

## **PROJECT REPORT**

### **PLIGGING TO THE FUTURE: AN EXPLORATION OF ELECTRICITY CONSUMPTION PATTERNS.**

#### **1.Introduction:**

##### **1.1. Overview:**

In this problem, we analysis the data of Electricity Consumption Patterns of India and create a visualize dashboard to give the solution of Plugging into the future and exploration of Electricity Consumption in India.

The dataset is exhaustive in its demonstration of energy consumption state wise.

Analyzing Electricity Consumption in India from Jan 2019 till 5th December 2020. This dataset contains a record of Electricity consumption in each states of India, here we are going to analyze State wise , Region wise and Overall Electricity consumption in India.

Fields Include

States - Indian States

Regions- States in Regions on Indian Map

Latitude - States in Regions on Indian Map

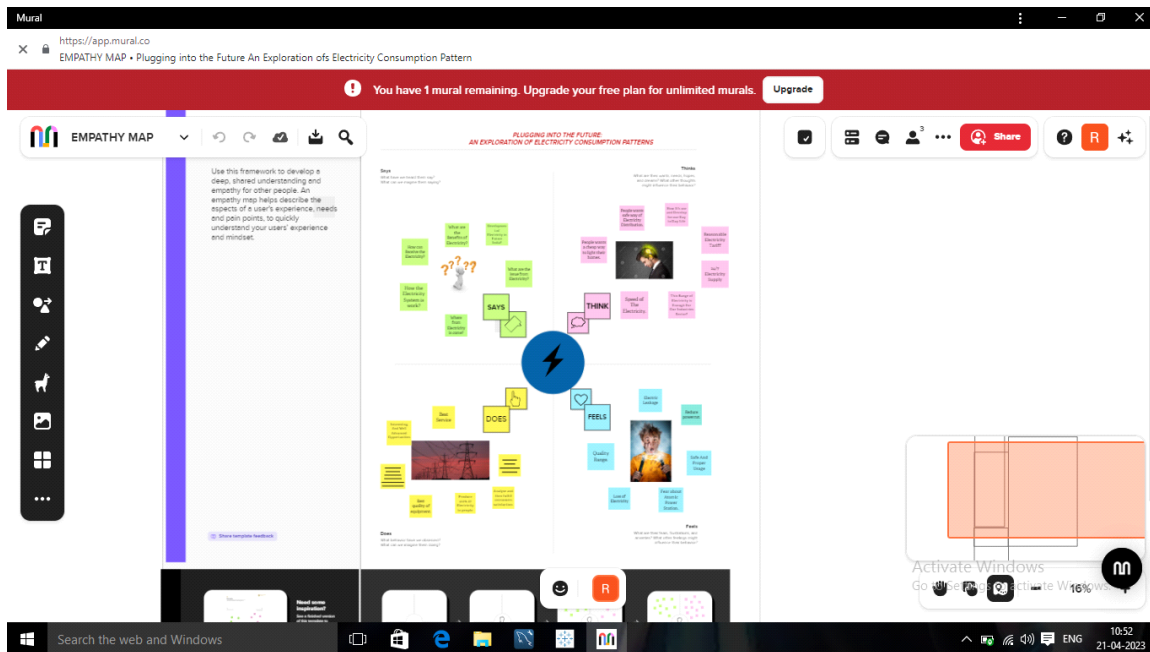
Longitude - Geographical Coordinates of States

Dates - Dates of Usage

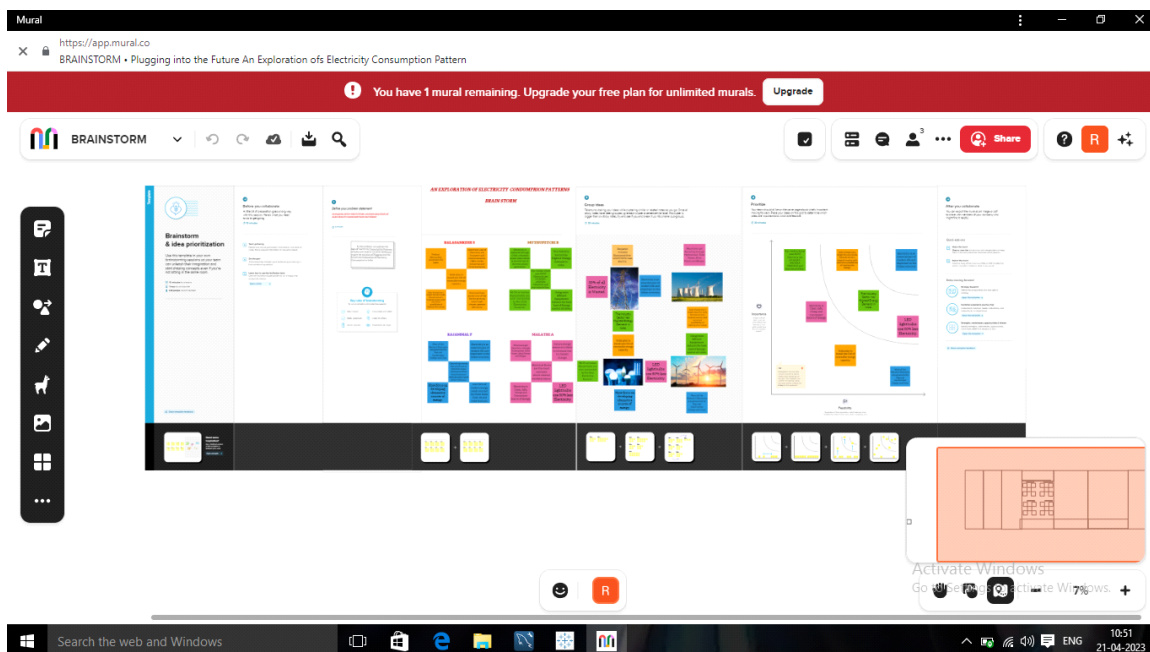
Usage - Power consumed in Mega Units (MU)

