# PROJECT REPORT

#### I. INTRODUCTION

#### 1.1. OVERVIEW

# TITLE – Tracing the Growth of the Global

**Community: A population forecasting Analysis.** This Analysis is all about Population Forecasting. Population Forecasting is a method to predict the future Population of an Area. With the help of this analysis, we can able to solve or ready with problem solving measures to overcome Water scarcity, Ecological degradation, Food and more. The rate of industrialization and its effects on population growth is perhaps the most important relationship. In this Project we are collecting the dataset from UNSD (United Nation Statistics Division) and preparing that data for Visualization using Tableau Public. Actually this prepared data with Visualization will help us to easily understandable the data and also we gain some insights into our analysis. We are preparing the data visualizations by many types i.e. Population records over the countries, over the Years, over the years by sex, over the cities with highest average population, and over the cities. Also we are preparing the dashboard to display the information and data in an easy to read type. It is mainly used to track the key performance indicators in the form of Charts and Graphs. Also we are preparing the Data story to present the data and information in a narrative Format. As it will be more engaging and easier to understand i.e. only Key findings and highlights are summarized in a format.

#### 1.2. PURPOSE

Forecasting helps to set goals and plan ahead, having accurate data and statistics to analyse helps businesses to decide what amount of change, growth or improvement will be determined as a success. By having these goals, companies can better evaluate progress. Government will be ready to face population regarding problems it may be a Financial Risk, water scarcity, Food, Natural calamities and more. With the Help of this we can analyse our data sets and be prepared for everything.

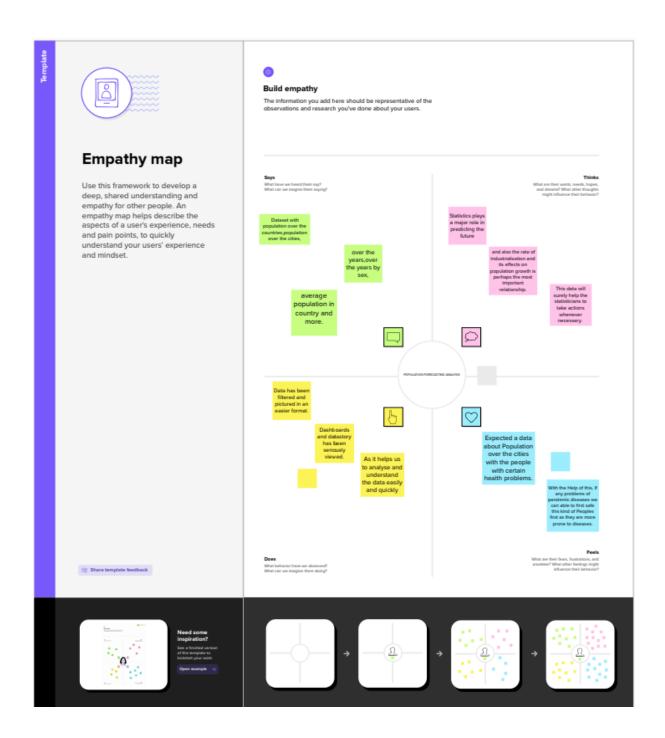
# 2. Problem Definition & Design Thinking

#### 2.1. EMPATHY MAP

An empathy map is a collaborative tool teams can use to gain a deeper insight into their customers.

Much like a user persona, an empathy map can represent a group of users, such as a customer segment.

The empathy map was originally created by Dave Grey and has gained much popularity within the agile community.



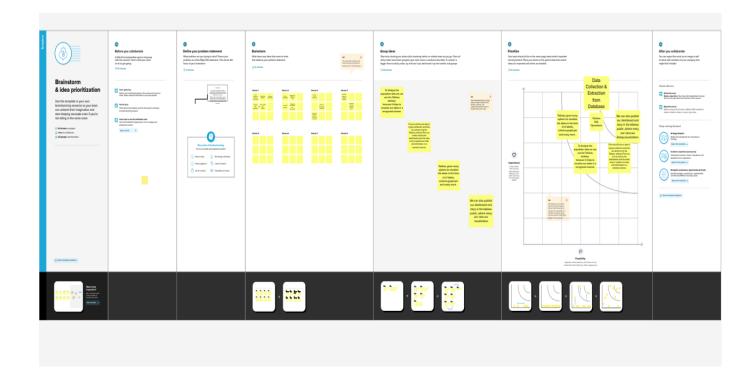
# 2.2. Ideation and Brainstorming Map

Brainstorming is a strategy used to generate a number of ideas to help solve a particular problem.

