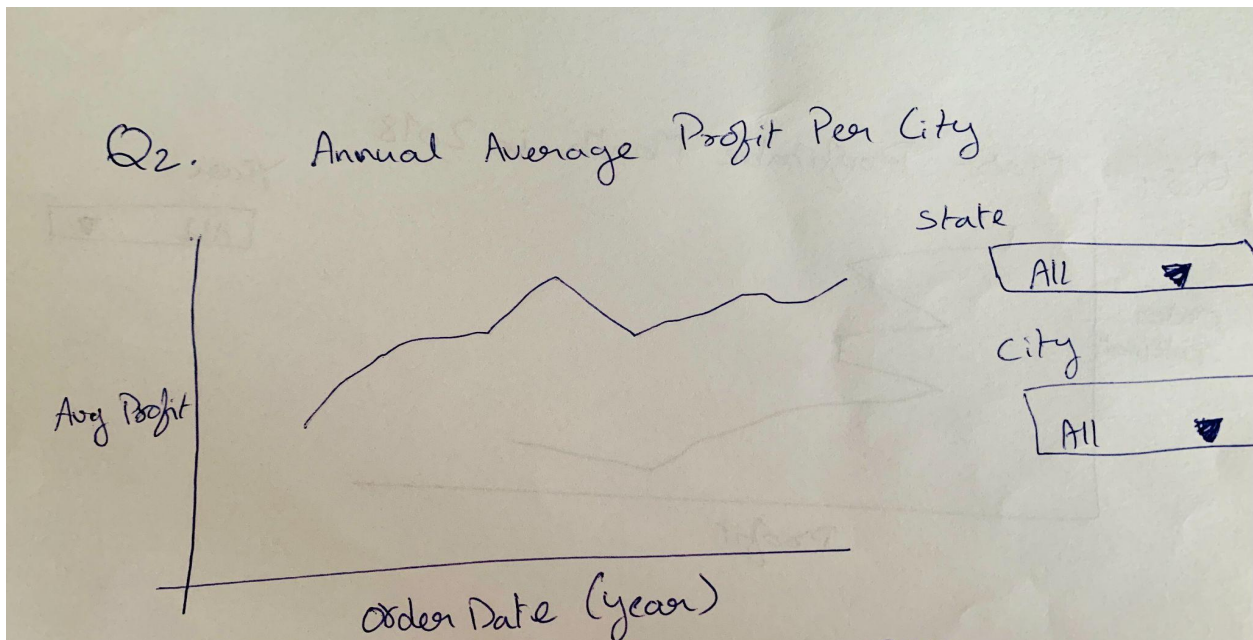
Step 5. Get your Submission Files ready
- Upload your file and your Data Dashboards_Project 1_Template for Project Submission file on the **Project Submission page**
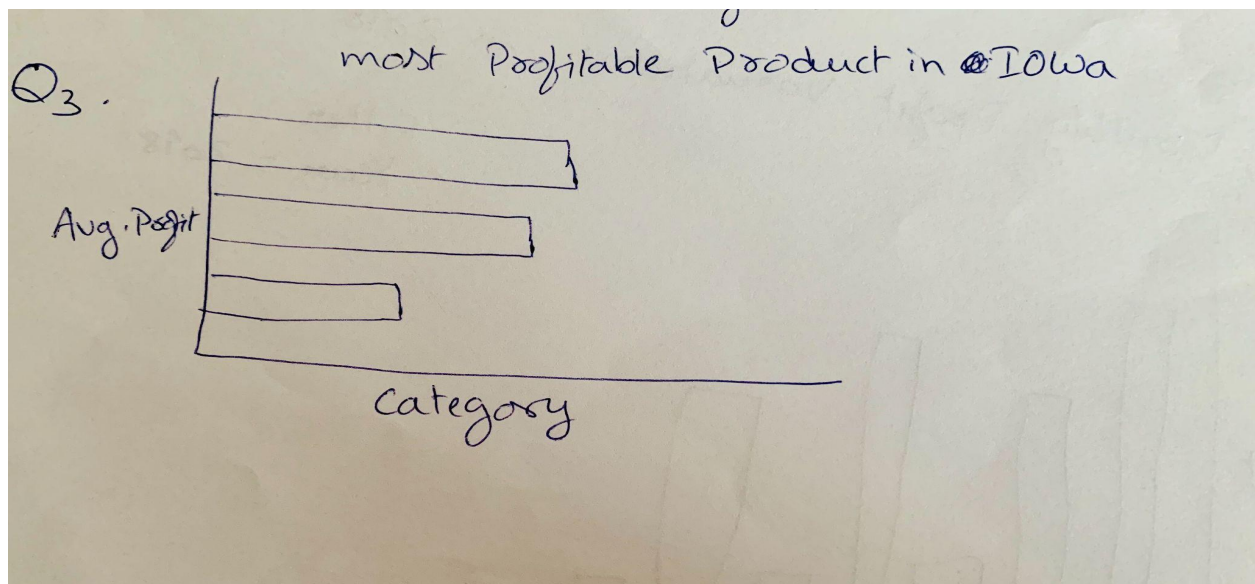
Data Dashboard Midterm Project

