

VISUALIZATION TOOL FOR ELECTRIC VEHICLE CHARGE AND RANGE
ANALYTICS

A PROJECT REPORT

Batch-II

Submitted By

S.Indhumaha

(Register No: 20201071522106)

V.Karthick

(Register No: 20201071522107)

A.Maharasi

(Register No: 20201071522108)

M.Manoj

(Register No: 20201071522109)

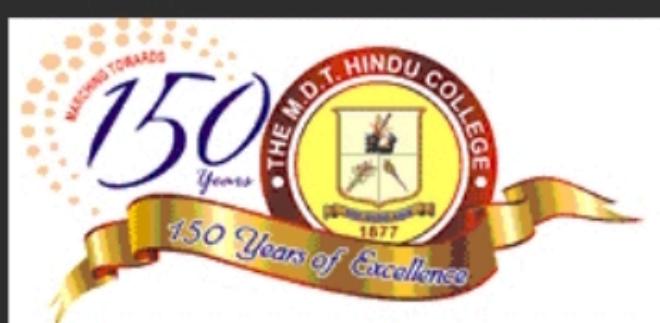
C.Sutharsan

(Register No: 20201071522130)

BACHELOR OF SCIENCE

IN

PHYSICS



DEPARTMENT OF PHYSICS

THE MADURAI DIRAVIYAM THAYUMANAVAR HINDHU COLLEGE

TIRUNELVELI-627010

1. INTRODUCTION

1.1 Overview:

A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source and have an electric motor instead of an internal combustion engine. The Electric Vehicle (EV) is not new, but it has been receiving significantly more attention in recent years. Advances in both EV analytics and battery technologies have led to increased automotive market share. However, this growth is not attributed to hardware alone. The modern mechatronic vehicle marries electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer, and data analysis, to form a comprehensive transportation solution. Advances in all these areas have contributed to the overall rise of EV's, but the common thread that runs through all these elements is data analytics. The new EV's are combined Electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer to form a comprehensive transportation solution.

1.2 USE OF THIS PROJECT:

This project used for "ELECTRIC VEHICLE" in problem defining, understanding the problem, specify the business problem, Requirements of business, literature survey and business impact. Through this project we learned how to do data preparation and how to visualize data produced. In this project helps for creating the dashboard and the story using the visualization. We learned how to upload the prepared dashboard and story to the web. Through this project have learned the charge and range analysis for electric vehicles. This project helps for how to handle many software. Also, this project contains many uses full details.

Says

What have we heard them say?
What can we imagine them saying?

I am not a person
from the ice霜
but I am a
real urbanite
with a family and
a home.

I never release
information about
myself because
I know that FCC
releases didn't
exist yet and they
are going to come.

I am not a person
from the ice霜
but I am a
real urbanite
with a family and
a home.

I'm not a real
urbanite so I
haven't had
any experience
with electric
cars.

Because I'm a
housewife
without a car
of my own,
I don't have
any experience.

I am not
from the ice霜
but I am a
real urbanite
with a family and
a home.

VISUALIZATION TOOLS FOR ELECTRIC VEHICLE CHARGE AND RANGE ANALYSIS

Give them a name and
a portrait to empathize
with your persona.

Visions of
personal
mobility futures
in the Ukraine
analyzed.

People are
imagined mostly
as consumers
who purchase
and drive cars.

Higher purchase
and lower power
consumption.
Low energy, low
charge.

People are mostly
like this
and driving a car
and not having
a car is causing a lot
of problems.

Electric vehicles
prices are becoming
more and more
available
and mobility is at
your disposal.

Based on what you
said here I see myself
as being a young
adult who has a lot
of money and I like
to drive cars.

Brainstorm

Write down any ideas that come to mind that address your problem statement.

⌚ 10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

S INDHUMAHA



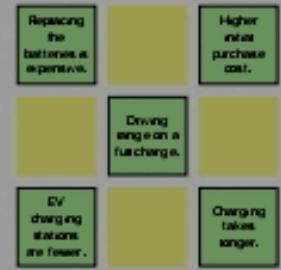
A MAHARASI



V KARTHIK



M MANOJ



C SUTHARSAN



Person 6

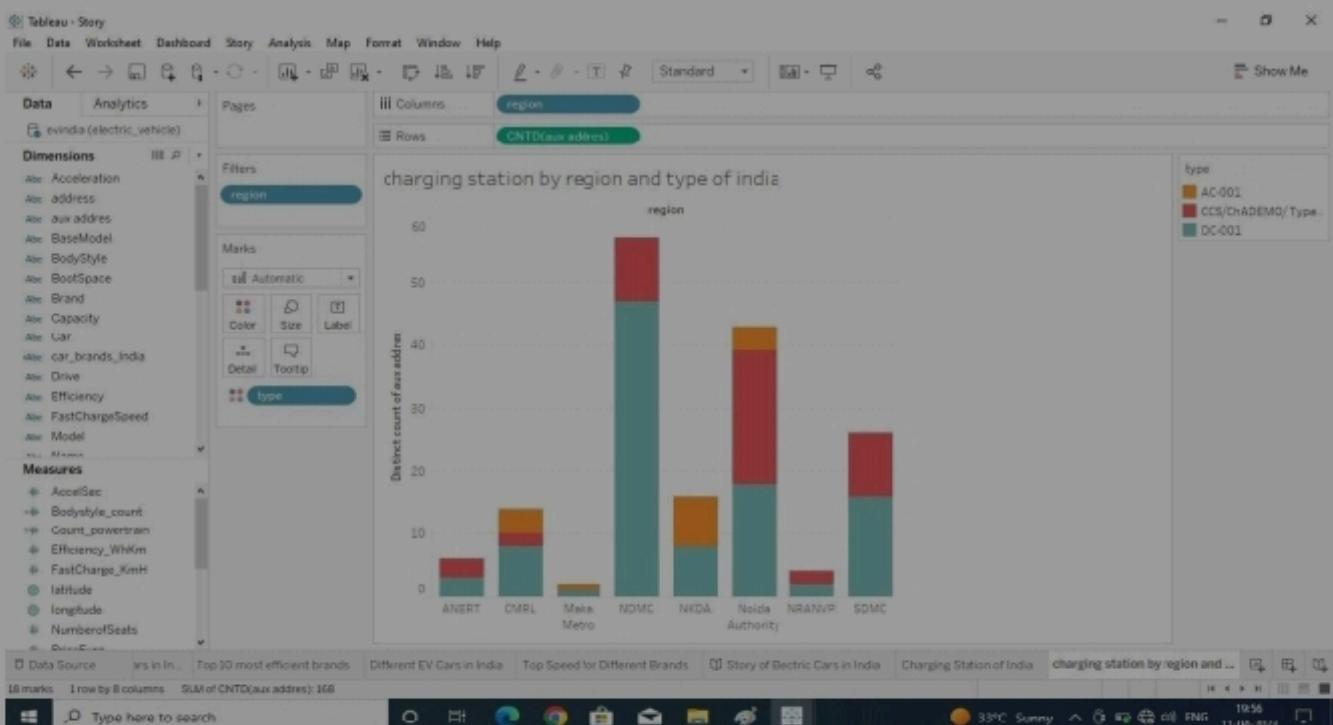
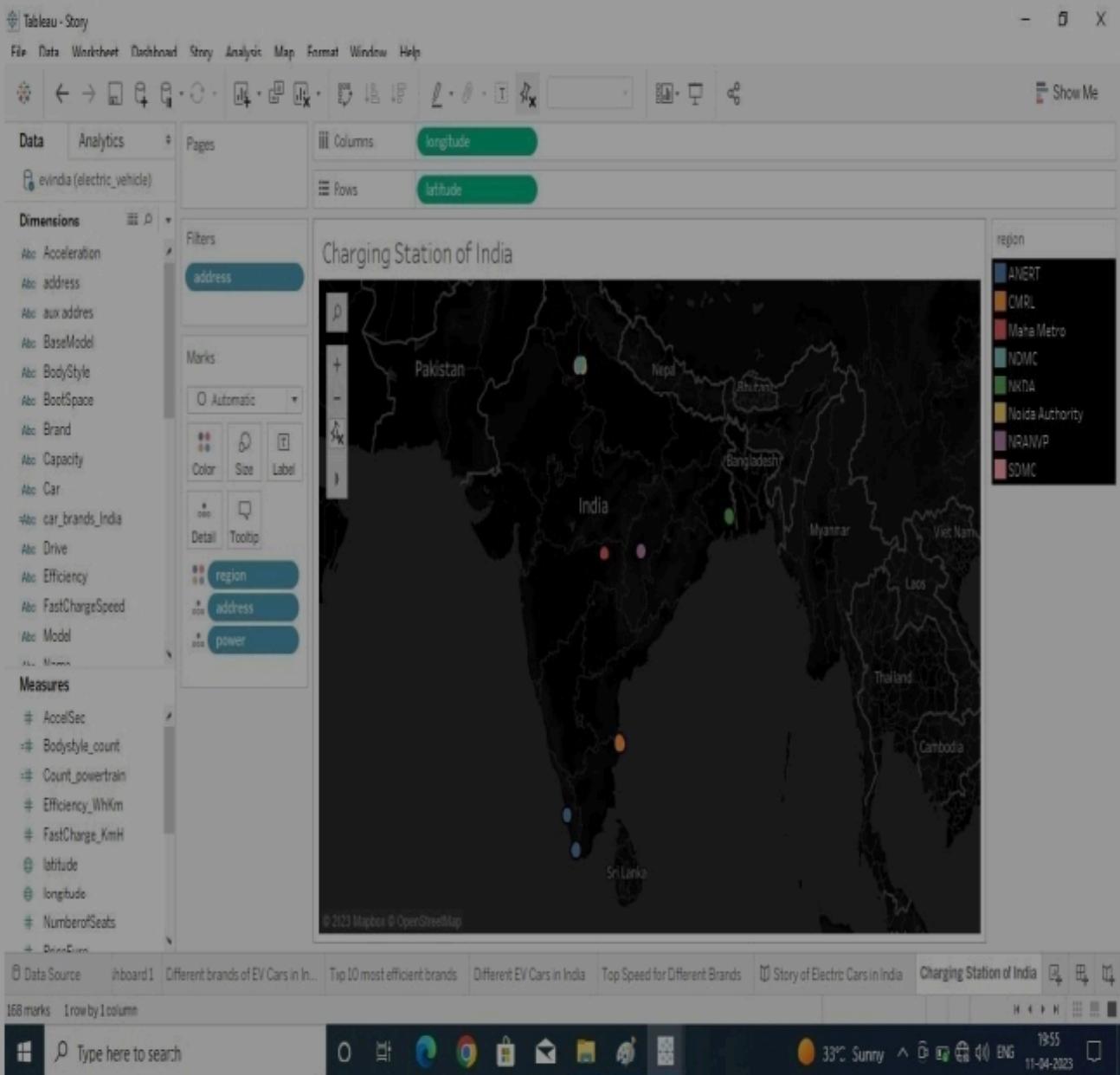