The technique has been around for over 70 years and is still used today to engage students in solving a range of problems.

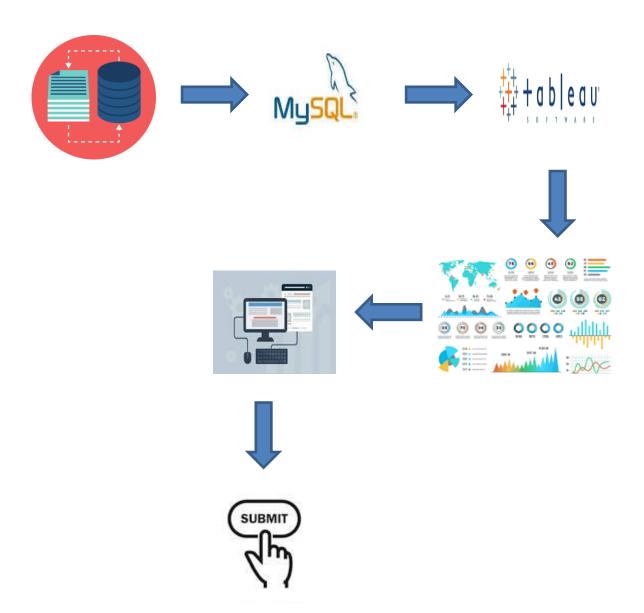
Techniques vary but there is a general structure to follow when developing brainstorming sessions.

Brainstorming allows students to think critically about ideas and solutions, form connections, and share ideas with peers