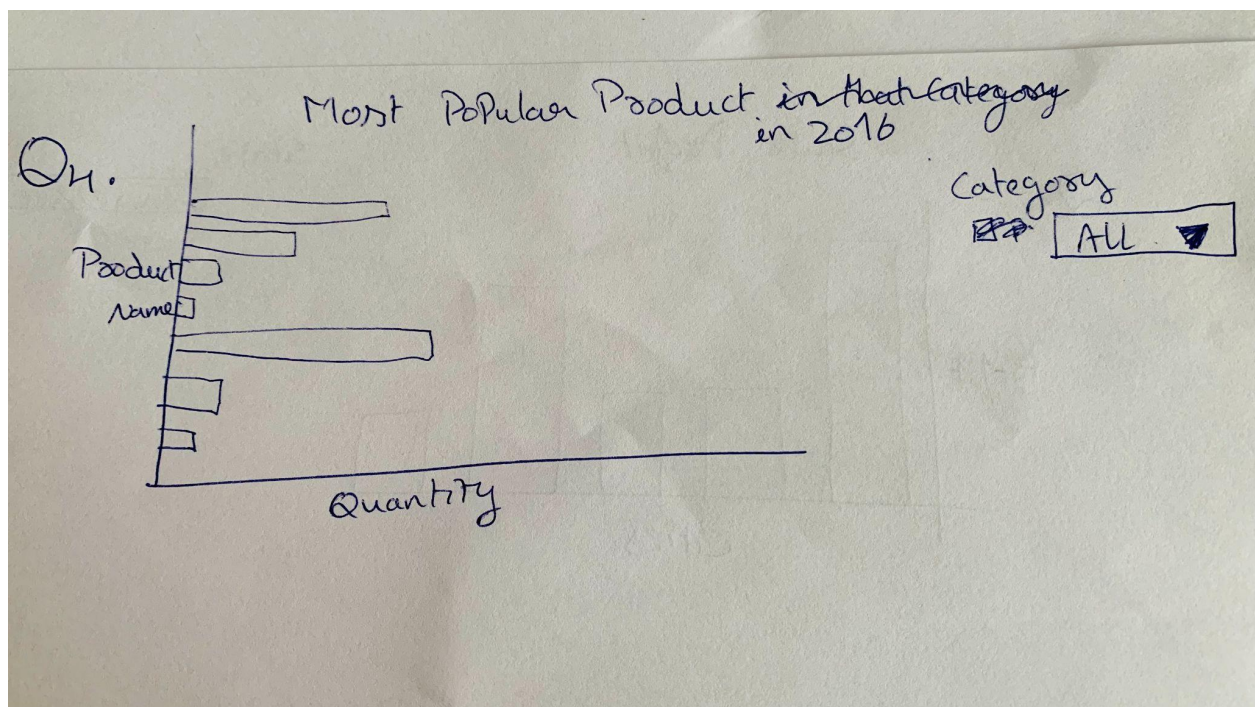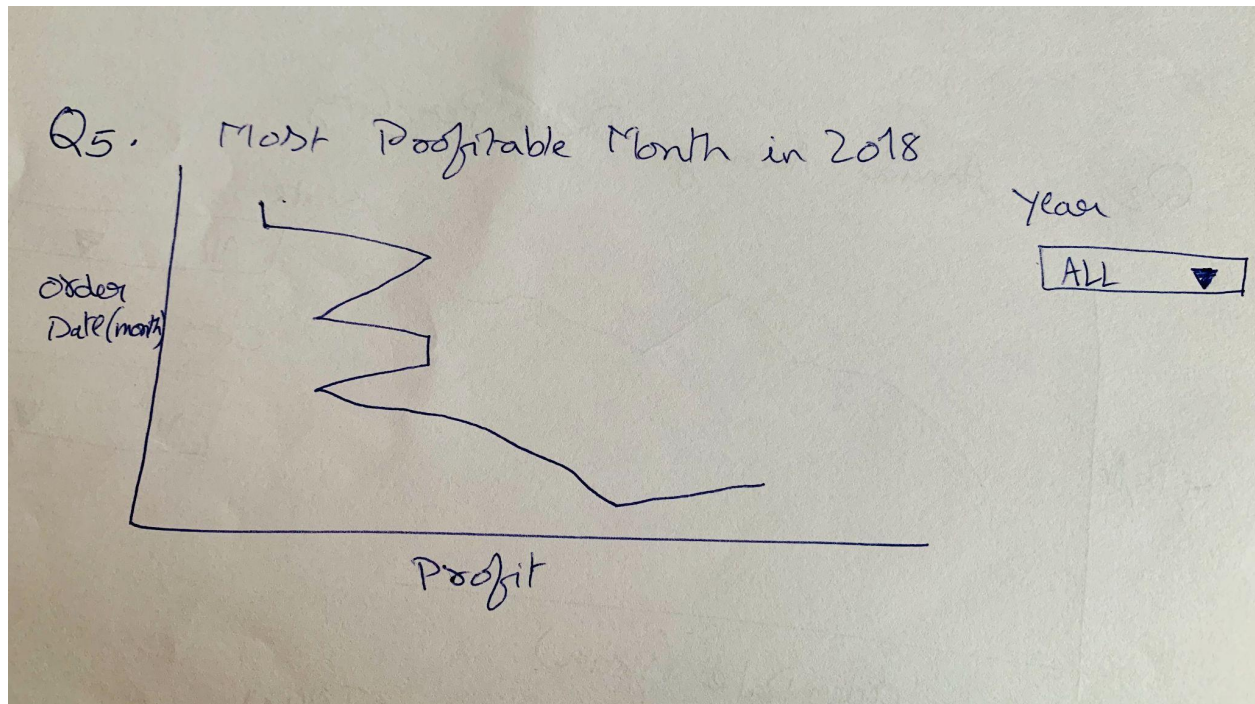Q1. What is the most profitable City in the State of Tennessee?