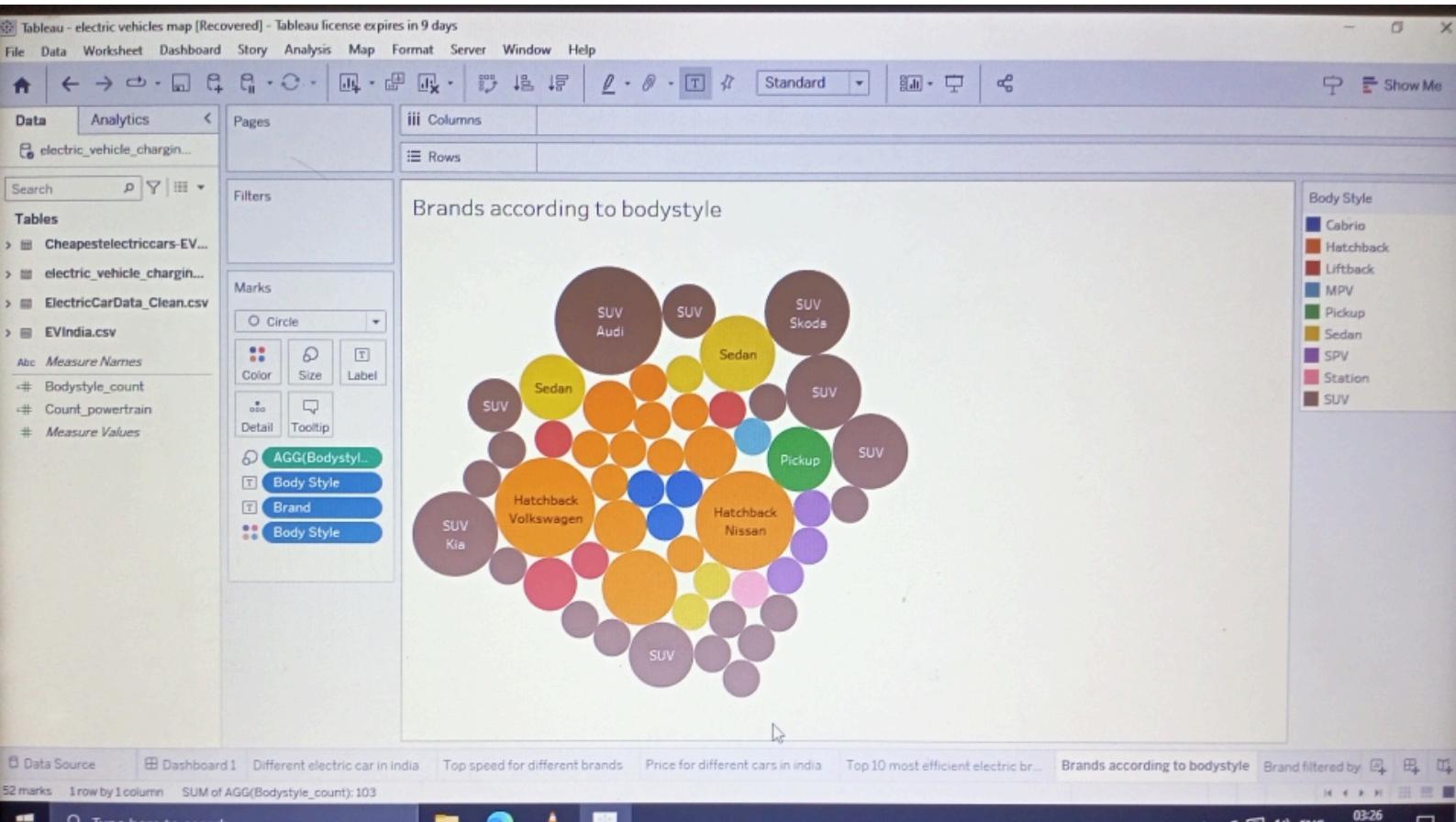
Person 7

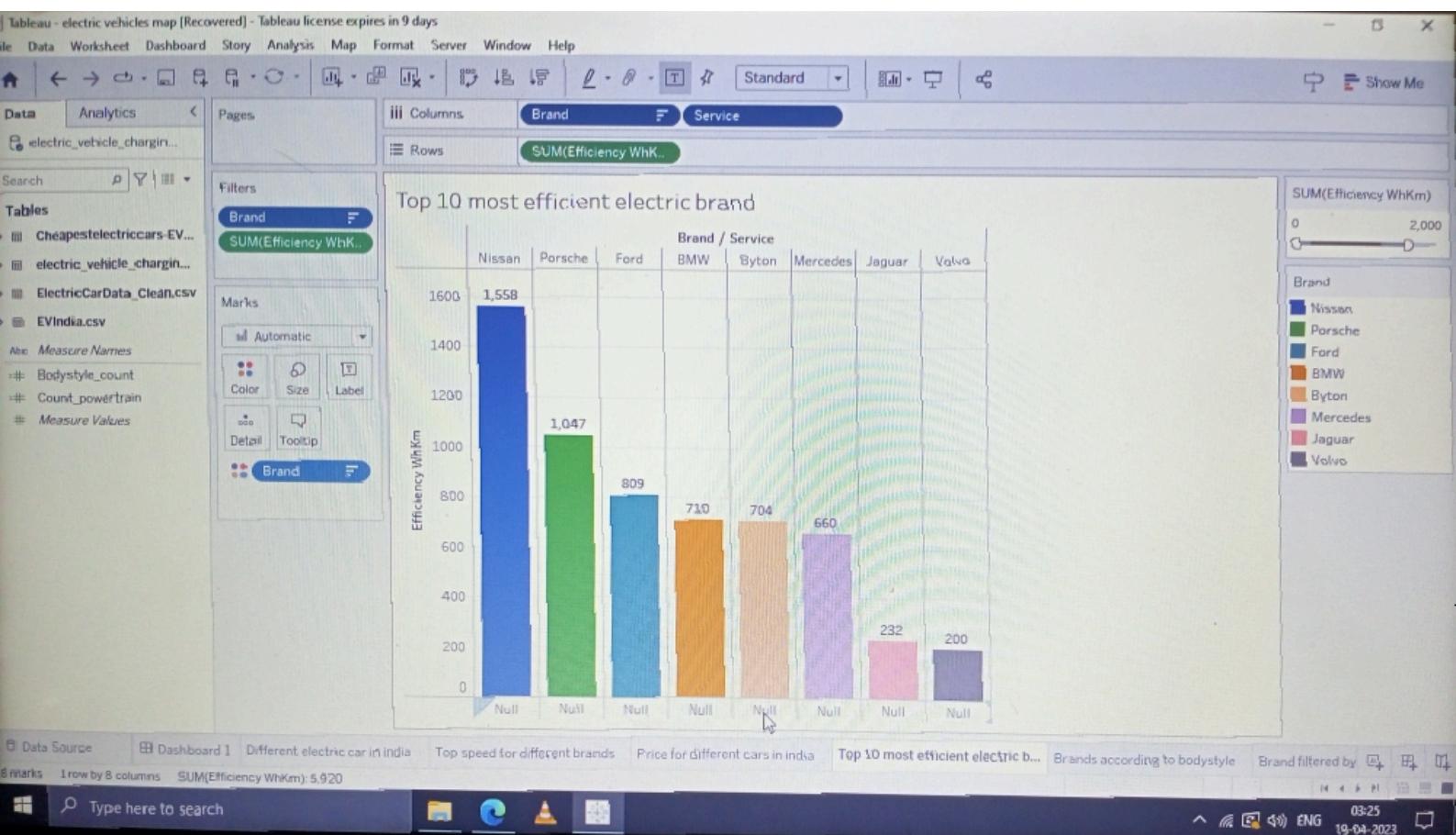


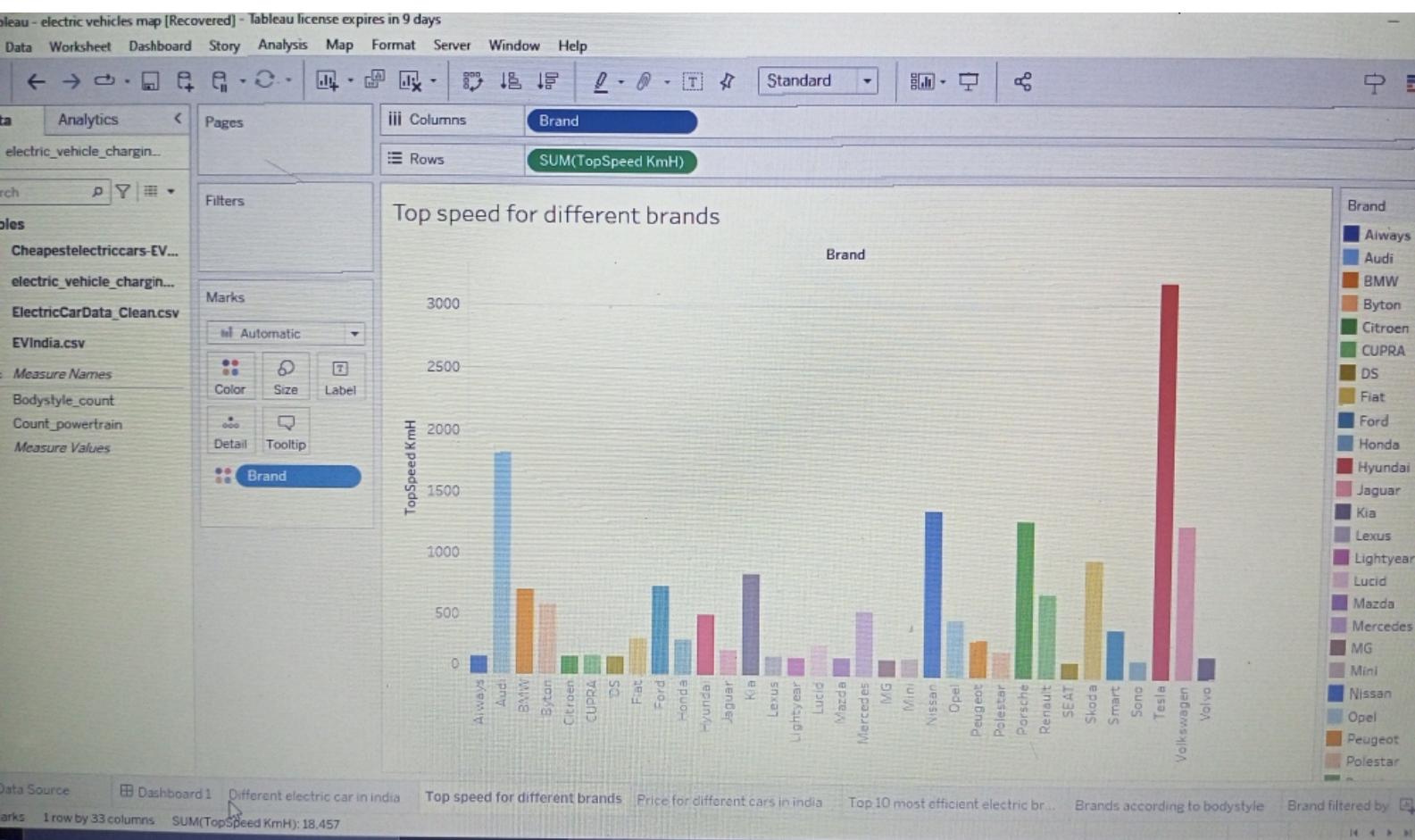
Person 8

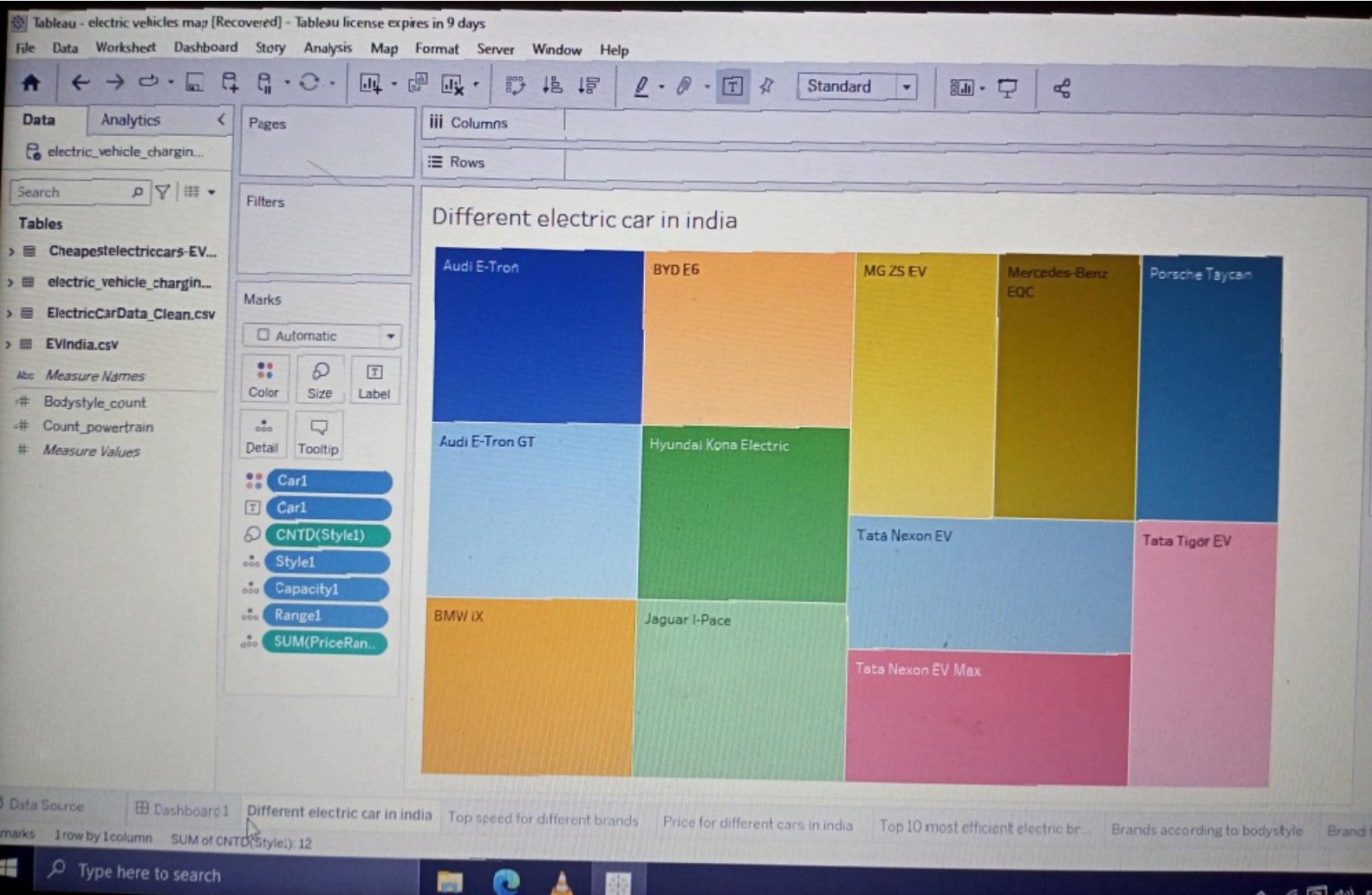


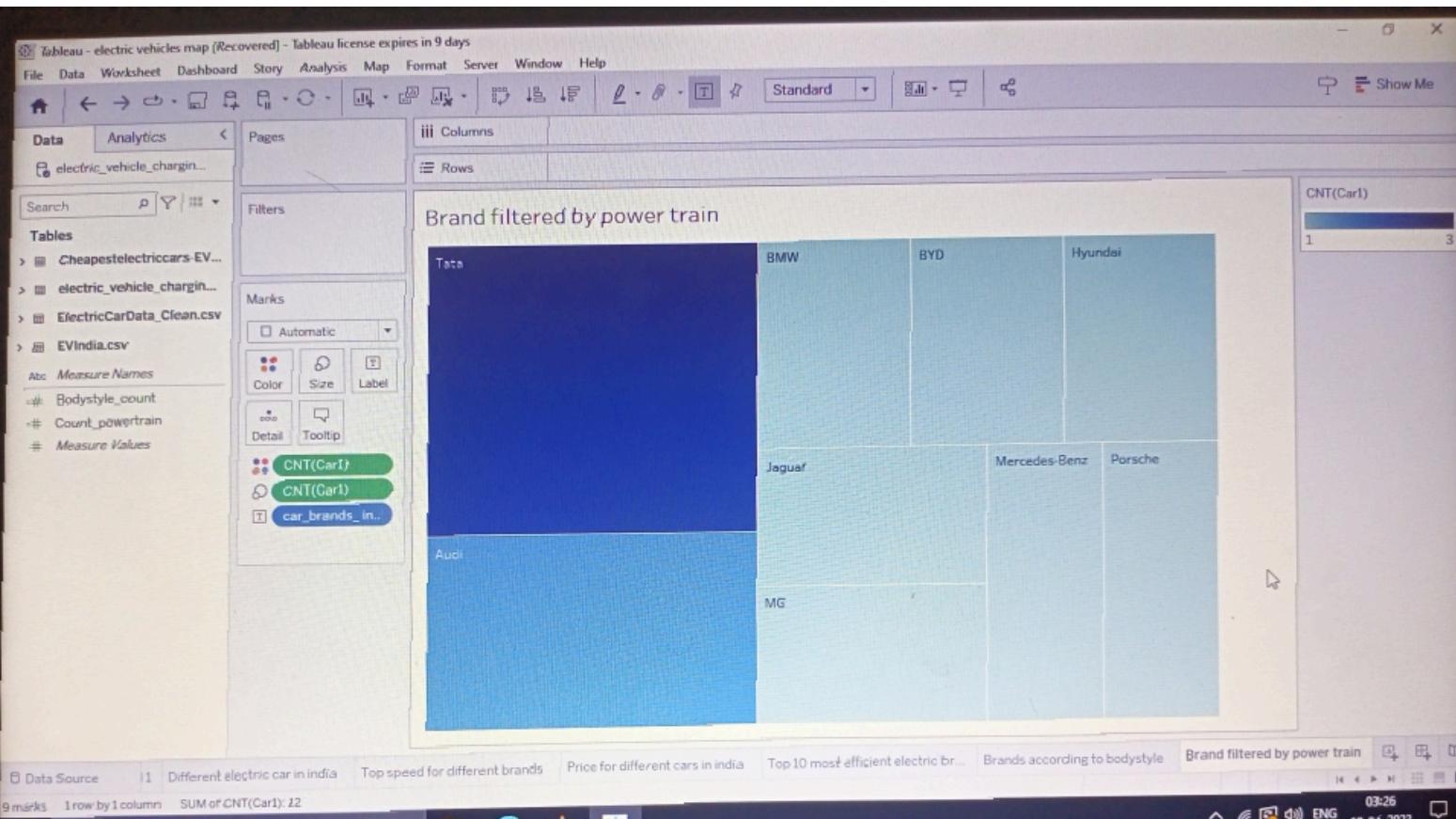