## 2.Problem Definition & Design Thinking:

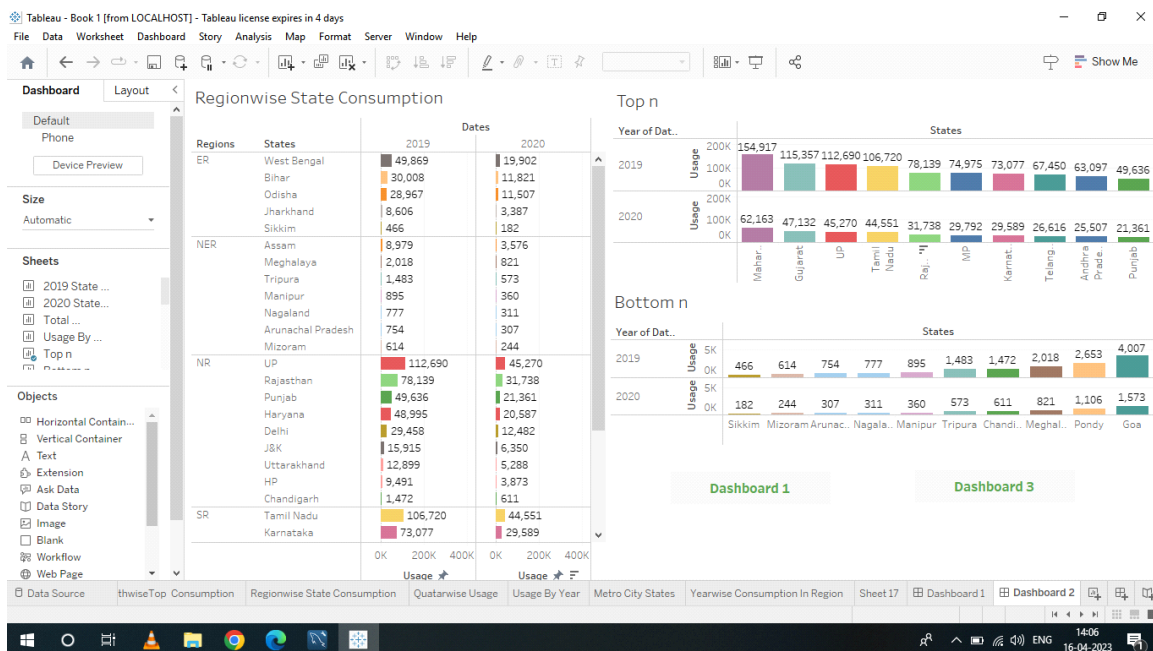
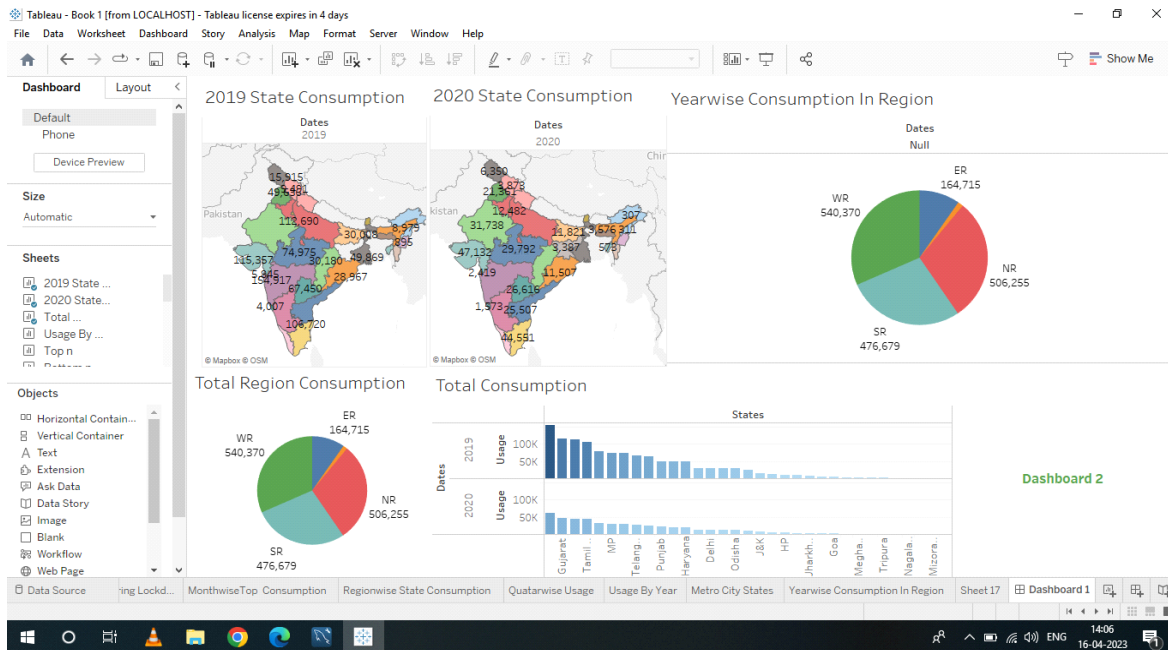
### 2.1. Empathy Map:



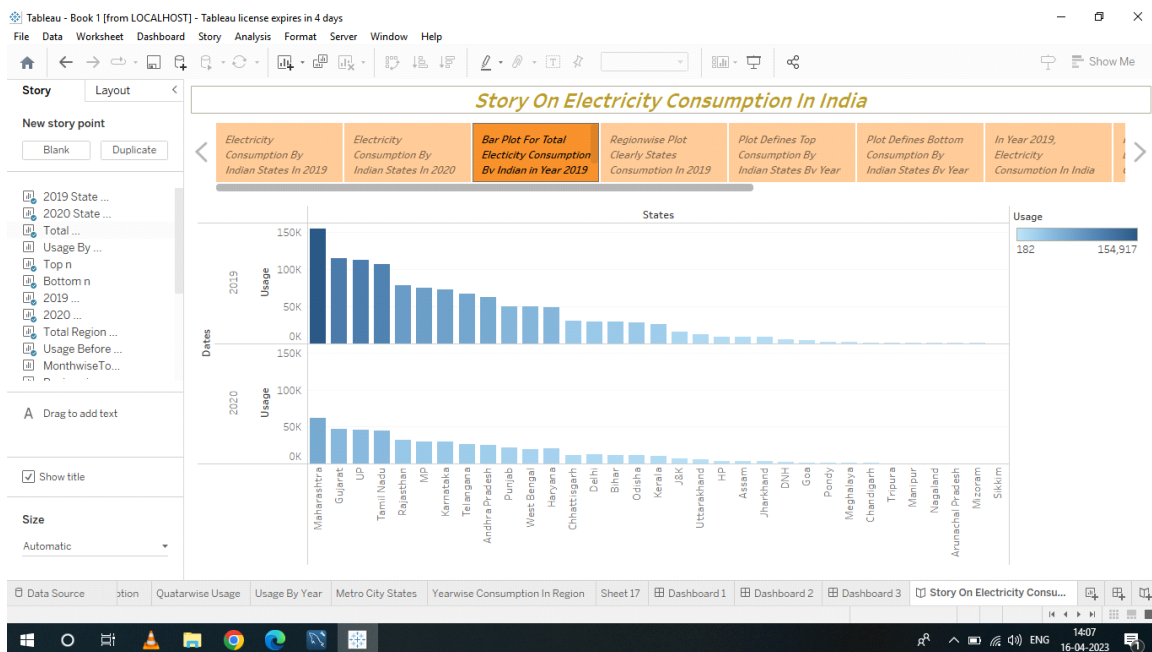
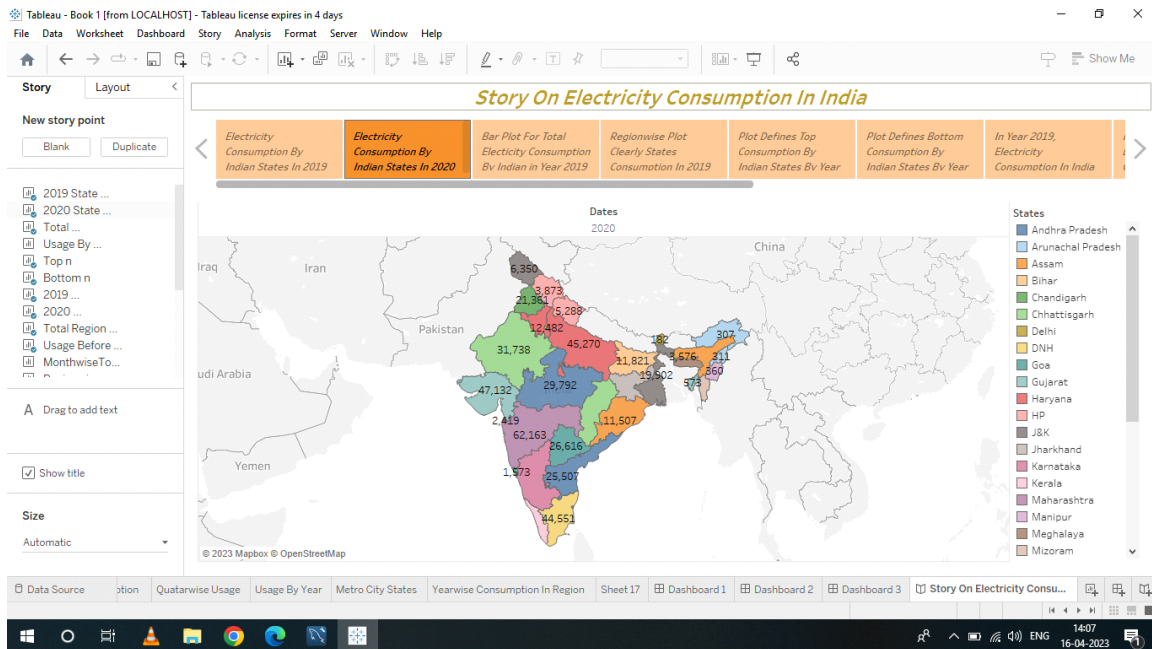
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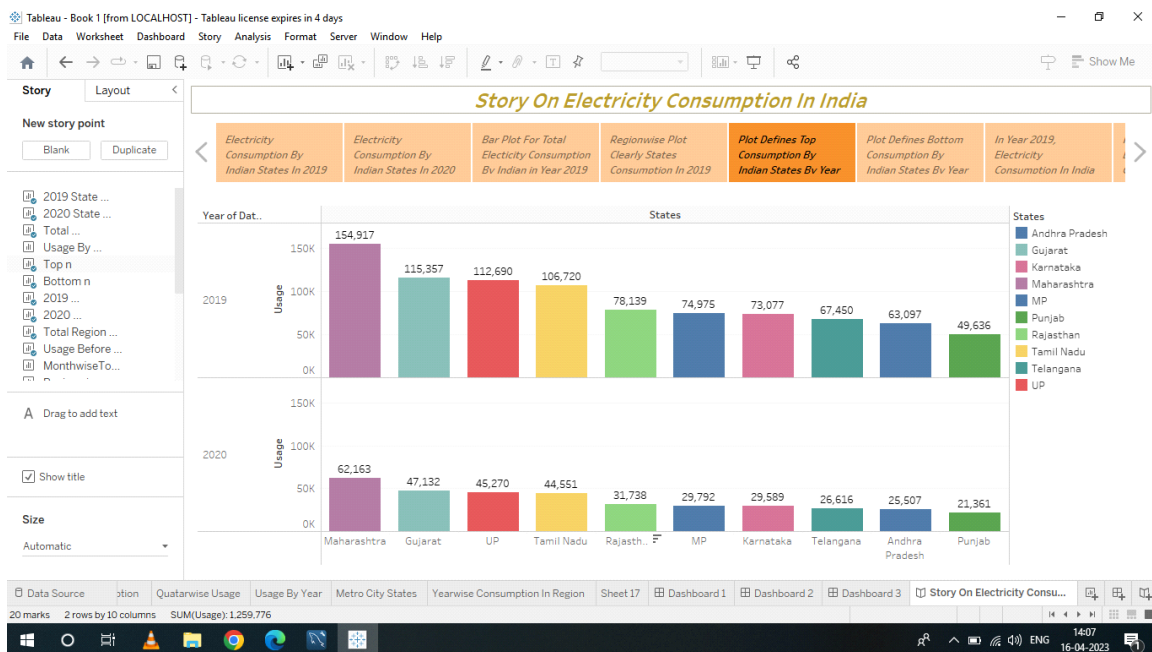
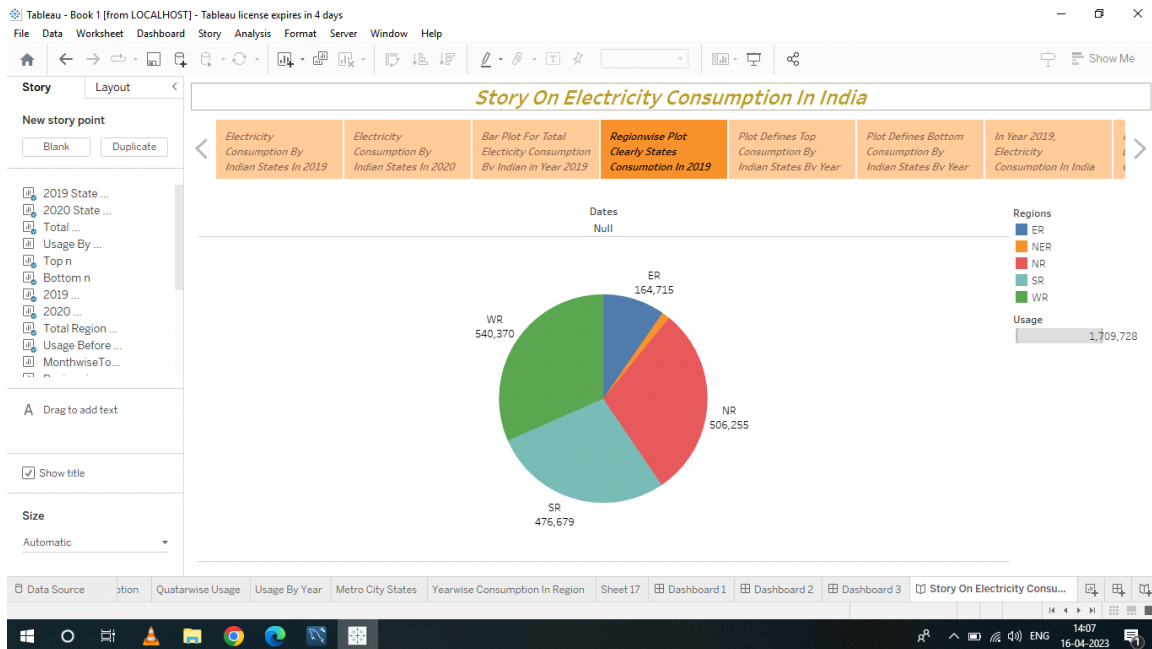