Q1.

State Profit

Profit

cities

State

Tennessee

Q2. What's the average annual profit for that city across all years in that city?

Q2.

Annual Average Profit Per City

Avg Profit

Order Date (year)

state

All

city

All

Q3. What's the most profitable product category in Iowa?

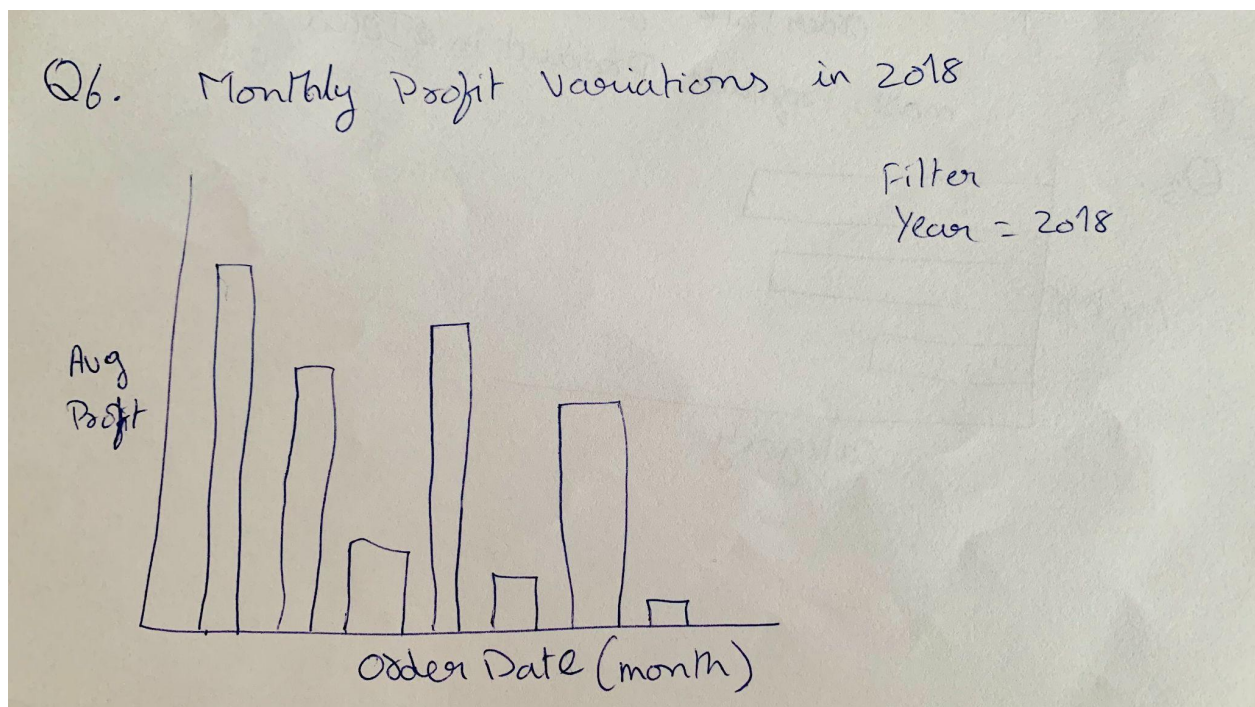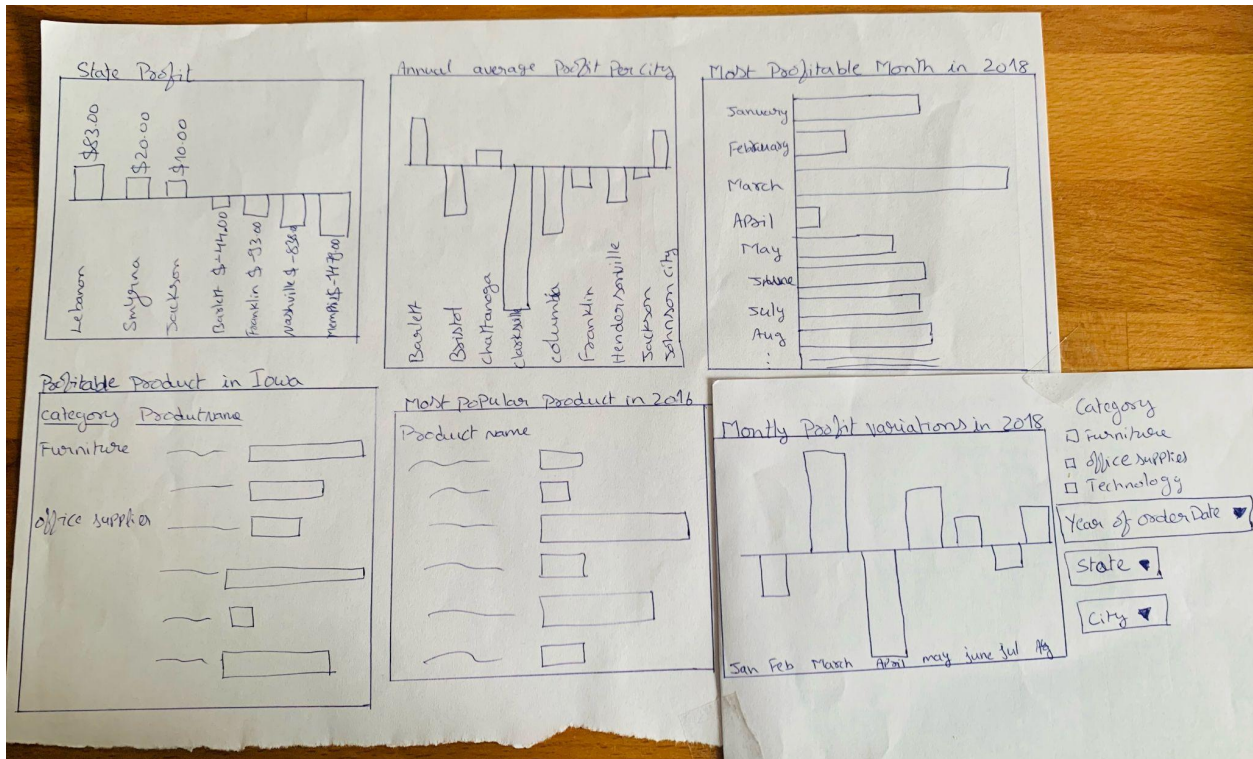**Q4. What is the most popular product in that category in 2016?**