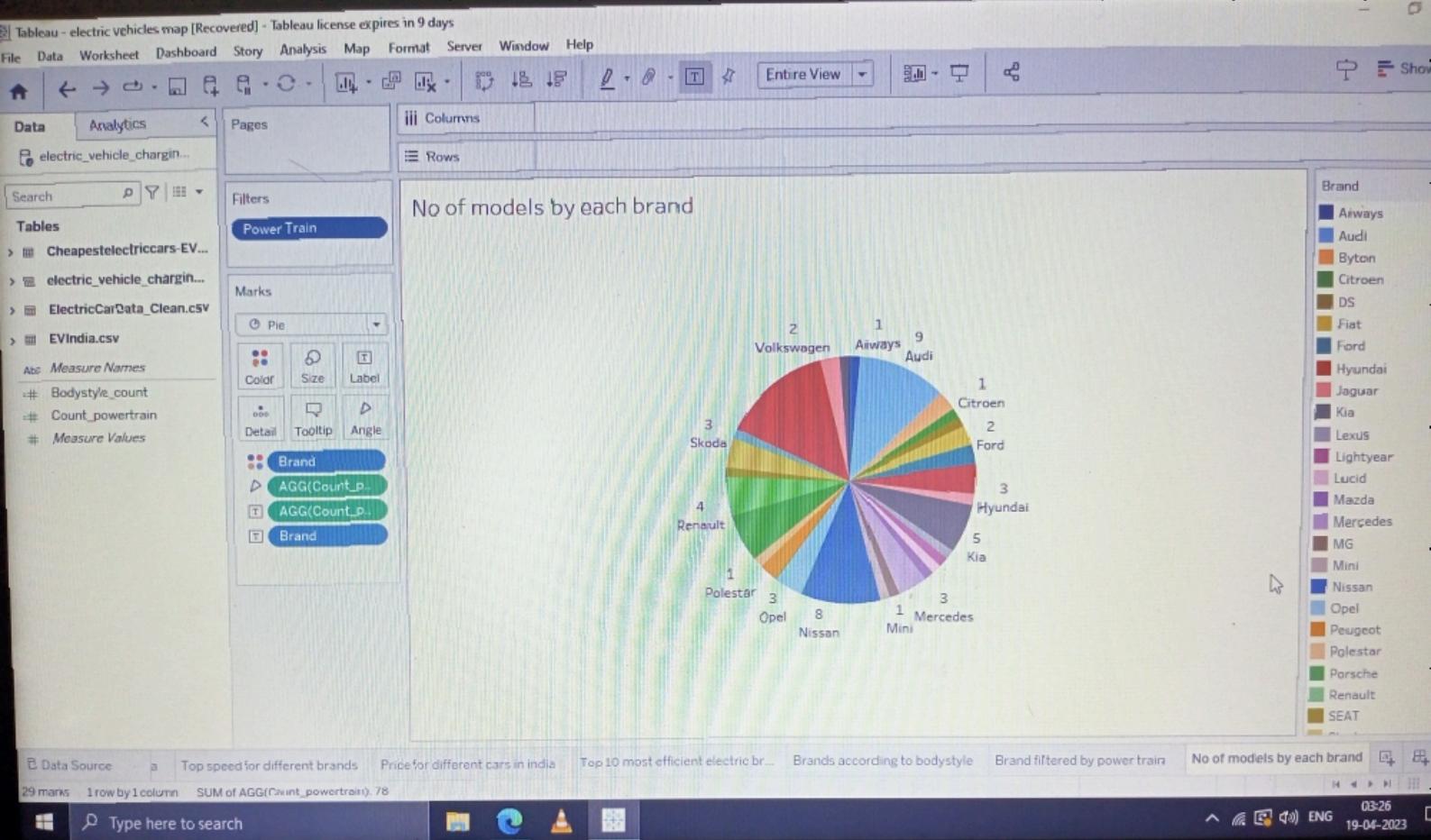












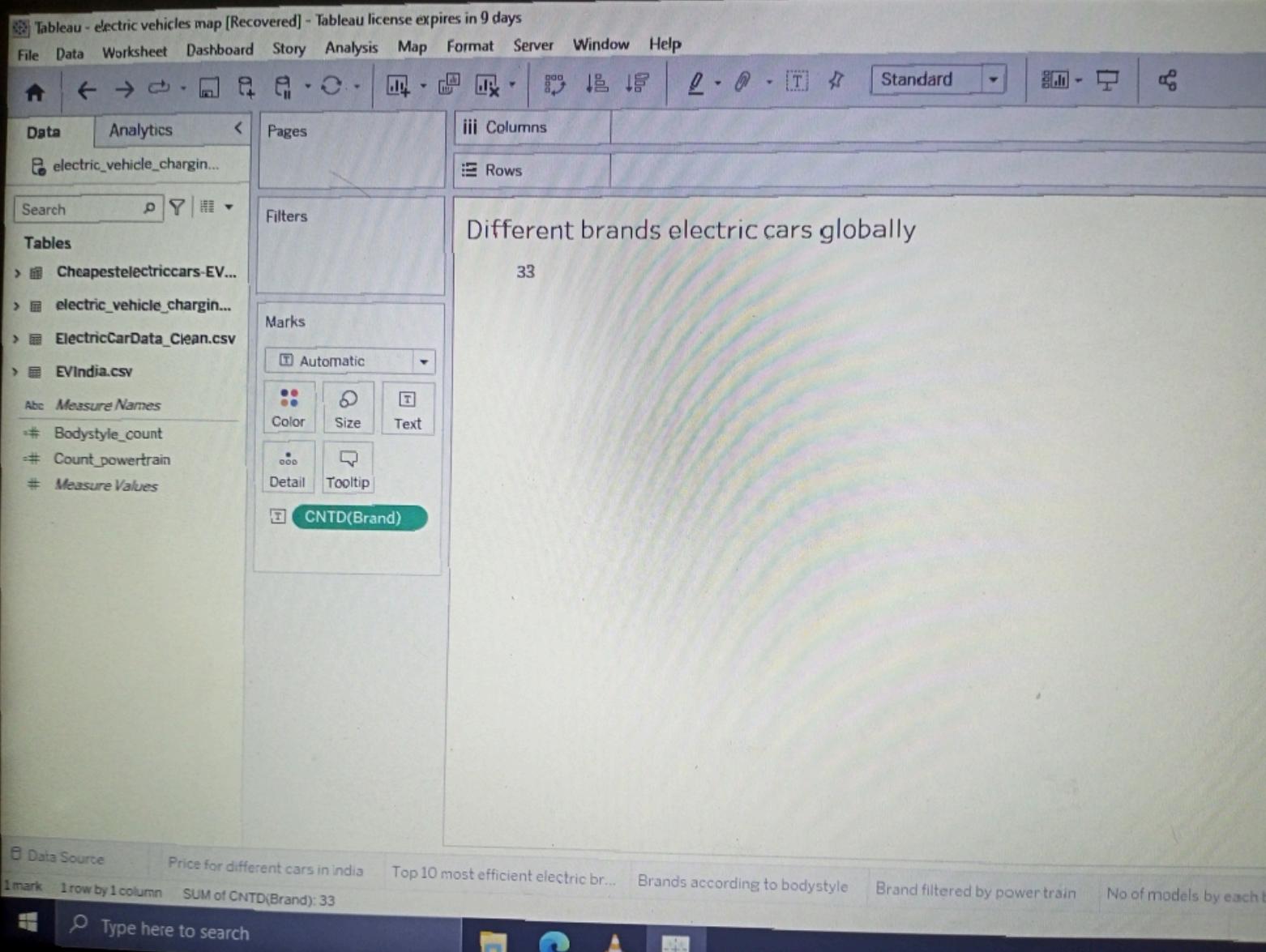


Tableau - electric vehicles map [Recovered] - Tableau license expires in 9 days

File Data Worksheet Dashboard Story Analysis IMap Format Server Window Help

Data Analytics < Pages Columns Rows

electric_vehicle_chargin... Search P Y

Tables

- Cheapestelectriccars-EV...
- electric_vehicle_chargin...
- ElectricCarData_Clean.csv
- EVIndia.csv