### 3.1. Dashboards:

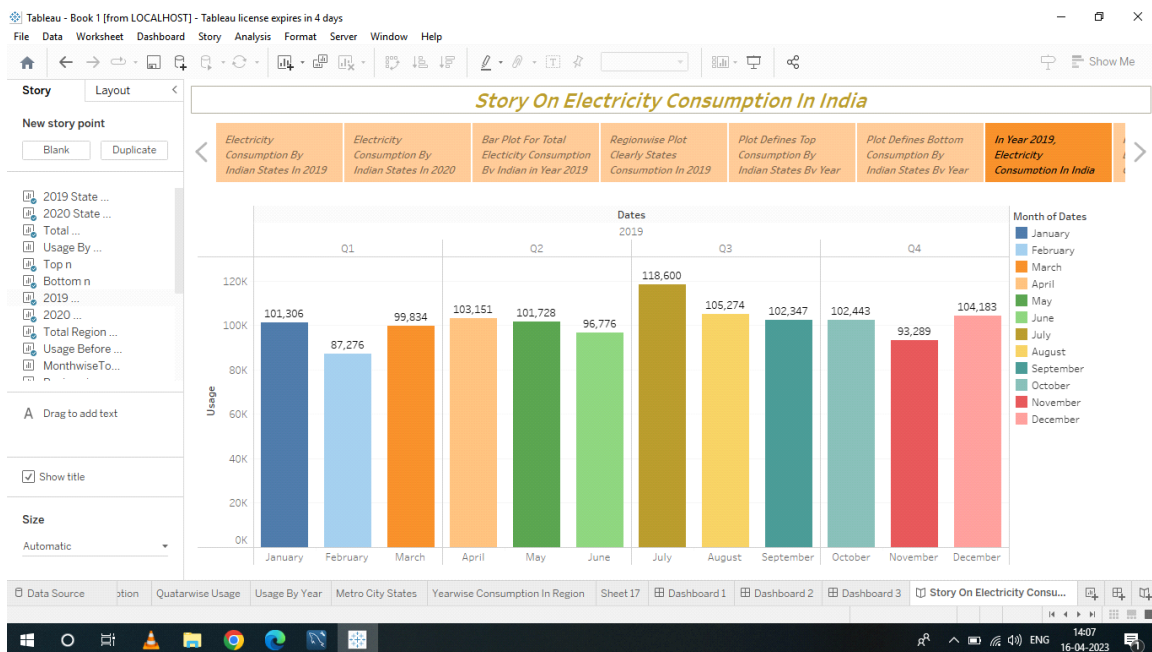
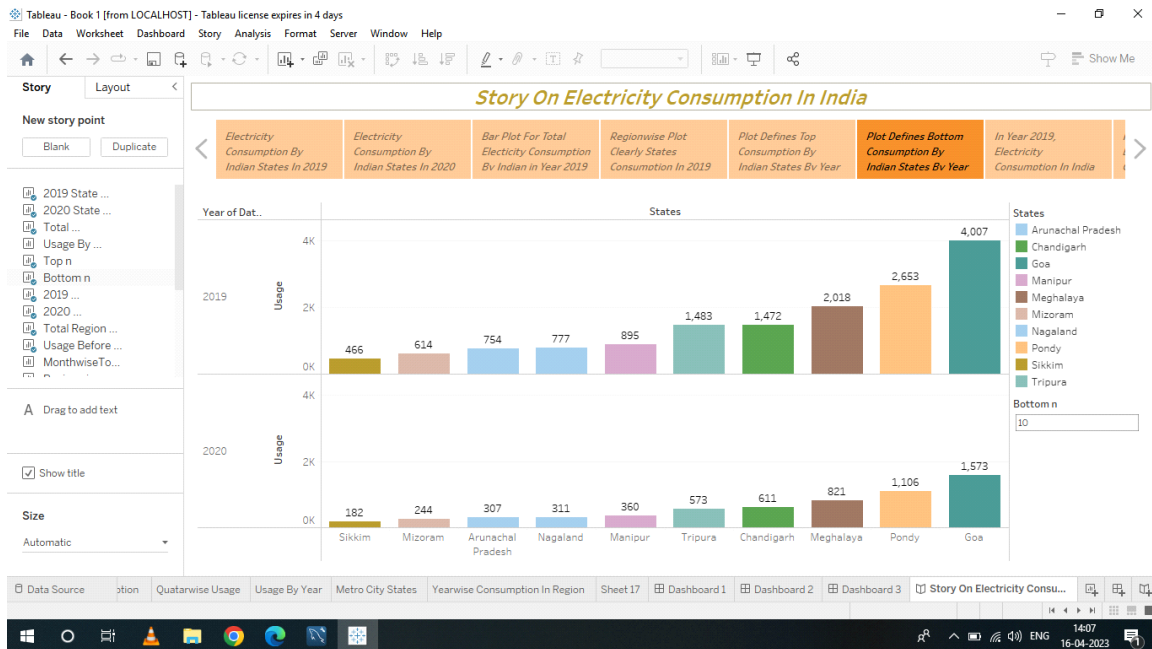