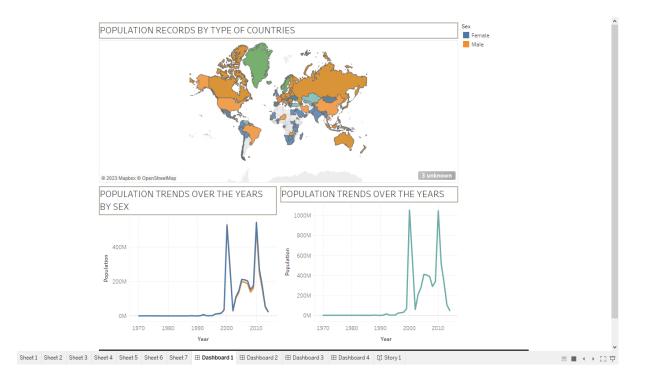


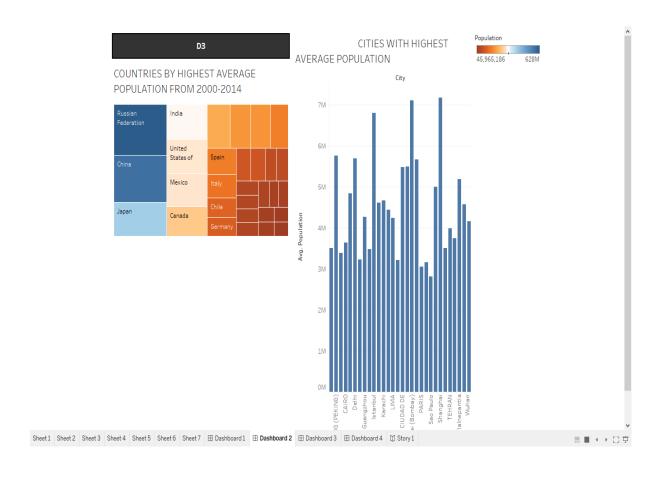
## 3.RESULT

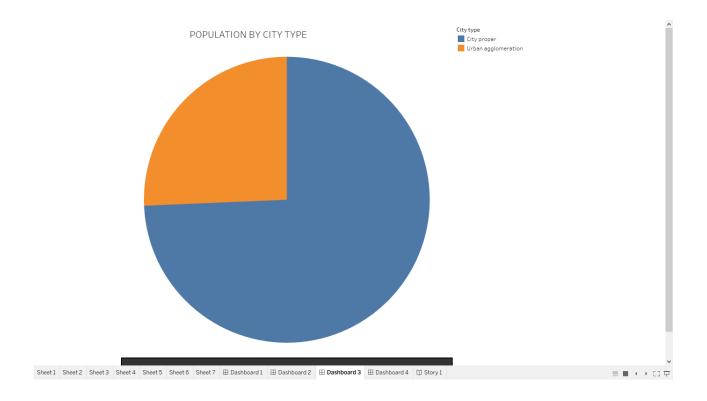
## 3.1 DATA MODEL

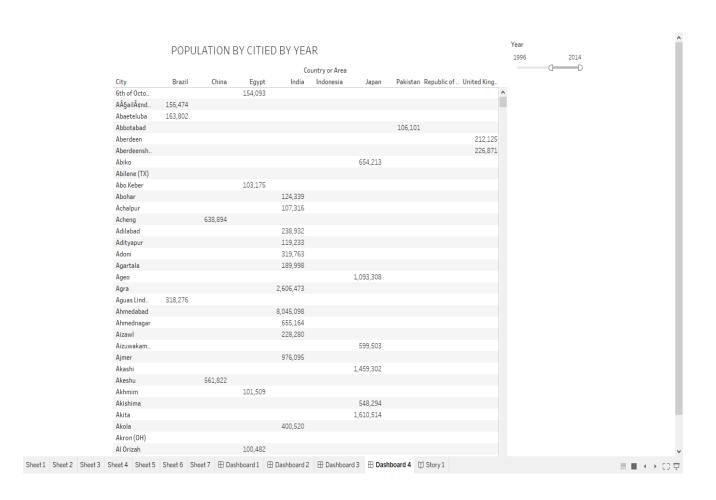


We prepared the dashboard to display the information and data in an easy to read type. It is mainly used to track the key performance indicators in the form of Charts and Graphs.



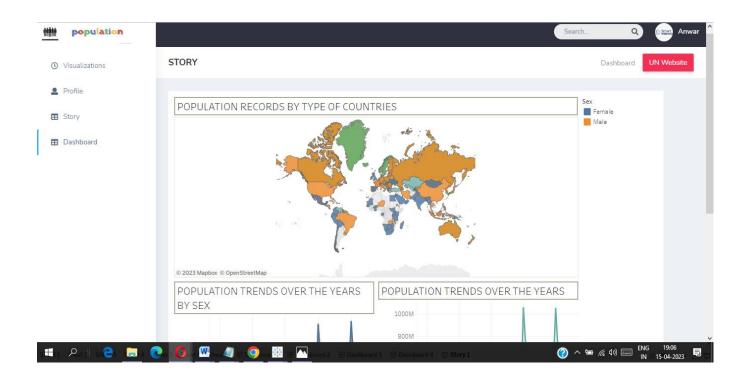


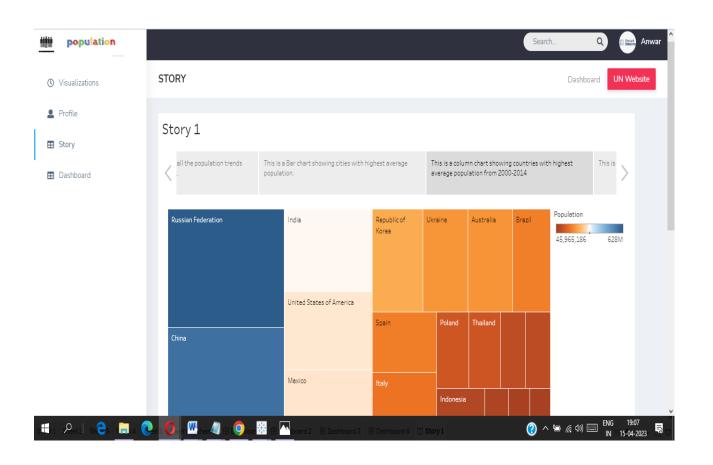




# The Data story to present the data and information in a narrative Format. As it will be more engaging and easier







# 4. Advantages & Disadvantages

# 4.1. Advantages

Population projection gives a picture of what the future size and structure of the population by sex and age might look like.

It is based on knowledge of the past trends, and, for the future, on assumptions made for three components: fertility, mortality and migration.