Atts Measure Names

- Bodystyle_count
- Count_powertrain
- Measure Values

Marks Automatic

- Color
- Size
- Text
- Detail
- Tooltip

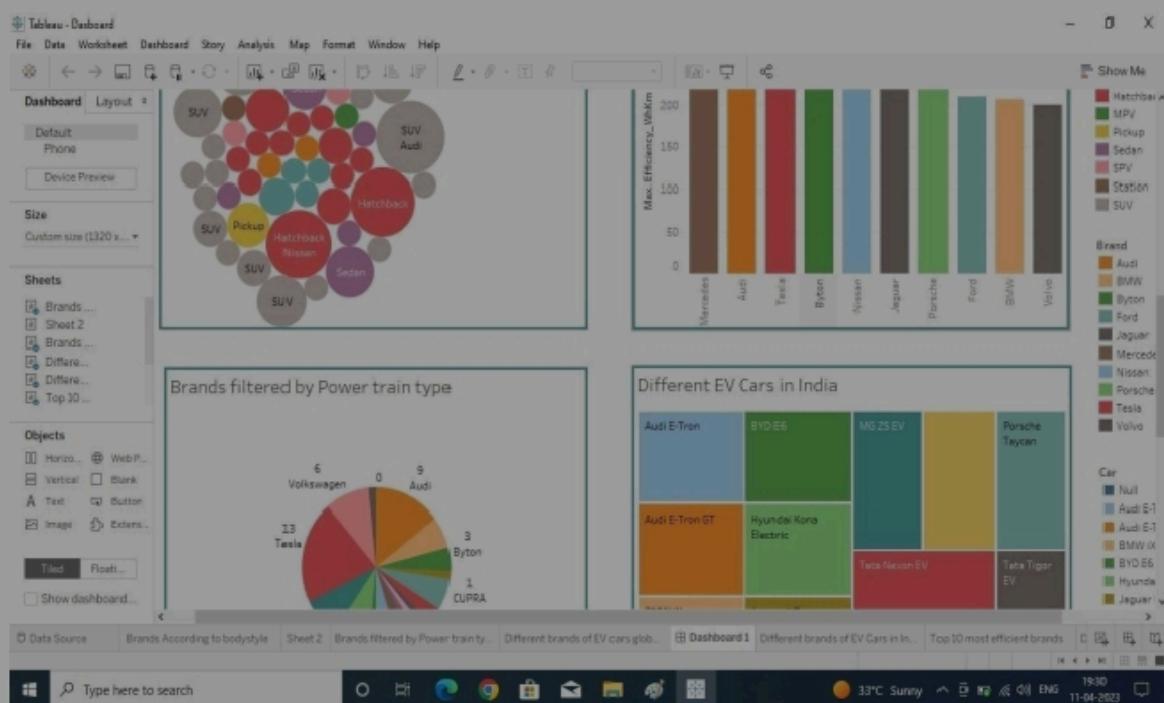
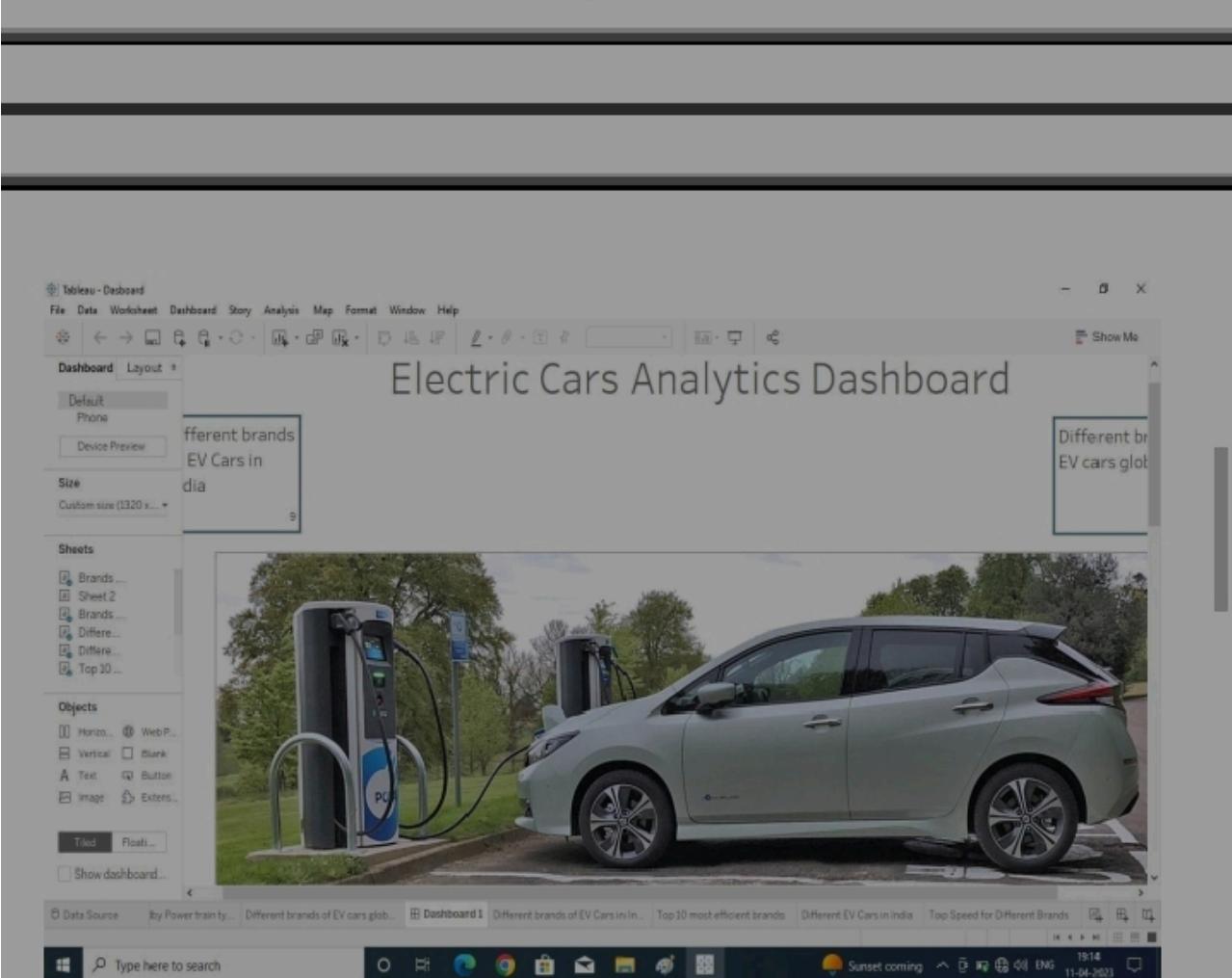
CNTD(car_brands)

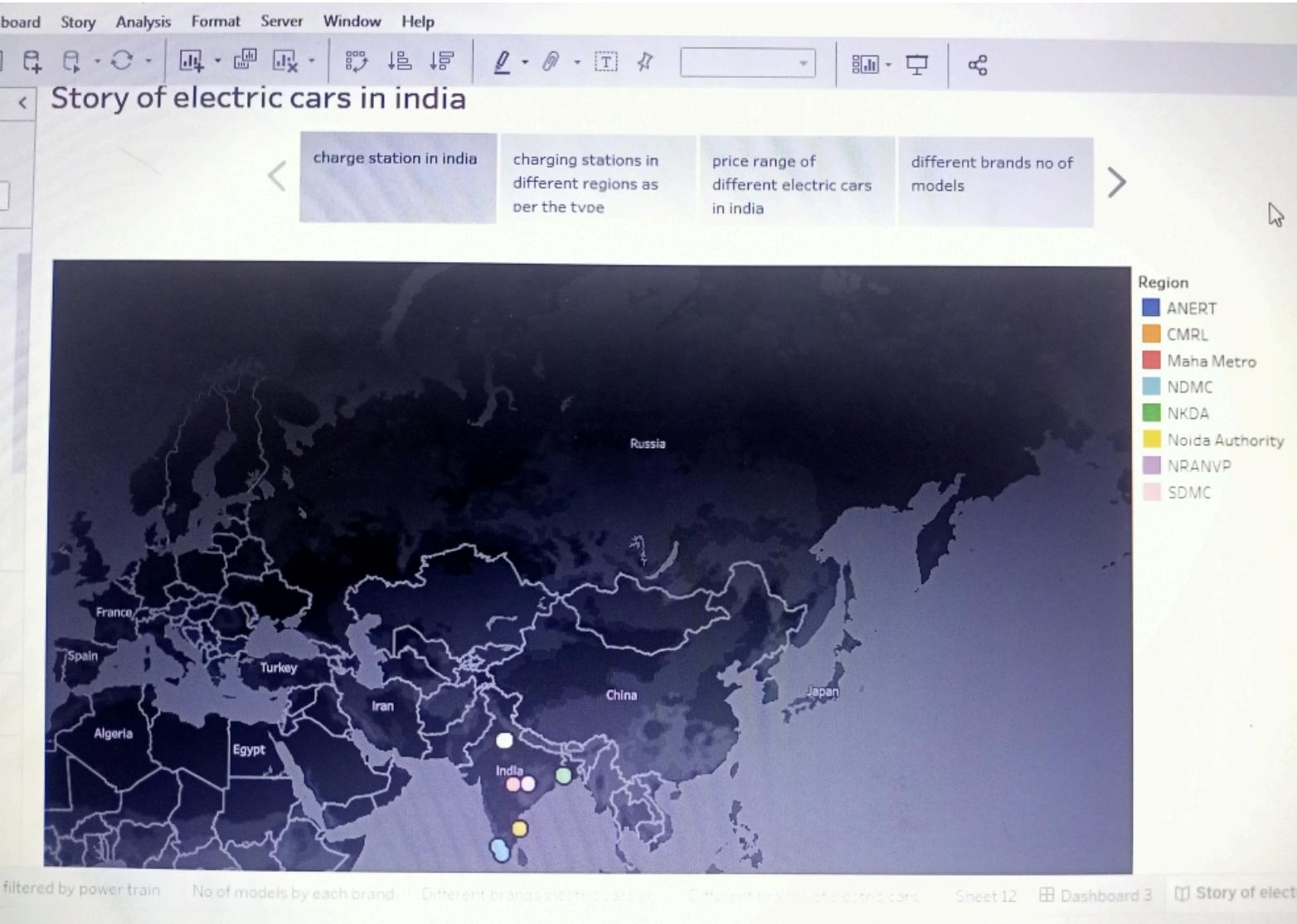
Different brands of electric cars in india