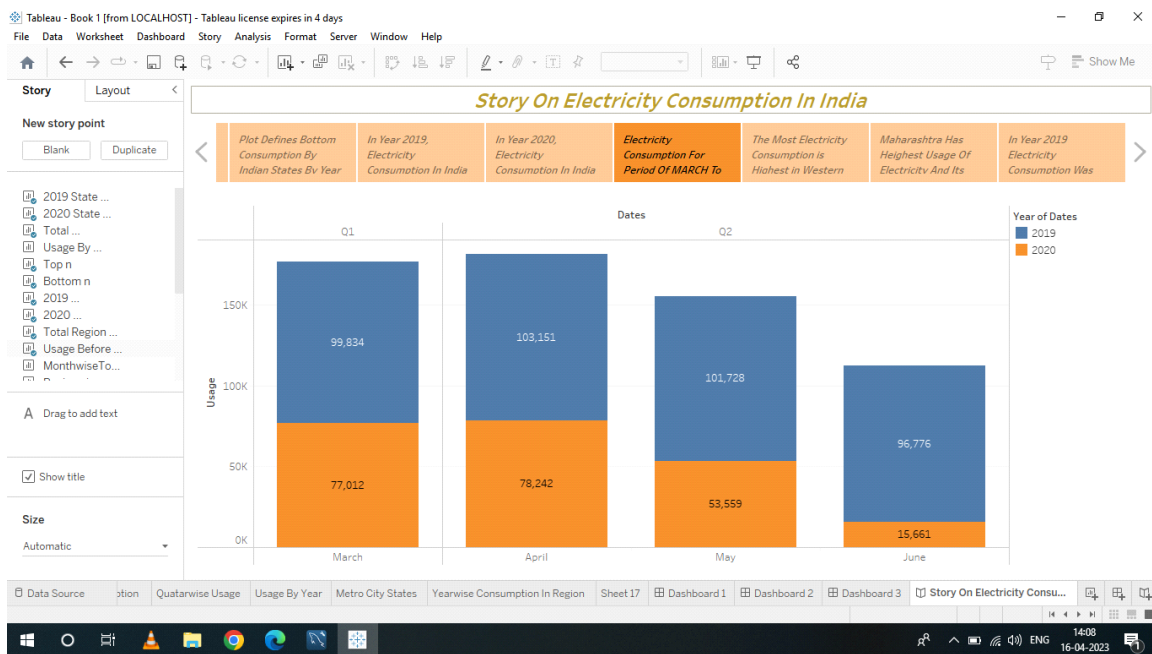
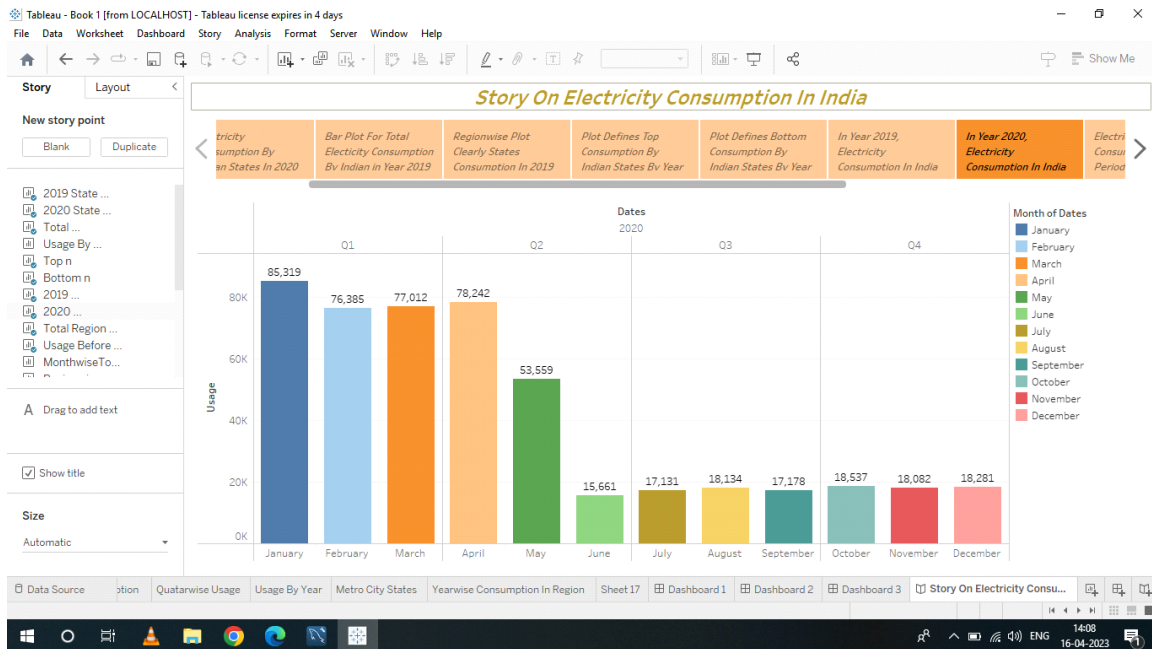




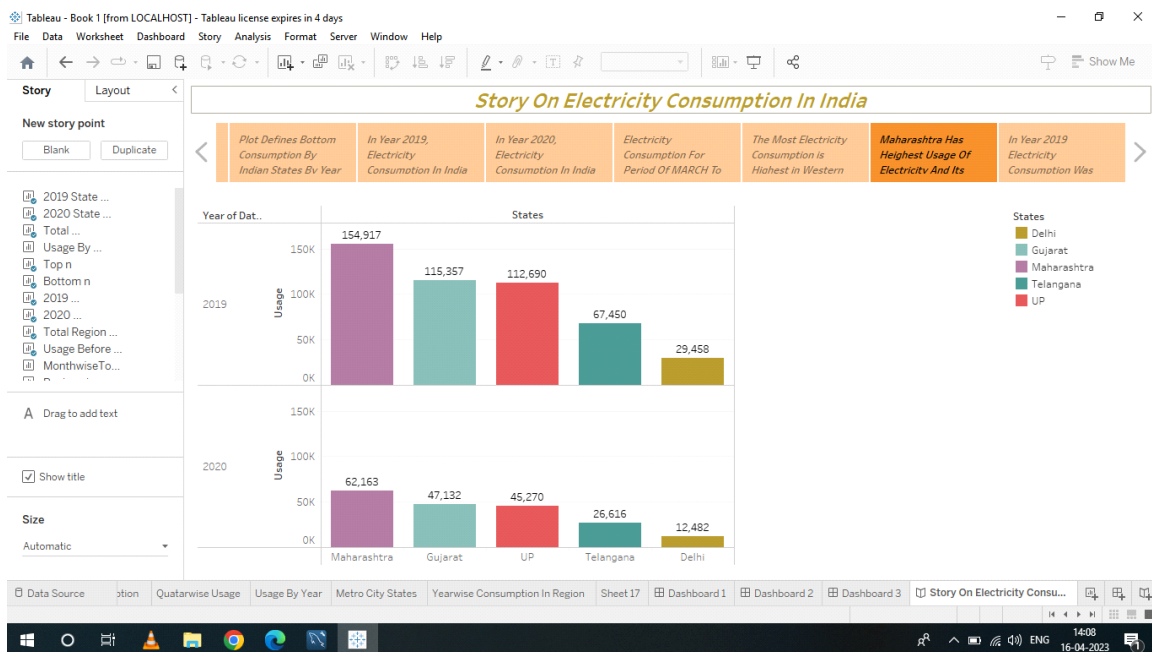
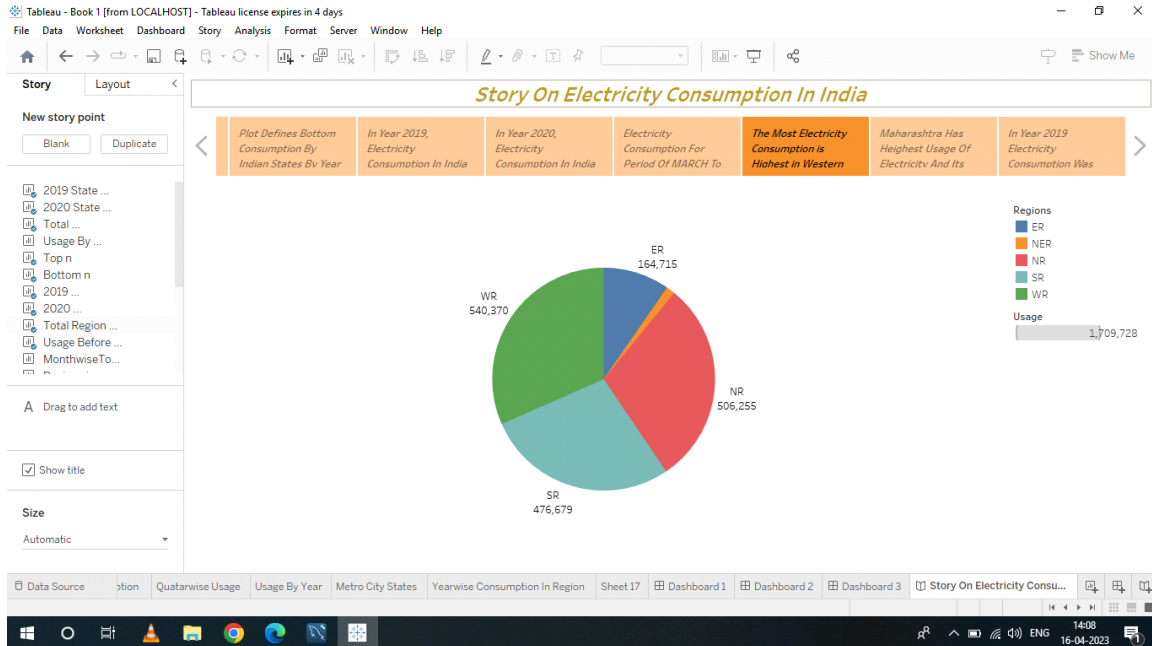