Estimate the basic need for human, such as demand for food, water, power, transportations.

Plan constructions such as housing, highways etc.

Estimate the labour forces in various places.

Estimate the potential consumptions in various regions

You can make reliable estimates of the population with less time, effort, and money

# Disadvantages

First and foremost it needs More Man Power and Money to first Analyse the Population and takes more time to calculate the total population.

Every country started calculating the Total number of peoples residing in the country by taking census accordingly, this process takes more time.

The reliability of projections decreases over time, and projections tend to be less reliable in periods of rapid change.

Projections for areas with small populations tend to be less reliable than those for areas with large populations.

Cost to the environment. Population growth exacerbates many of the existing environmental problems like Congestion. Too many people in a small space will lead to various types of congestion, Water shortages, and Generating unsustainable waste.

#### 5. APPLICATIONS

Population analysis is needed to identify problems and community needs, establish goals and objectives, assess alternative courses of action, allocate resources for plan implementation, and evaluate the ability of the plan to achieve goals and objectives.

By using this dataset one can easily understand the data's because it is Tough to Understand. So we are using Tableau desktop to visualize our Data and give some story, dashboard to be user friendly.

To provide an estimate of the future population as a common framework for use in planning, policy formation and decision making in a number of different fields.

#### 6. CONCLUSION

By this Project One can Easily Understand the Dataset because we are showing the Data in the form of Charts, Graphs, Columns, Trees and more in the field of Tableau desktop in Dashboard and Story.

With the Help of this data we can sort out many problems it may be Pandemic diseases, Water scarcity, Food, Financial problems in the country and major Population Problems and also some environmental Problems.

#### 7. FUTURE SCOPE

In this dataset, there is no data of number of patients or Number of senior citizens and Number of persons who are diabetes. If these data's are available then it is easy to identify the persons or cities when any serious pandemic disease spread over the country. They are very prone to such diseases because they have less natural Immunity to handle that disease. So It will be very helpful to the government to safe them first if needed.

Next time I will add the persons with Diabetes over the years, Persons with cancer over the years. Just Because It will be more helpful to everyone out there.

### 8. APPENDIX

Source HTML Code for Web application.

```
<!DOCTYPE html>
<html dir="ltr" lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <!-- Tell the browser to be responsive to screen width -->
  <meta name="viewport" content="width=device-width,</pre>
initial-scale=1">
  <meta name="keywords"
    content="wrappixel, admin dashboard, html css
dashboard, web dashboard, bootstrap 5 admin, bootstrap 5,
css3 dashboard, bootstrap 5 dashboard, Ample lite admin
bootstrap 5 dashboard, frontend, responsive bootstrap 5
admin template, Ample admin lite dashboard bootstrap 5
dashboard template">
  <meta name="description"
    content="Ample Admin Lite is powerful and clean admin
dashboard template, inpired from Bootstrap Framework">
```

<meta name="robots" content="noindex,nofollow">

<title>Global Population Timseries Analysis</title>

```
<link rel="canonical"</pre>
href="https://www.wrappixel.com/templates/ample-admin-
lite/" />
  <!-- Favicon icon -->
  <link rel="icon" type="image/png" sizes="16x16"</pre>
href="plugins/images/favicon.png">
  <!-- Custom CSS -->
 <link href="css/style.min.css" rel="stylesheet">
  <!-- HTML5 Shim and Respond.js IE8 support of HTML5
elements and media queries -->
  <!-- WARNING: Respond.js doesn't work if you view the
page via file:// -->
  <!--[if It IE 9]>
  <script
src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv
.js"></script>
  <script
src="https://oss.maxcdn.com/libs/respond.js/1.4.2/respond.
min.js"></script>
<![endif]-->
</head>
```

```
<body>
 <!--
______
<!-- Preloader - style you can find in spinners.css -->
 <!--
______
<div class="preloader">
  <div class="lds-ripple">
   <div class="lds-pos"></div>
   <div class="lds-pos"></div>
  </div>
 </div>
 <!--
______
<!-- Main wrapper - style you can find in pages.scss -->
 <!--
```