Data Source Top 10 most efficient electric br. Brands according to bodystyle Brand filtered by power train No of models by each brand Different brands electric cars gl.

1 row by 1 column SUM of CNTD(car_brands, india): 9

Type here to search





4. ADVANTAGES AND DISADVANTAGES

4.1 ADVANTAGES:

Eco-friendly: Because electric vehicles do not utilize fuel for combustion, there are no emissions or gas exhaust. Vehicles that run on fossil fuels contribute significantly to hazardous gas accumulation in the environment, thus driving an electric car can help contribute to a cleaner environment.

Renewable energy source: Electric vehicles run on renewable power, whereas conventional automobiles function on the combustion of fossil fuels, which reduces the world's fossil-fuel stocks.

Less noise and smoother motion: Driving an electric car is significantly smoother. Because they lack fast-moving elements, they are quieter and produce less noise.

Cost-effective: Electricity is far less expensive than fuels such as gasoline and diesel, which are subject to regular price increases. When solar electricity is utilized at home, battery recharging is cost-effective.

Low maintenance: Because electric cars have fewer moving components, wear and tear is reduced when compared to traditional auto parts. Repairs are also simpler and less expensive than combustion engines.

4.2 DISADVANTAGES:

High initial cost: Electric vehicles continue to be quite expensive, and many buyers believe they are not as inexpensive as traditional automobiles.

Charging station limitations: People who need to travel long distances are concerned about finding adequate charging stations in the middle of their journey, which are not always accessible.

Recharging takes time: Unlike conventional automobiles, which require only a few minutes to replenish their gas tanks, charging an electric vehicle takes many hours.

Limited options: Currently, there aren't many electric car models to pick from in terms of appearance, style, or customized variations.

7. FUTURE SCOPE

There are no emissions:

Electric automobiles are being developed primarily because they do not emit any pollution when driving. An electric vehicle is propelled by a battery-powered electric motor. There is no burning of fuel. An electric vehicle does not have an exhaust system. It's the best road transportation solution at a time when global CO₂ emissions and air pollution must be drastically cut.

Access to city centres is unrestricted:

Aside from the fact that more cities are implementing LEZs, these zones are also growing in size and strictness with time. With an electric car, you have limitless access to low-emission zones, now and in the future, wherever and whenever you want.

Electricity is less expensive than gasoline:

Electricity is less expensive than gasoline and fuel. In this regard, an electric automobile is less expensive than a car with a combustion engine. The most cost-effective solution is to charge at home.

Comfortable and quiet:

Unlike a combustion engine, an electric motor produces very little noise. As a result, the silence inside an electric vehicle is unmistakable. Additionally, unlike a combustion engine, an electric motor does not produce any vibrations or resonance. The vibration-free and silent drivetrain adds to the relaxation.

There's no need to switch gears:

An electric automobile does not have a traditional gearbox, which is another key distinction from a car with a combustion engine. An electric car always works like a car with an automatic transmission, which eliminates the need to shift gears. You also don't have to pay more for it. Driving in busy start-stop traffic in the city or traffic congestion has never been more comfortable, thanks to the quietness of an electric motor.

Torque on the fly:

The incredibly high torque of an electric motor is a distinct feature. Much more powerful than a typical internal combustion engine. Furthermore, an electric motor responds rapidly to throttle motions and generates peak torque right from a standstill. Internal combustion engines have an unavoidable response time and can only generate maximum torque in a specific speed range. All of this assures enticing performance thanks to the smooth and powerful acceleration, as well as a great deal of driving pleasure.

Extremely effective:

At the moment, the most efficient combustion engines have an efficiency of around 40%. That means they only put 40% of the energy in the fuel into motion. Heat and friction account for the remaining 60%.

An electric motor has a 90 per cent efficiency, which means it uses the battery's energy far more efficiently. Furthermore, because an electric motor can be transformed into a generator in the blink of an eye, an electric car can swiftly recover kinetic energy.

8. APPENDIX

8.1 SOURCE CODE:

DASHBOARD:

https://public.tableau.com/views/Dashboard_16811353129130/Dashboard1?:language=enUS&:display_count=n&:origin=viz_share_link

8.2 STORY:

https://public.tableau.com/views/Story_16811350752970/StoryofElectricCarsinIndia?:language=en-US&:display_count=n&:origin=viz_share_link

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta content="width=device-width, initial-scale=1.0" name="viewport">
    <title>Electric Vehicle Charge and range analaytics</title>
    <meta content="" name="description">
    <meta content="" name="keywords">
    <!-- Favicon -->
    <link href="assets/img/favicon.png" rel="icon">
    <link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
    <!-- Google Fonts -->
    <link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Jost:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">
    <!-- Vendor CSS Files -->
    <link href="assets/vendor/aos/aos.css" rel="stylesheet">
    <link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
    <link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
    <link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
```

```
<link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
<link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">
<link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
<!-- Template Main CSS File -->
<link href="assets/css/style.css" rel="stylesheet">
<!-- ===== -->
* Template Name: Arsha
* Updated: Mar 10 2023 with Bootstrap v5.2.3
* Template URL: https://bootstrapmade.com/arsha-free-bootstrap-html-template-corporate/
* Author: BootstrapMade.com
* License: https://bootstrapmade.com/license/
===== -->
</head>
<body>
<!-- ===== Header ===== -->
<header id="header" class="fixed-top">
<div class="container d-flex align-items-center">
<h1 class="logo me-auto"><a href="index.html">Electric Vehicle</a></h1>
<!-- Uncomment below if you prefer to use an image logo -->
<!-- <a href="index.html" class="logo me-auto"></a>-->
<nav id="navbar" class="navbar">
<ul>
<li><a class="nav-link scrollto active" href="#hero">Home</a></li>
<li><a class="nav-link scrollto" href="#about">About</a></li>
<li><a class="nav-link scrollto" href="#services">Dasboard</a></li>
<li><a class="nav-link scrollto" href="#portfolio">Story</a></li>
<li><a class="nav-link scrollto" href="#contact">Contact</a></li>
<li><a class="getstarted scrollto" href="#about">Get started</a></li>
</ul>
<i class="bi bi-list mobile-nav-toggle"></i>
</nav><!-- .navbar -->
</div>
</header><!-- End Header -->
<!-- ===== Hero Section ===== -->
<section id="hero" class="d-flex align-items-center">
<div class="container">
<div class="row">
<div class="col-lg-6 d-flex flex-column justify-content-center pt-4 pt-lg-0 order-2 order-lg-1" data-aos="fade-up" data-aos-delay="200">
```

```
<h1>Visualization tool for Electric Vehicle Charge and Range Analysis</h1>
<div class="d-flex justify-content-center justify-content-lg-start">
<a href="#about" class="btn-get-started scrollto">Get Started</a>
<a href="https://www.youtube.com/watch?v=jDDaplaOz7Q" class="glightbox btn-watch-video"><i
class="bi bi-play-circle"></i><span>Watch Video</span></a>
</div>
</div>
<div class="col-lg-6 order-1 order-lg-2 hero-img" data-aos="zoom-in" data-aos-delay="200">

</div>
</div>
</div>
</section><!-- End Hero -->
<main id="main">
<!-- ===== About Us Section ===== -->
<section id="about" class="about">
<div class="container" data-aos="fade-up">
<div class="section-title">
<h2>About Us</h2>
</div>
<div class="row content">
<div class="col-lg-6">
<p>
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore
et dolore
magna aliqua.
</p>
<ul>
<li><i class="ri-check-double-line"></i> Ullamco laboris nisi ut aliquip ex ea commodo
consequat</li>
<li><i class="ri-check-double-line"></i> Duis aute irure dolor in reprehenderit in voluptate
velit</li>
<li><i class="ri-check-double-line"></i> Ullamco laboris nisi ut aliquip ex ea commodo
consequat</li>
</ul>
</div>
</div>
</section><!-- End About Us Section -->
<!-- ===== Why Us Section ===== -->
<section id="why-us" class="why-us section-bg">
<div class="container-fluid" data-aos="fade-up">
<div class="row">
```