Q5. What was the most profitable month in 2018 overall?

Q5. Most Profitable Month in 2018

Order Date (month)

Profit

Year

ALL ▼

Q6. How widely did monthly profits vary in 2018?

Q6. Monthly Profit Variations in 2018
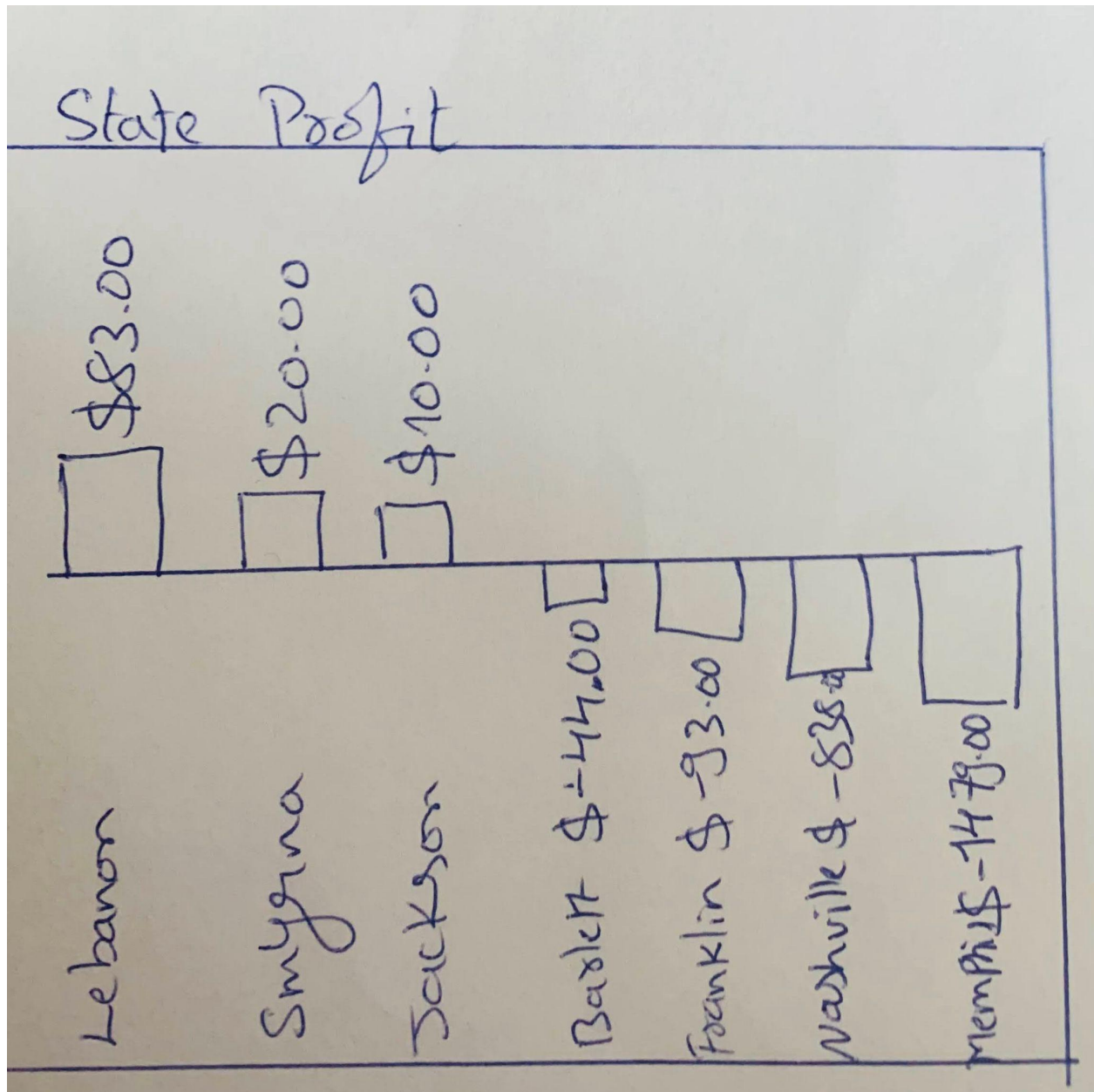
Avg Profit