<div id="main-wrapper" data-layout="vertical" datanavbarbg="skin5" data-sidebartype="full" data-sidebar-position="absolute" data-headerposition="absolute" data-boxed-layout="full"> < |--<!-- Topbar header - style you can find in pages.scss --> <!--<header class="topbar" data-navbarbg="skin5"> <nav class="navbar top-navbar navbar-expand-md" navbar-dark"> <div class="navbar-header" data-logobg="skin6"> < 1--<!-- Logo --> <1--\_\_\_\_\_\_ <a class="navbar-brand" href="dashboard.html">

```
<!-- Logo icon -->
           <b class="logo-icon">
            <!-- Dark Logo icon -->
            <img src="plugins/images/logo-icon3.jpg"</pre>
alt="homepage" />
          </b>
          <!--End Logo icon -->
           <!-- Logo text -->
           <span class="logo-text">
            <!-- dark Logo text -->
            <img src="plugins/images/logo-text5.png"</pre>
alt="homepage" />
          </span>
         </a>
         <!--
______
<!-- End Logo -->
         <!--
```

```
<!--
<!-- toggle and nav items -->
        <!--
<a class="nav-toggler waves-effect waves-light"
text-dark d-block d-md-none"
         href="javascript:void(0)"><i class="ti-menu ti-
close"></i></a>
      </div>
      <1--
<!-- End Logo -->
      <!--
______
<div class="navbar-collapse collapse"
id="navbarSupportedContent" data-navbarbg="skin5">
        ul class="navbar-nav d-none d-md-block d-lg-
none">
```

```
<a class="nav-toggler nav-link waves-effect">
waves-light text-white"
          href="javascript:void(0)"><i class="ti-menu
ti-close"></i></a>
        <!--
_____
<!-- Right side toggle and nav items -->
      <!--
ul class="navbar-nav ms-auto d-flex align-items-
center">
        <!--
______
<!-- Search -->
```

```
<!--
______
cli class=" in">
           <form role="search" class="app-search d-
none d-md-block me-3">
             <input type="text" placeholder="Search..."
class="form-control mt-0">
             <a href="" class="active">
              <i class="fa fa-search"></i>
             </a>
           </form>
         <!--
<!-- User profile and search -->
         <!--
<a class="profile-pic" href="#">
```

```
<img
src="plugins/images/users/smartinternz_thumb.png"
alt="user-img" width="36"
           class="img-circle"><span class="text-
white font-medium">Anwar</span></a>
       _____
<!-- User profile and search -->
       <!--
</div>
   </nav>
  </header>
  <!--
______
<!-- End Topbar header -->
```

```
<!--
______
<!--
______
<!-- Left Sidebar - style you can find in sidebar.scss -->
  <!--
______
<aside class="left-sidebar" data-sidebarbg="skin6">
    <!-- Sidebar scroll-->
    <div class="scroll-sidebar">
     <!-- Sidebar navigation-->
     <nav class="sidebar-nav">
      <!-- User Profile-->
        <a class="sidebar-link waves-effect waves-
dark sidebar-link" href="dashboard.html"
          aria-expanded="false">
```

```
<i class="far fa-clock" aria-
hidden="true"></i>
               <span class="hide-
menu">Visualizations</span>
             </a>
           <a class="sidebar-link waves-effect waves-
dark sidebar-link" href="profile.html"
               aria-expanded="false">
               <i class="fa fa-user" aria-
hidden="true"></i>
               <span class="hide-menu">Profile</span>
             </a>
           <a class="sidebar-link waves-effect waves-
dark sidebar-link" href="story.html"
               aria-expanded="false">
               <i class="fa fa-table" aria-
hidden="true"></i>
```

```
<span class="hide-menu">Story</span>
             </a>
           <a class="sidebar-link waves-effect waves-
dark sidebar-link" href="dash1.html"
               aria-expanded="false">
               <i class="fa fa-table" aria-
hidden="true"></i>
               <span class="hide-
menu">Dashboard</span>
             </a>
           </nav>
       <!-- End Sidebar navigation -->
     </div>
```

```
<!-- End Sidebar scroll-->
  </aside>
  <!--
______
<!-- End Left Sidebar - style you can find in sidebar.scss --
>
  <!--
<!--
______
<!-- Page wrapper -->
  <!--
_____
<div class="page-wrapper">
   <!--
<!-- Bread crumb and right sidebar toggle -->
```

```
<!--
```