```
<div class="col-lg-7 d-flex flex-column justify-content-center align-items-stretch order-2 order-lg-1">
<div class="content">
<h3>Eum ipsam laborum deleniti <strong>velit pariatur architecto aut nihil</strong></h3>
<p>
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Duis aute irure dolor in reprehenderit
</p>
</div>
<div class="accordion-list">
<ul>
<li>
<a data-bs-toggle="collapse" class="collapse" data-bs-target="#accordion-list-1"><span>01</span>
Non consectetur a erat nam at lectus urna duis? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
<div id="accordion-list-1" class="collapse show" data-bs-parent=".accordion-list">
<p>
Feugiat pretium nibh ipsum consequat. Tempus iaculis urna id volutpat lacus laoreet non curabitur gravida. Venenatis lectus magna fringilla urna porttitor rhoncus dolor purus non.
</p>
</div>
</li>
<li>
<a data-bs-toggle="collapse" data-bs-target="#accordion-list-2"
class="collapsed"><span>02</span> Feugiat scelerisque varius morbi enim nunc? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
<div id="accordion-list-2" class="collapse" data-bs-parent=".accordion-list">
<p>
Dolor sit amet consectetur adipiscing elit pellentesque habitant morbi. Id interdum velit laoreet id donec ultrices. Fringilla phasellus faucibus scelerisque eleifend donec pretium. Est pellentesque elit ullamcorper dignissim. Mauris ultrices eros in cursus turpis massa tincidunt dui.
</p>
</div>
</li>
<li>
<a data-bs-toggle="collapse" data-bs-target="#accordion-list-3"
class="collapsed"><span>03</span> Dolor sit amet consectetur adipiscing elit? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
<div id="accordion-list-3" class="collapse" data-bs-parent=".accordion-list">
<p>
Eleifend mi in nulla posuere sollicitudin aliquam ultrices sagittis orci. Faucibus pulvinar elementum integer enim. Sem nulla pharetra diam sit amet nisl suscipit. Rutrum tellus pellentesque eu tincidunt.
</p>

```

Lectus urna quis convallis convallis tellus. Urna molestie at elementum eu facilisis sed odio morbi quis

</p>

</div>

</div>

</div>

<div class="col-lg-5 align-items-stretch order-1 order-lg-2 img" style="background-image: url("assets/img/why-us.png");' data-aos="zoom-in" data-aos-delay="150"> </div>

</div>

</div>

</section><!-- End Why Us Section -->

<!-- ===== Skills Section ===== -->

<section id="skills" class="skills">

<div class="container" data-aos="fade-up">

<div class="row">

<div class="col-lg-6 d-flex align-items-center" data-aos="fade-right" data-aos-delay="100">

</div>

<div class="col-lg-6 pt-4 pt-lg-0 content" data-aos="fade-left" data-aos-delay="100">

<h3>Voluptatem dignissimos provident quasi corporis voluptates</h3>

<p class="fst-italic">

 Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

</p>

<div class="skills-content">

<div class="progress">

HTML <i class="val">100%</i>

<div class="progress-bar-wrap">

<div class="progress-bar" role="progressbar" aria-valuenow="100" aria-valuemin="0" aria-valuemax="100"></div>

</div>

</div>

<div class="progress">

CSS <i class="val">90%</i>

<div class="progress-bar-wrap">

<div class="progress-bar" role="progressbar" aria-valuenow="90" aria-valuemin="0" aria-valuemax="100"></div>

</div>


```
vizElement.style.width='1320px';vizElement.style.height='2027px';} else {  
vizElement.style.width='100%';vizElement.style.height='2627px';} var scriptElement =  
document.createElement('script'); scriptElement.src =  
'https://public.tableau.com/javascripts/api/viz_v1.js';  
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>  
</section><!-- End Cta Section -->  
<!-- ===== Portfolio Section ===== -->  
<section id="portfolio" class="portfolio">  
<div class="container" data-aos="fade-up">  
<div class="section-title">  
<h2>Story</h2>  
</div><div class='tableauPlaceholder' id='viz1681197920720' style='position: relative'><noscript><a href='#'><img alt='Story of Electric Cars in India ' src='https://public.tableau.com/static/images/St/Story_16811350752970/StoryofElectricCarsinIndia1_rss.png' style='border: none' /></a></noscript><object class='tableauViz' style='display:none;'><param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param name='embed_code_version' value='3' /> <param name='site_root' value="/" /><param name='name' value='Story_16811350752970/StoryofElectricCarsinIndia' /><param name='tabs' value='no' /><param name='toolbar' value='yes' /><param name='static_image' value='https://public.tableau.com/static/images/St/Story_16811350752970/StoryofElectricCarsinIndia1.png' /> <param name='animate_transition' value='yes' /><param name='display_static_image' value='yes' /><param name='display_spinner' value='yes' /><param name='display_overlay' value='yes' /><param name='display_count' value='yes' /><param name='language' value='en-US' /></object></div> <script type='text/javascript'> var divElement = document.getElementById('viz1681197920720'); var vizElement = divElement.getElementsByTagName('object')[0]; vizElement.style.width='1016px';vizElement.style.height='991px'; var scriptElement = document.createElement('script'); scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js'; vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>  
</section><!-- End Portfolio Section -->  
<!-- ===== Team Section ===== -->  
<section id="team" class="team section-bg">  
<div class="container" data-aos="fade-up">  
<div class="section-title">  
<h2>Team</h2>  
</div>  
<div class="row">  
<div class="col-lg-6" data-aos="zoom-in" data-aos-delay="100">  
<div class="member d-flex align-items-start">  
<div class="pic"></div>  
<div class="member-info">  
<h4>V SATHISH</h4>
```

```
<span>Team Leader</span>
<p>Explicabo voluptatem mollitia et repellat qui dolorum quasi</p>
<div class="social">
<a href=""><i class="ri-twitter-fill"></i></a>
<a href=""><i class="ri-facebook-fill"></i></a>
<a href=""><i class="ri-instagram-fill"></i></a>
<a href=""><i class="ri-linkedin-box-fill"></i></a>
</div>
</div>
</div>
</div>

<div class="col-lg-6 mt-4 mt-lg-0" data-aos="zoom-in" data-aos-delay="200">
<div class="member d-flex align-items-start">
<div class="pic"></div>
<div class="member-info">
<h4>C ARUNACHALAM</h4>
<span>Team Member</span>
<p>Aut maiores voluptates amet et quis praesentium qui senda para</p>
<div class="social">
<a href=""><i class="ri-twitter-fill"></i></a>
<a href=""><i class="ri-facebook-fill"></i></a>
<a href=""><i class="ri-instagram-fill"></i></a>
<a href=""><i class="ri-linkedin-box-fill"></i></a>
</div>
</div>
</div>
</div>

<div class="col-lg-6 mt-4" data-aos="zoom-in" data-aos-delay="300">
<div class="member d-flex align-items-start">
<div class="pic"></div>
<div class="member-info">
<h4>G MARIAPPAN</h4>
<span>Team Member</span>
<p>Quisquam facilis cum velit laborum corrupti fuga rerum quia</p>
<div class="social">
<a href=""><i class="ri-twitter-fill"></i></a>
<a href=""><i class="ri-facebook-fill"></i></a>
<a href=""><i class="ri-instagram-fill"></i></a>
<a href=""><i class="ri-linkedin-box-fill"></i></a>
</div>
</div>
```



```
</ul>
<a href="#" class="buy-btn">Get Started</a>
</div>
</div>

<div class="col-lg-4 mt-4 mt-lg-0" data-aos="fade-up" data-aos-delay="200">
<div class="box featured">
<h3>Business Plan</h3>
<h4><sup>$</sup>29<span>per month</span></h4>
<ul>
<li><i class="bx bx-check"></i> Quam adipiscing vitae proin</li>
<li><i class="bx bx-check"></i> Nec feugiat nisl pretium</li>
<li><i class="bx bx-check"></i> Nulla at volutpat diam uteera</li>
<li><i class="bx bx-check"></i> Pharetra massa massa ultricies</li>
<li><i class="bx bx-check"></i> Massa ultricies mi quis hendrerit</li>
</ul>
<a href="#" class="buy-btn">Get Started</a>
</div>
</div>

<div class="col-lg-4 mt-4 mt-lg-0" data-aos="fade-up" data-aos-delay="300">
<div class="box">
<h3>Developer Plan</h3>
<h4><sup>$</sup>49<span>per month</span></h4>
<ul>
<li><i class="bx bx-check"></i> Quam adipiscing vitae proin</li>
<li><i class="bx bx-check"></i> Nec feugiat nisl pretium</li>
<li><i class="bx bx-check"></i> Nulla at volutpat diam uteera</li>
<li><i class="bx bx-check"></i> Pharetra massa massa ultricies</li>
<li><i class="bx bx-check"></i> Massa ultricies mi quis hendrerit</li>
</ul>
<a href="#" class="buy-btn">Get Started</a>
</div>
</div>
</div>
</div>