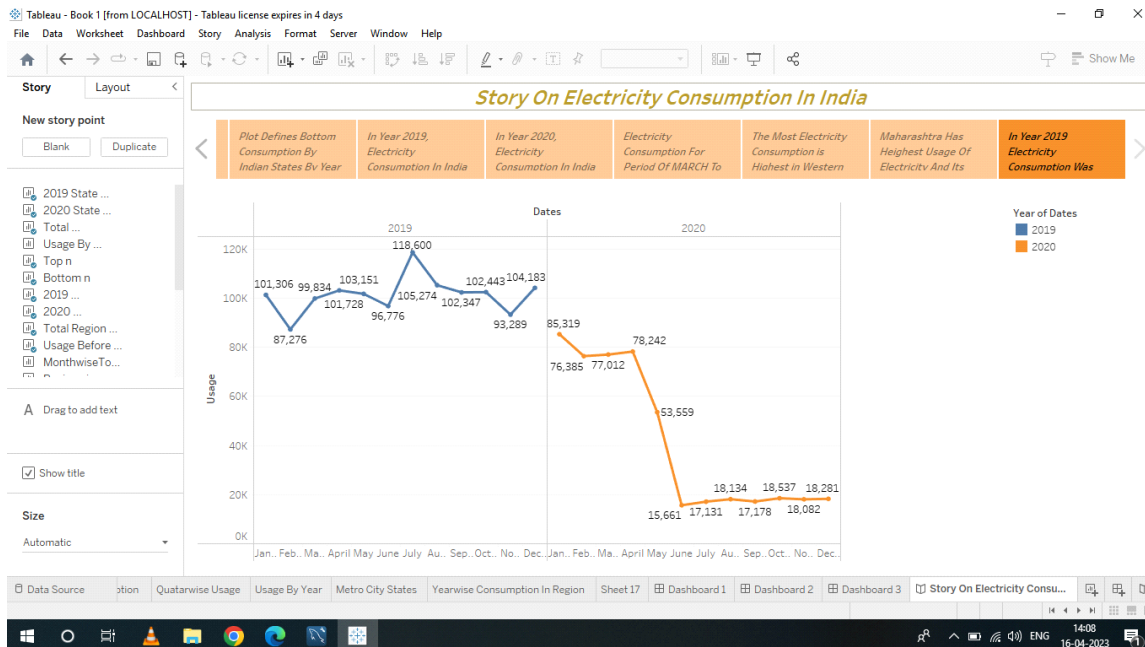




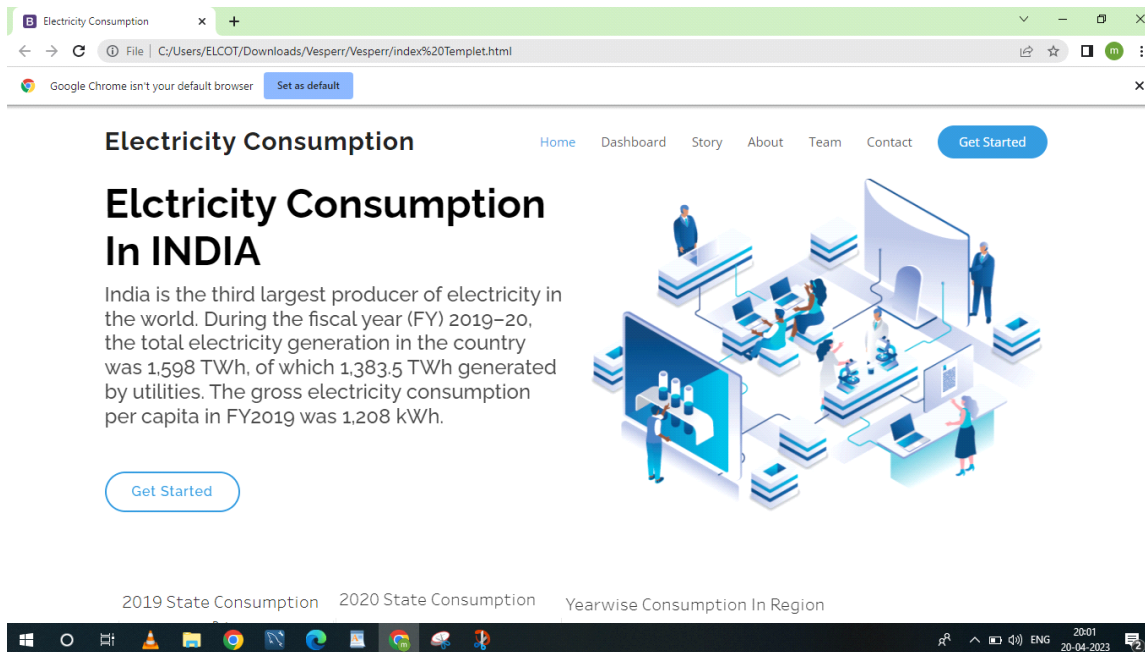


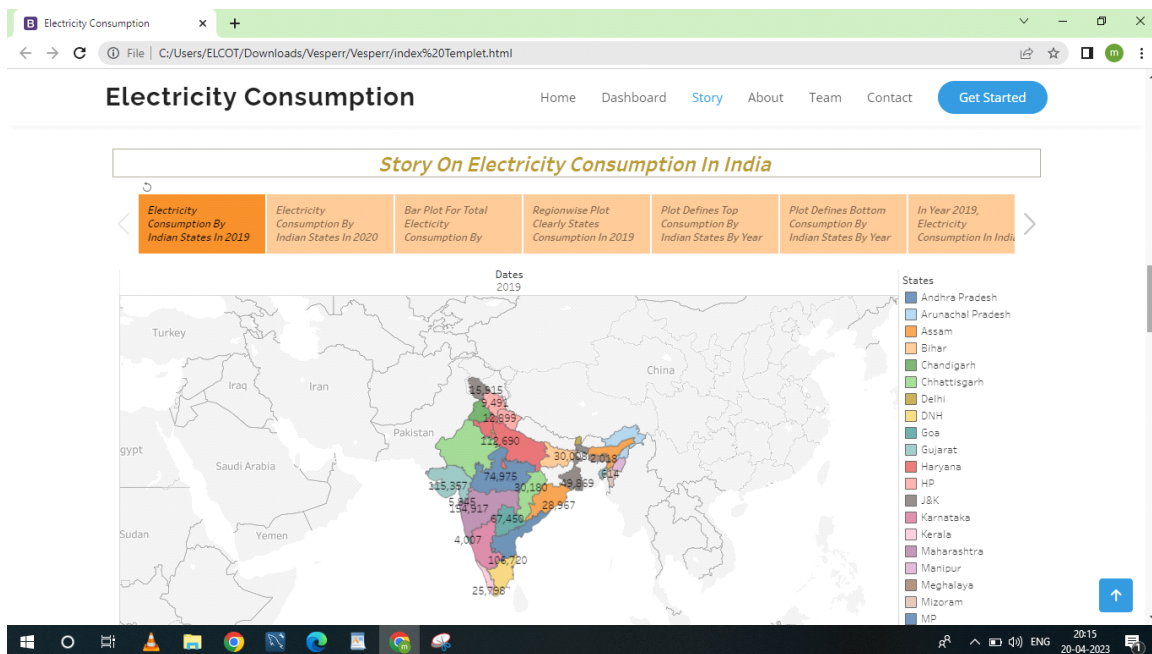