Order Date (month)

Filter
Year = 2018

WIREFRAMES

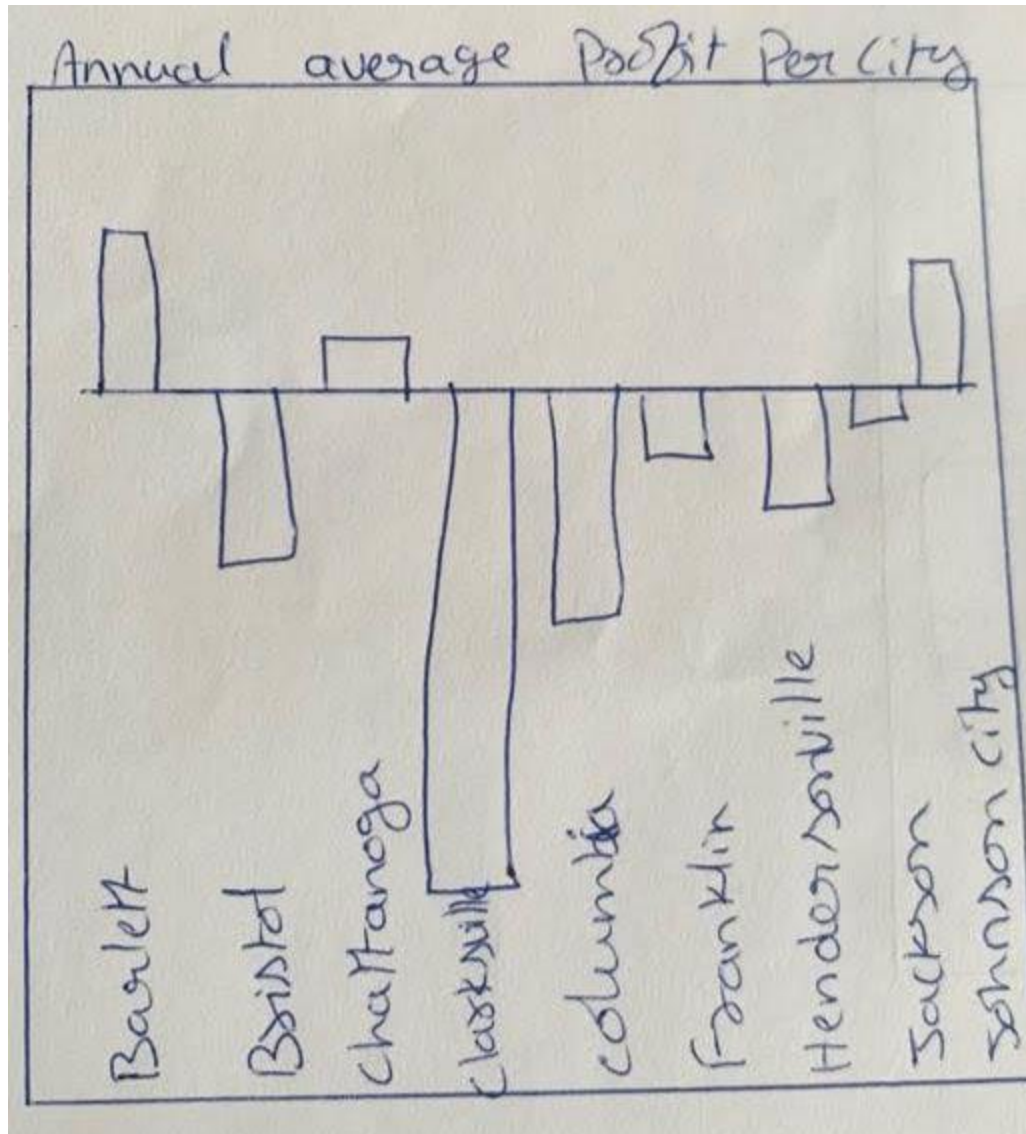## Q1.What is the most profitable City in the State of Tennessee?