<div class="page-breadcrumb bg-white"> <div class="row align-items-center"> <div class="col-lg-3 col-md-4 col-sm-4 col-xs-12"> <h4 class="page-title"> STORY</h4> </div> <div class="col-lg-9 col-sm-8 col-md-8 col-xs-12"> <div class="d-md-flex"> class="breadcrumb ms-auto"> <a href="#" class="fwnormal">Dashboard</a> <a href="https://www.un.org/development/desa/pd/" target="\_blank" class="btn btn-danger d-none d-md-block pull-right ms-3 hidden-xs hidden-sm waves-effect waves-light text-white">UN Website</a> </div>

```
</div>
    </div>
    <!-- /.col-lg-12 -->
   </div>
   <!--
<!-- End Bread crumb and right sidebar toggle -->
   <1--
______
<!--
<!-- Container fluid -->
   <!--
______
<div class="container-fluid">
    <!--
<!-- Start Page Content -->
```

<div class='tableauPlaceholder'
id='viz1674236179404' style='position: relative'>

<noscript><a href='#'>

<img class='tableauPlaceholder' id='viz1681371345149' style='position: relative'><noscript><a href='#'><img alt='Story 1' src='https://public.tableau.com/static/i mages/NM/NMUNPopulationdata1/Story1&# 47;1 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='NMUNPopulationdata1/Story1' /><param name='tabs' value='no' /><param name='toolbar' value='yes' /><param name='static image' value='https://public.tableau.com/static&#47 ;images/NM/NMUNPopulationdata1/Story1& #47;1.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('viz1681371345149');
var vizElement =
divElement.getElementsByTagName('object')[0];
vizElement.style.width='1016px';vizElement.style.height='991
             var scriptElement =
px';
document.createElement('script');
scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement,
vizElement);
                   </script>
          <param name='embed_code_version' value='3' />
          <param name='site root' value=" />
          <param name='name'</pre>
value='population story/Story1' />
          <param name='tabs' value='no' />
          <param name='toolbar' value='yes' />
          <param name='static image'</pre>
value='https://public.tableau.com/static&#47
;images/po/population_story/Story1/1.p
ng' />
```

```
<param name='animate transition' value='yes' />
           <param name='display static image' value='yes'</pre>
/>
           <param name='display spinner' value='yes' />
           <param name='display_overlay' value='yes' />
           <param name='display_count' value='yes' />
           <param name='language' value='en-US' />
           <param name='filter' value='publish=yes' />
           </object></div>
           <script type='text/javascript'>
           var divElement =
document.getElementById('viz1674236179404');
                  var vizElement =
divElement.getElementsByTagName('object')[0];
vizElement.style.width='1016px';vizElement.style.height='991
px';
                          var scriptElement =
document.createElement('script');
                             scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
```

vizElement.parentNode.insertBefore(scriptElement, vizElement);

```
</script>
  <!--
______
<!-- End PAge Content -->
  <!--
______
<!--
______
<!-- Right sidebar -->
  <!--
______
<!-- .right-sidebar -->
  <!--
______
```

```
<!-- End Right sidebar -->
   <!--
______
</div>
  <!--
______
<!-- End Container fluid -->
  <!--
_____
<!--
______
<!-- footer -->
  <!--
______
<footer class="footer text-center"> 2022 ©
Smartinternz brought to you by <a
```

```
href="https://www.thesmartbridge.com/">thesmartbridge.c
om</a>
  </footer>
  <!--
<!-- End footer -->
  <!--
</div>
 <!--
______
<!-- End Page wrapper -->
 <!--
______
</div>
<!--
_____
```

```
<!-- End Wrapper -->
 <!--
_____
<!--
<!-- All Jquery -->
 <!--
<script
src="plugins/bower_components/jquery/dist/jquery.min.js">
</script>
 <!-- Bootstrap tether Core JavaScript -->
 <script
src="bootstrap/dist/js/bootstrap.bundle.min.js"></script>
 <script src="js/app-style-switcher.js"></script>
 <!--Wave Effects -->
 <script src="js/waves.js"></script>
 <!--Menu sidebar -->
 <script src="js/sidebarmenu.js"></script>
```

```
<!--Custom JavaScript -->
<script src="js/custom.js"></script>
</body>
</html>
```