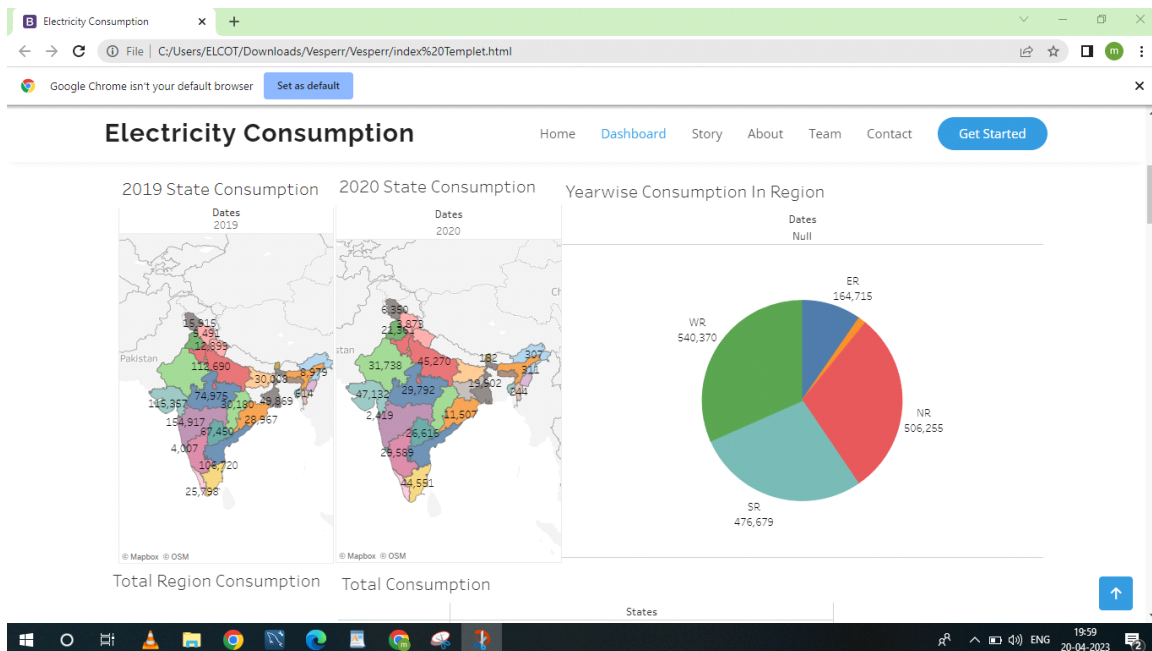


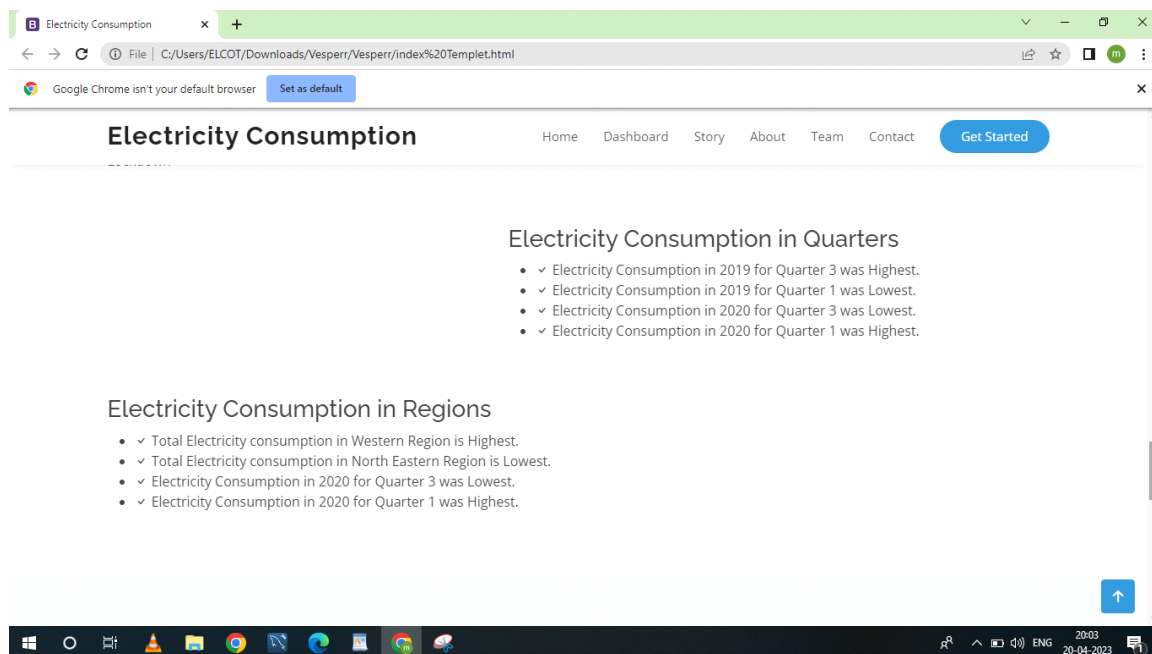
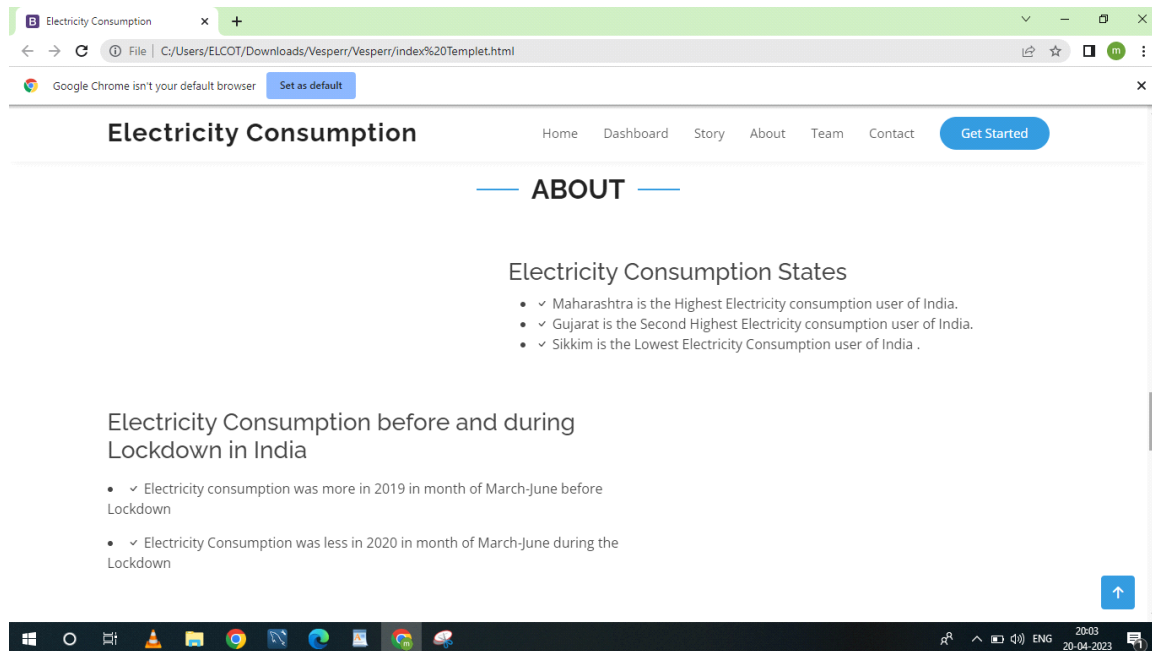