Set the State picklist to 'Tennessee' and the Year picklist to 'All' to view the city with the highest profit over all years. I went with a bar chart.

State Profit

- Lebanon $883.00
- Smyrna $20.00
- Jackson $10.00
- Bartlett $-44.00
- Franklin $-93.00
- Nashville $-838
- Memphis -1479.00

Q2. What's the average annual profit for that city across all years in that city?

Shows the average profit for the most profitable city in a given state.

Annual average Profit Per City

Bartlett
Bristol
chattanoga
clarksville
columbia
Franklin
Hendersonville
Jackson
Johnson city

Q3.What's the most profitable product category in Iowa?

Set the state to 'Iowa' to see the most profitable category for each year. I went with a bar chart.
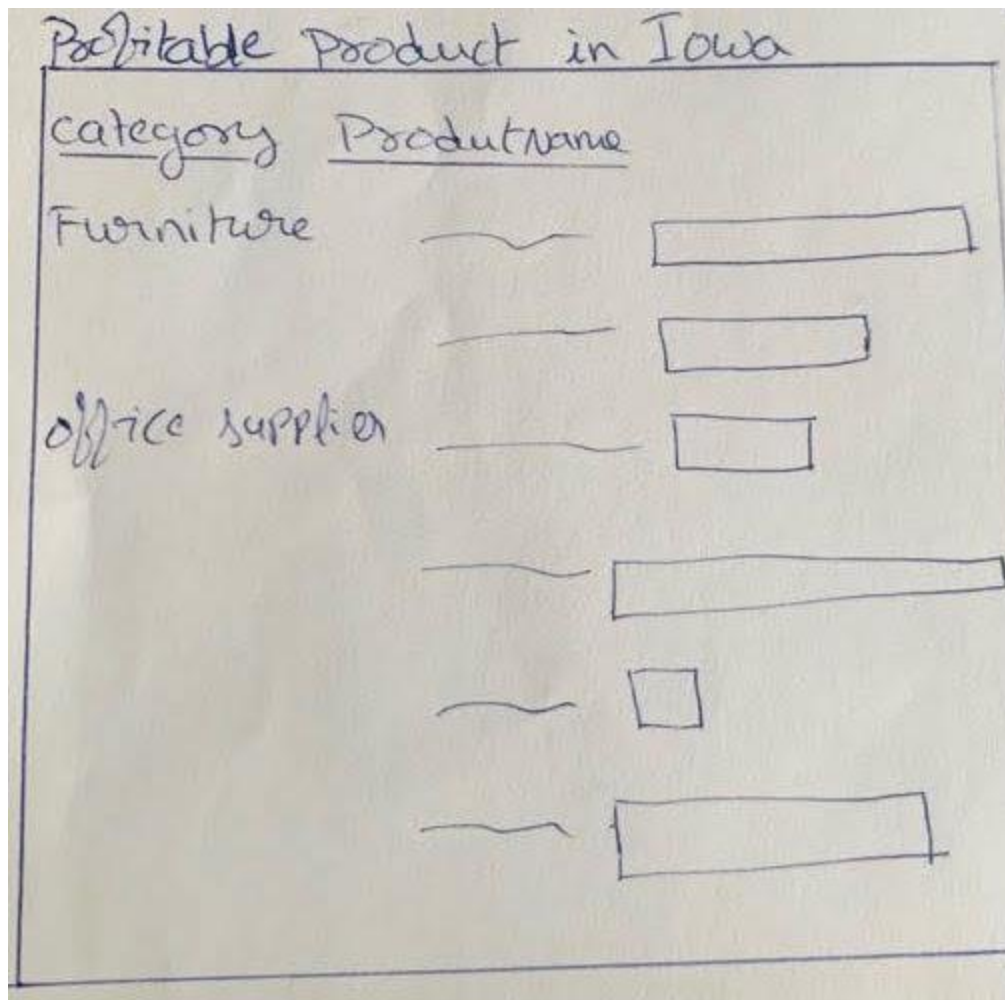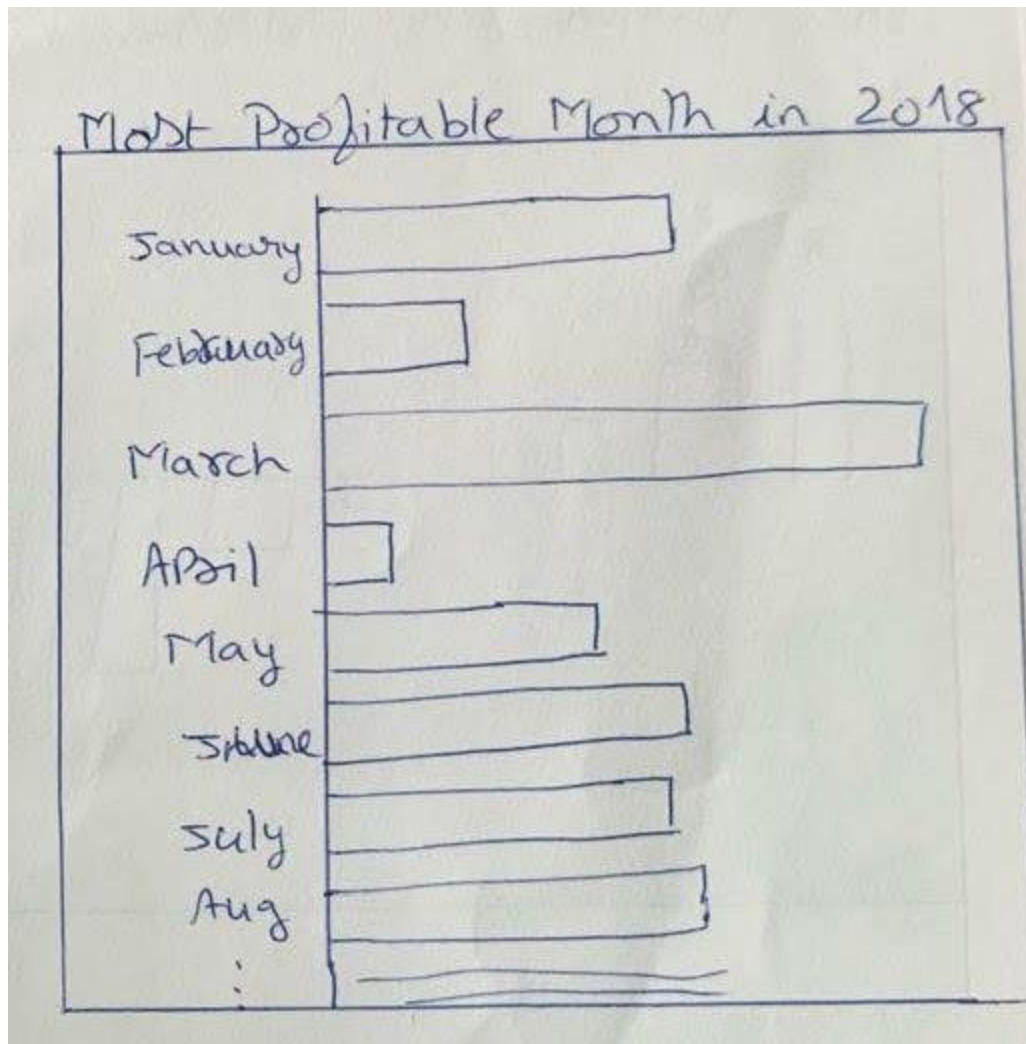
Q4.What is the most popular product in that category in 2016?