</section><!-- End Pricing Section -->
<!-- ===== Frequently Asked Questions Section ===== -->
<section id="faq" class="faq section-bg">
<div class="container" data-aos="fade-up">
<div class="section-title">
<h2>Frequently Asked Questions</h2>
```

<p>Magnam dolores commodi suscipit. Necessitatibus eius consequatur ex aliquid fuga eum quidem. Sit sint consectetur velit. Quisquam quos quisquam cupiditate. Et nemo qui impedit suscipit alias ea. Quia fugiat sit in iste officiis commodi quidem hic quas.</p>

</div>

<div class="faq-list">

<li data-aos="fade-up" data-aos-delay="100">

<i class="bx bx-help-circle icon-help"></i> <a data-bs-toggle="collapse" class="collapse" data-bs-target="#faq-list-1">Non consectetur a erat nam at lectus urna duis? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i>

<div id="faq-list-1" class="collapse show" data-bs-parent=".faq-list">

<p>

Feugiat pretium nibh ipsum consequat. Tempus iaculis urna id volutpat lacus laoreet non curabitur gravida. Venenatis lectus magna fringilla urna porttitor rhoncus dolor purus non.

</p>

</div>

<li data-aos="fade-up" data-aos-delay="200">

<i class="bx bx-help-circle icon-help"></i> <a data-bs-toggle="collapse" data-bs-target="#faq-list-2" class="collapsed">Feugiat scelerisque varius morbi enim nunc? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i>

<div id="faq-list-2" class="collapse" data-bs-parent=".faq-list">

<p>

Dolor sit amet consectetur adipiscing elit pellentesque habitant morbi. Id interdum velit laoreet id donec ultrices. Fringilla phasellus faucibus scelerisque eleifend donec pretium. Est pellentesque elit ullamcorper dignissim. Mauris ultrices eros in cursus turpis massa tincidunt dui.

</p>

</div>

<li data-aos="fade-up" data-aos-delay="300">

<i class="bx bx-help-circle icon-help"></i> <a data-bs-toggle="collapse" data-bs-target="#faq-list-3" class="collapsed">Dolor sit amet consectetur adipiscing elit? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i>

<div id="faq-list-3" class="collapse" data-bs-parent=".faq-list">

<p>

Eleifend mi in nulla posuere sollicitudin aliquam ultrices sagittis orci. Faucibus pulvinar elementum integer enim. Sem nulla pharetra diam sit amet nisl suscipit. Rutrum tellus pellentesque eu tincidunt. Lectus urna duis convallis convallis tellus. Urna molestie at elementum eu facilisis sed odio morbi quis

</p>

</div>

<li data-aos="fade-up" data-aos-delay="400">

```
<i class="bx bx-help-circle icon-help"></i> <a data-bs-toggle="collapse" data-bs-target="#faq-list-4" class="collapsed">Tempus quam pellentesque nec nam aliquam sem et tortor consequat? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
<div id="faq-list-4" class="collapse" data-bs-parent=".faq-list">
<p>
Molestie a iaculis at erat pellentesque adipiscing commodo. Dignissim suspendisse in est ante in. Nunc vel risus commodo viverra maecenas accumsan. Sit amet nisl suscipit adipiscing bibendum est. Purus gravida quis blandit turpis cursus in.
</p>
</div>
</li>

<li data-aos="fade-up" data-aos-delay="500">
<i class="bx bx-help-circle icon-help"></i> <a data-bs-toggle="collapse" data-bs-target="#faq-list-5" class="collapsed">Tortor vitae purus faucibus ornare. Varius vel pharetra vel turpis nunc eget lorem dolor? <i class="bx bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
<div id="faq-list-5" class="collapse" data-bs-parent=".faq-list">
<p>
Laoreet sit amet cursus sit amet dictum sit amet justo. Mauris vitae ultricies leo integer malesuada nunc vel. Tincidunt eget nullam non nisi est sit amet. Turpis nunc eget lorem dolor sed. Ut venenatis tellus in metus vulputate eu scelerisque.
</p>
</div>
</li>
</ul>
</div>
</div>
</section><!-- End Frequently Asked Questions Section -->
<!-- ===== Contact Section ===== -->
<section id="contact" class="contact">
<div class="container" data-aos="fade-up">
<div class="section-title">
<h2>Contact</h2>
<p>Magnam dolores commodi suscipit. Necessitatibus eius consequatur ex aliquid fuga eum quidem. Sit sint consectetur velit. Quisquam quos quisquam cupiditate. Et nemo qui impedit suscipit alias ea. Quia fugiat sit in iste officiis commodi quidem hic quas.</p>
</div>
<div class="row">
<div class="col-lg-5 d-flex align-items-stretch">
<div class="info">
<div class="address">
<i class="bi bi-geo-alt"></i>
```

```
<h4>Location:</h4>
<p>A108 Adam Street, New York, NY 535022</p>
</div>

<div class="email">
<i class="bi bi-envelope"></i>
<h4>Email:</h4>
<p>info@example.com</p>
</div>

<div class="phone">
<i class="bi bi-phone"></i>
<h4>Call:</h4>
<p>+1 5589 55488 55s</p>
</div>

<iframe
src="https://www.google.com/maps/embed?pb=!1m14!1m8!1m3!1d12097.433213460943!2d-74.0062269!3d40.7101282!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x0%3A0xb89d1fe6bc499443!2sDowntown+Conference+Center!5e0!3m2!1smk!2sbgr!4v1539943755621" frameborder="0"
style="border:0; width: 100%; height: 290px;" allowfullscreen></iframe>
</div>
</div>

<div class="col-lg-7 mt-5 mt-lg-0 d-flex align-items-stretch">
<form action="forms/contact.php" method="post" role="form" class="php-email-form">
<div class="row">
<div class="form-group col-md-6">
<label for="name">Your Name</label>
<input type="text" name="name" class="form-control" id="name" required>
</div>
<div class="form-group col-md-6">
<label for="name">Your Email</label>
<input type="email" class="form-control" name="email" id="email" required>
</div>
</div>
<div class="form-group">
<label for="name">Subject</label>
<input type="text" class="form-control" name="subject" id="subject" required>
</div>
<div class="form-group">
<label for="name">Message</label>
<textarea class="form-control" name="message" rows="10" required></textarea>
</div>
<div class="my-3">
```

```
<div class="loading">Loading</div>
<div class="error-message"></div>
<div class="sent-message">Your message has been sent. Thank you!</div>
</div>
<div class="text-center"><button type="submit">Send Message</button></div>
</form>
</div>
</div>
</div>
</section><!-- End Contact Section -->
</main><!-- End #main -->
<!-- ===== Footer ===== -->
<footer id="footer">
<div class="footer-newsletter">
<div class="container">
<div class="row justify-content-center">
<div class="col-lg-6">
<h4>Join Our Newsletter</h4>
<p>Tamen quem nulla quae legam multos aute sint culpa legam noster magna</p>
<form action="" method="post">
<input type="email" name="email"><input type="submit" value="Subscribe">
</form>
</div>
</div>
</div>
</div>
<div class="footer-top">
<div class="container">
<div class="row">
<div class="col-lg-3 col-md-6 footer-contact">
<h3>Arsha</h3>
<p>
A108 Adam Street <br>
New York, NY 535022<br>
United States <br><br>
<strong>Phone:</strong> +1 5589 55488 55<br>
<strong>Email:</strong> info@example.com<br>
</p>
</div>
<div class="col-lg-3 col-md-6 footer-links">
```

```
<h4>Useful Links</h4>
<ul>
<li><i class="bx bx-chevron-right"></i> <a href="#">Home</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">About us</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Services</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Terms of service</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Privacy policy</a></li>
</ul>
</div>

<div class="col-lg-3 col-md-6 footer-links">
<h4>Our Services</h4>
<ul>
<li><i class="bx bx-chevron-right"></i> <a href="#">Web Design</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Web Development</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Product Management</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Marketing</a></li>
<li><i class="bx bx-chevron-right"></i> <a href="#">Graphic Design</a></li>
</ul>
</div>

<div class="col-lg-3 col-md-6 footer-links">
<h4>Our Social Networks</h4>
<p>Cras fermentum odio eu feugiat lide par naso tierra videa magna derita valies</p>
<div class="social-links mt-3">
<a href="#" class="twitter"><i class="bx bxl-twitter"></i></a>
<a href="#" class="facebook"><i class="bx bxl-facebook"></i></a>
<a href="#" class="instagram"><i class="bx bxl-instagram"></i></a>
<a href="#" class="google-plus"><i class="bx bxl-skype"></i></a>
<a href="#" class="linkedin"><i class="bx bxl-linkedin"></i></a>
</div>
</div>
</div>
</div>
</div>
</div>

<div class="container footer-bottom clearfix">
<div class="copyright">
&copy; Copyright <strong><span>Arsha</span></strong>. All Rights Reserved
</div>
<div class="credits">
<!-- All the links in the footer should remain intact. -->
<!-- You can delete the links only if you purchased the pro version. -->
<!-- Licensing information: https://bootstrapmade.com/license/ -->

```

```
<!-- Purchase the pro version with working PHP/AJAX contact form:  
https://bootstrapmade.com/arsha-free-bootstrap-html-template-corporate/ -->  
Designed by <a href="https://bootstrapmade.com/">BootstrapMade</a>  
</div>  
</div>  
</footer><!-- End Footer -->  
<div id="preloader"></div>  
<a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i class="bi bi-arrow-up-short"></i></a>  
<!-- Vendor JS Files -->  
<script src="assets/vendor/aos/aos.js"></script>  
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>  
<script src="assets/vendor/glightbox/js/glightbox.min.js"></script>  
<script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>  
<script src="assets/vendor/swiper/swiper-bundle.min.js"></script>  
<script src="assets/vendor/waypoints/noframework.waypoints.js"></script>  
<script src="assets/vendor/php-email-form/validate.js"></script>  
<!-- Template Main JS File -->  
<script src="assets/js/main.js"></script>  
</body>  
</html>
```