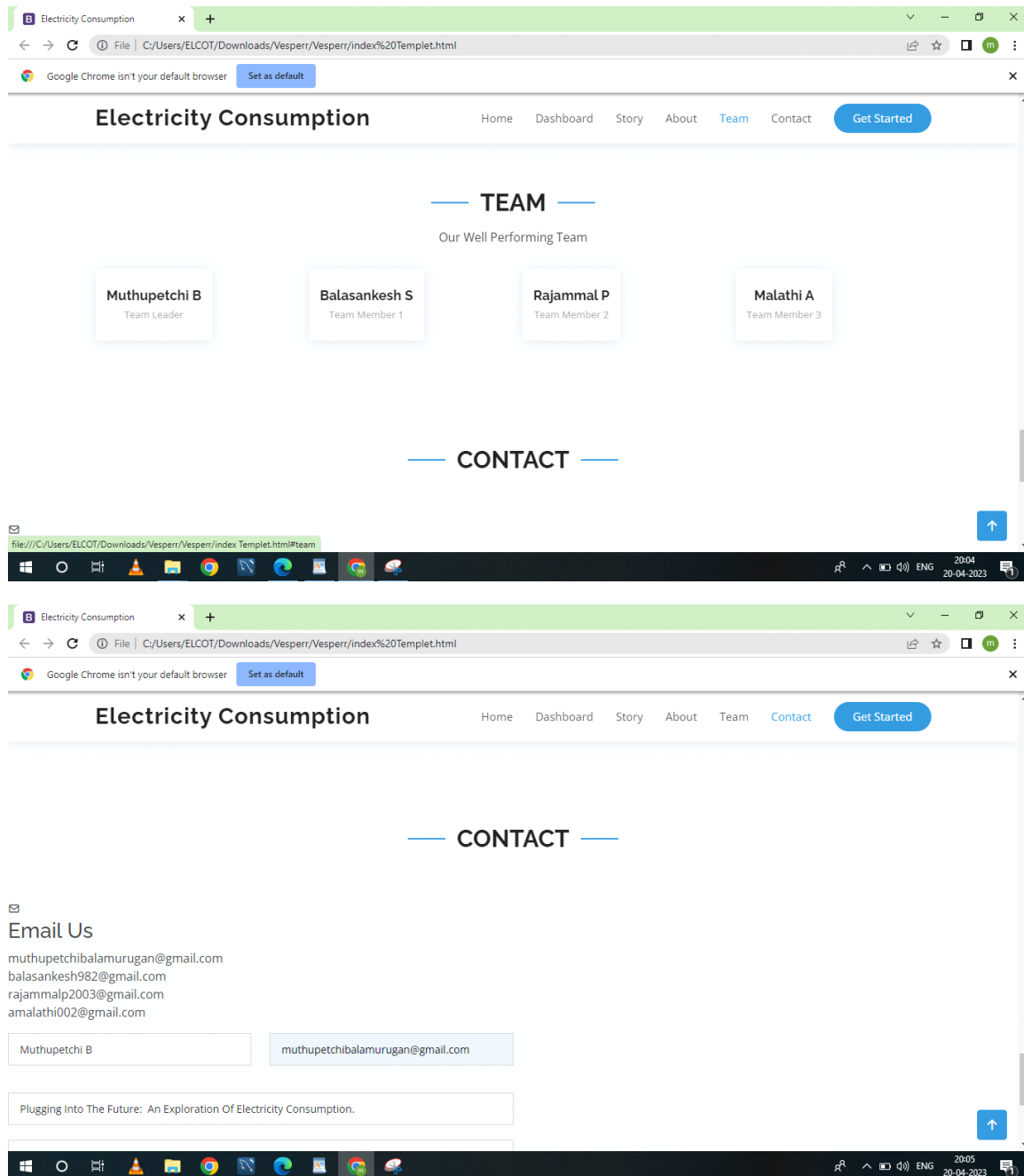


### 3.3.Web Integration:









## 4. Advantages And Disadvantages Of The Project:

### 4.1. Advantages:

(i) This Project Useful To Reducing Energy Expanses And Protecting Against Rising Energy Costs.

(ii) Provide Information On The Quantity And Quality Of Energy Input/output Of A System.

(iii) Analyzing How Much Energy Your Facility Consumes Lets You Quantify The Energy Resources Associated With Your Service, And Identify And Correct Consumption Inefficiencies.

#### **4.2. Disadvantages:**

(i) Power Plants That Are Used In The Production Of Electricity Burn Biomass In Order To Produce Sulfur Dioxide And Nitrogen Oxides.

(ii) A Natural Consequence Of Overusing Energy Is Increased Costs For You.

#### **5.Applications:**

(i) Human Life Has Become Easier By Using Electricity To Perform Many Functions And Situations In Every Day To Day Life. Such As Lighting, Heating, Cooling Of Homes And Operating Various Electrical Appliances.

#### **6.Conclusions:**

(i) As Result, We Are Analyzing The Electricity Consumption In India By State wise, Region wise, Month wise And Year wise. It Is Useful To Industry Sectors For Our Company Purpose.

(ii) Energy Plays A Crucial Role In Modern Societies. It Has A Vital Input To All Sectors. (E.g. Residential, Transportation And Manufacture) And Is Essential To Generate Electricity.

#### **7.Future Scope:**

In The Stated Policies Scenario Global Electricity Demand Grows At 2.1% Per Year To 2040 Twice The Rate Of Primary Energy Demand. This Raises Electricity Is Share In Total Final Energy Consumption From 19% In 2018 To 24% In 2040. Electricity Demand Growth Is Set To Be Particularly Strong In Developing Economies.

#### **8. Appendix:**

##### **8.1. Source Code:**

<https://drive.google.com/file/d/1bicDX43042OiqIhu4UivW2bOP0TC2bIJ/view?usp=sharing>