Using the table widget to display the most popular products in a specific category based on total sales for each product.
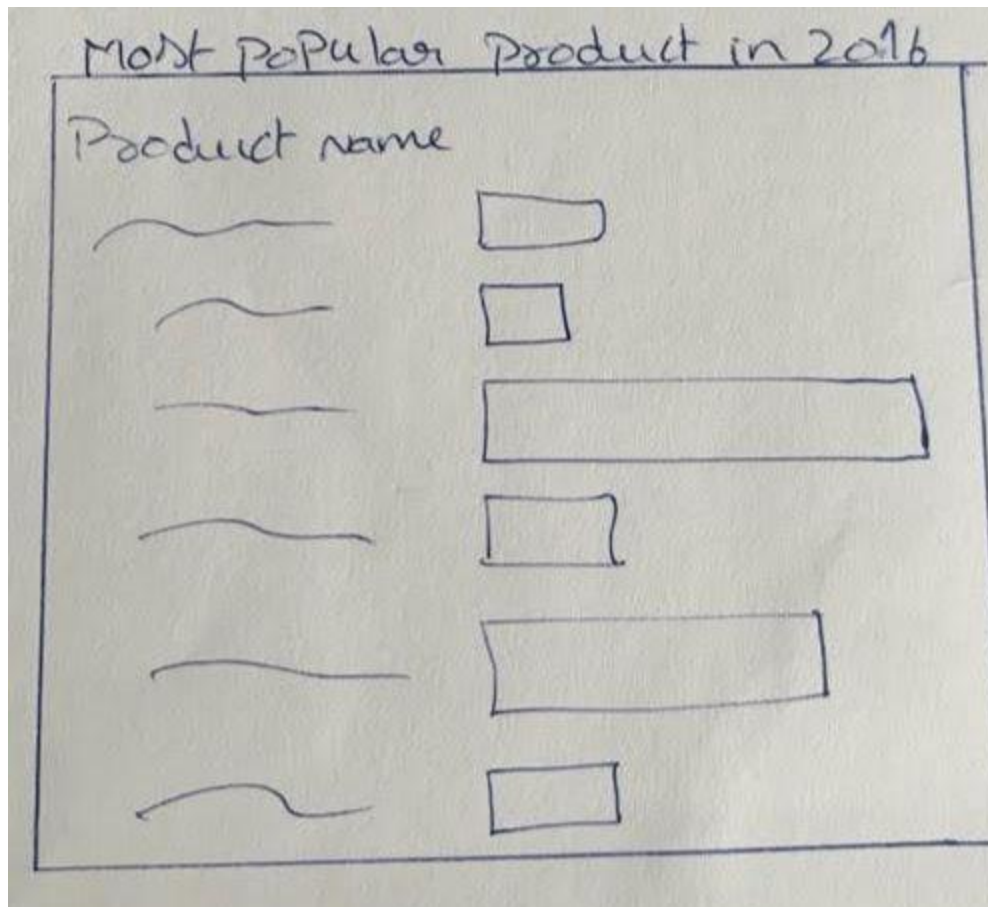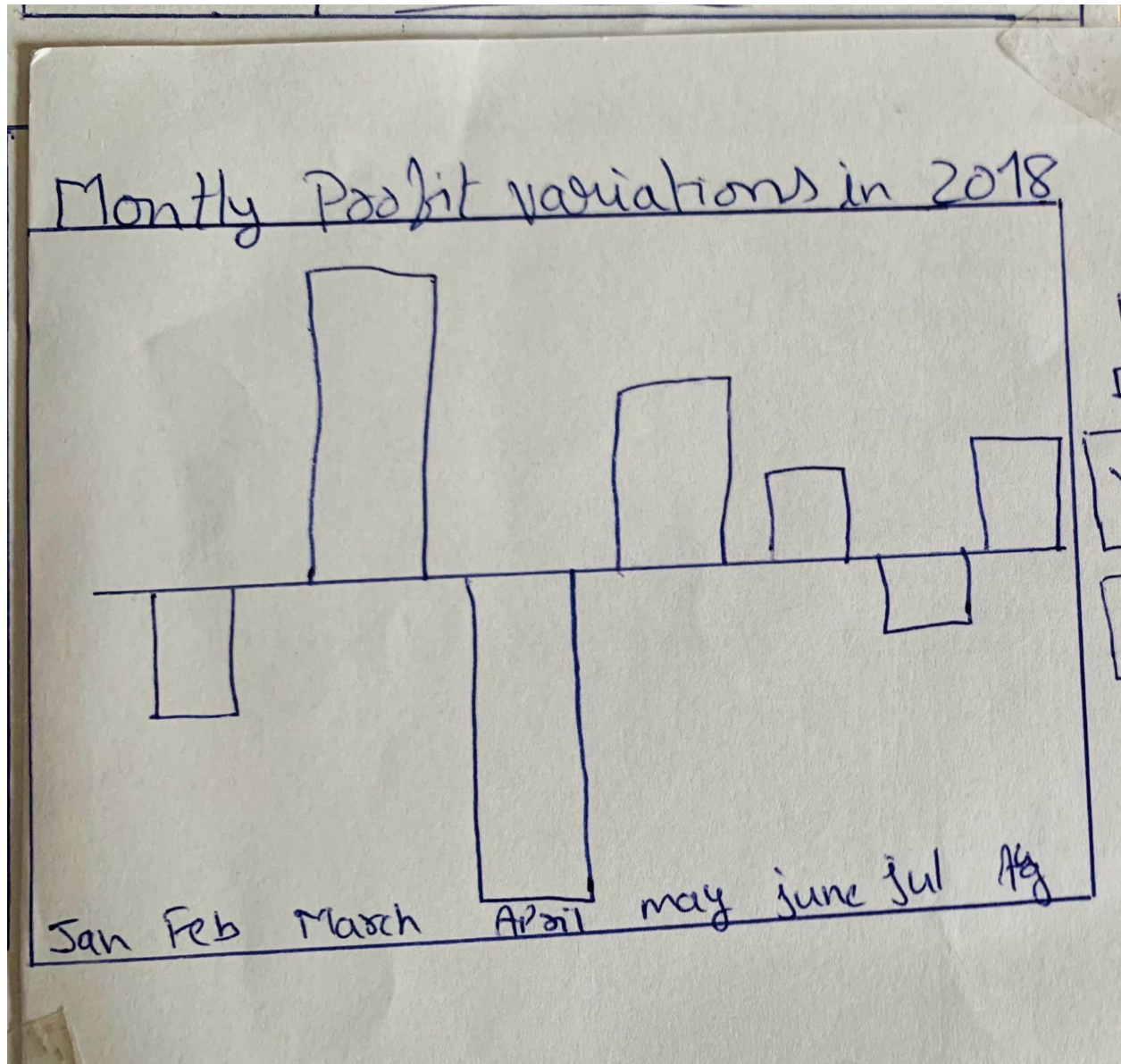
Q5.What was the most profitable month in 2018 overall?

To assess the overall profitable month in 2018, select the bar graph.

The widget displays the profit swing from the previous month in a bar chart to show how profits vary over a specified year.

Montly Poofit variations in 2018

Jan Feb March April may june Jul Ag

Proof of Concept

The following link to the proof of concept dashboard I created:

https://eu-west-1a.online.tableau.com/t/ramyaudacityprojectmasterschool/views/UdacityMidterm
DashboardProject/Dashboard1