#### 1. INTRODUCTION

#### 1.1 OVERVIEW:

As the video game industry is gaining increasing popularity and attracting more and more publishers, we are interested in unveiling noticeable insights about the relationship among genre, publisher, release date and sales of different titles. To this aim, we will inspect a dataset containing a list of more than 16000 video games sold from 1980 to 2020. The dataset was generated by a scrape of vgchartz.com.

Video game sales analysis may be conducted by game developers, publishers, retailers, and other industry professionals. It is an important part of the video game industry, as it helps to understand the needs and preferences of consumers and to identify opportunities for growth and innovation.

#### **FEATURES OF DATASET**

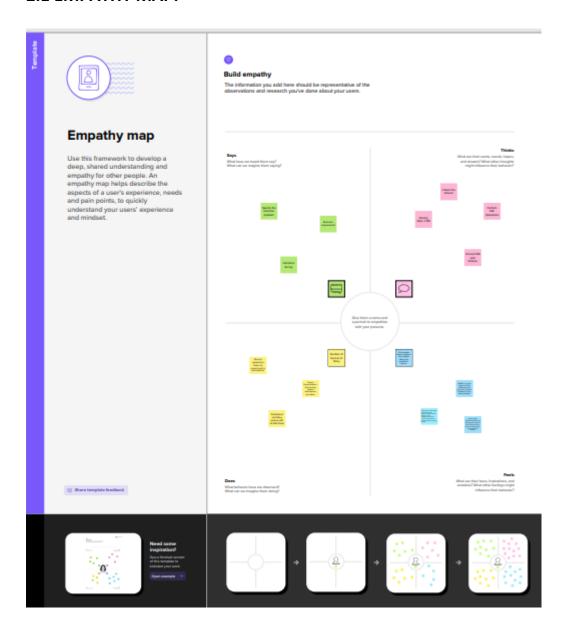
- Name The games name
- Platform Platform of the games release (i.e. PC,PS4, etc.)
- •Year Year of the game's release
- •Genre Genre of the game
- Publisher Publisher of the game
- •NA Sales Sales in North America (in millions)
- •EU Sales Sales in Europe (in millions)
- •JP Sales Sales in Japan (in millions)
- •Other Sales Sales in the rest of the world (in millions)
- •Global Sales Total worldwide sales.

#### 1.2 PURPOSE:

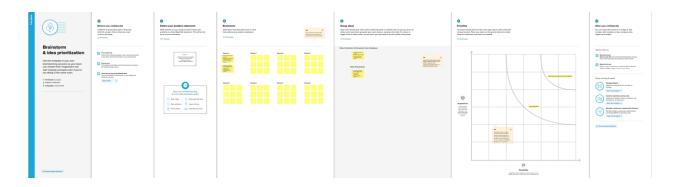
Interviews with colleges and universities, who specialize on producing a highly skilled video game workforce, that teach fundamental computer related skills, like programming and basic software technologies, note that software and technology is constantly evolving. For example, one popular technology can be obsolete within a matter of years. It is difficult, even impossible, for educational institutions to keep up with the ever-changing technologies. It would not make sense for universities to make investments into software or other technologies if they became obsolete within a short time period.

# 2. PROBLEM DEFINITION & DESIGN THINKING

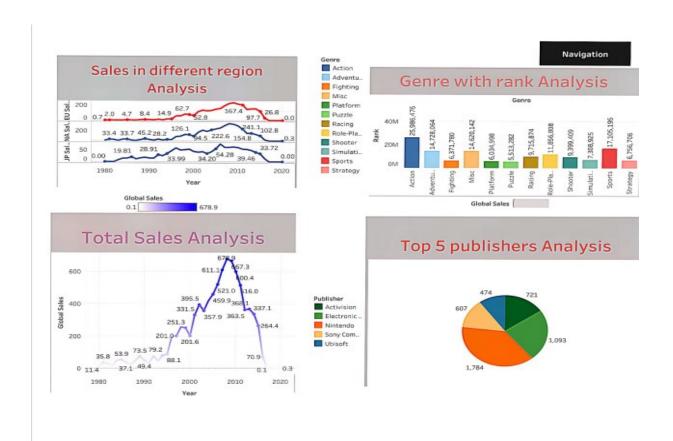
### 2.1 EMPATHY MAP:

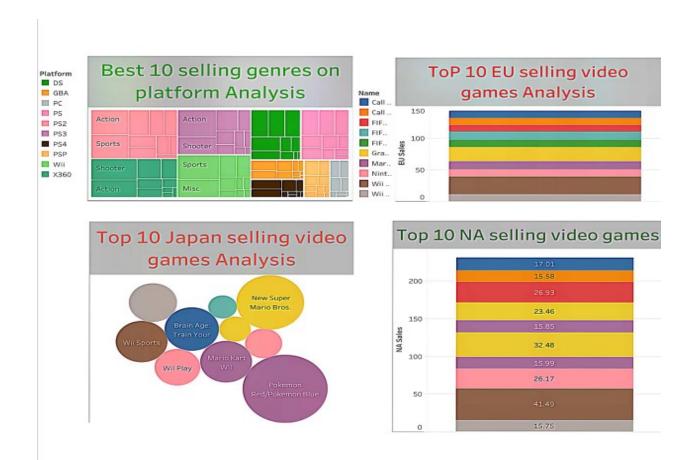


### 2.2 IDEATION & BRAINSTORMING MAP:



# 3 RESULT DASHBOARD:



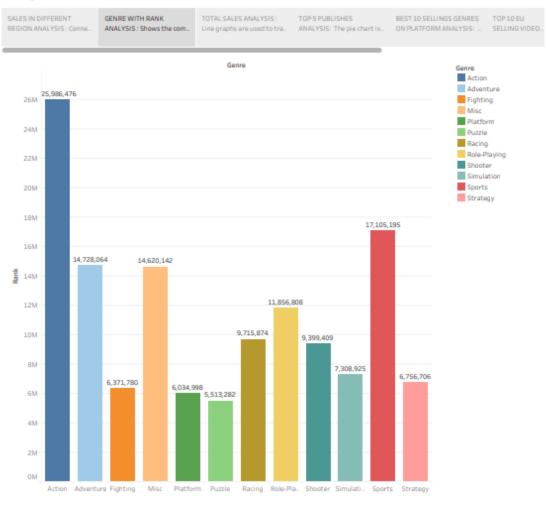


### **STORY:**

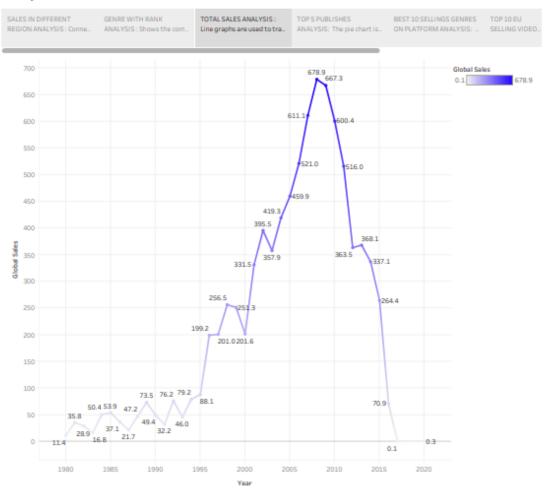
Story 1



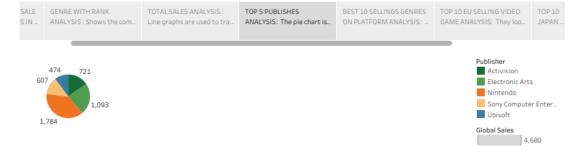
Story 1





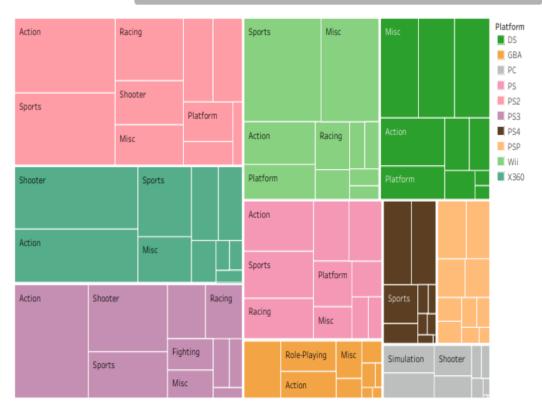


#### Story 1

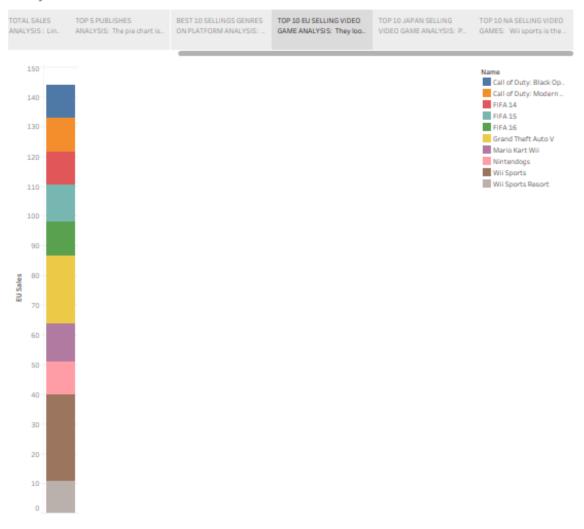


Story 1

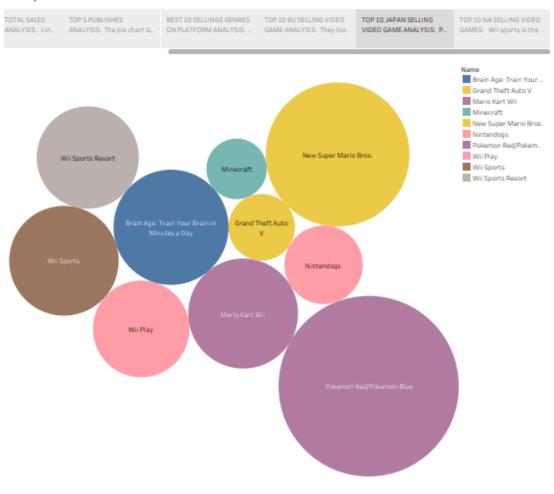




## Story 1



Story 1







# 4 ADVANTAGES & DISADVANTAGES ADVANTAGES:

The video game industry requires its workforce to not only have technical skills but also strong communication skills, either verbally and written. What the results indicate is that each cluster conducts a considerable amount of critical thinking in problem solving from the design, engineering, sound, and business side of product development.

Being able to communicate ideas to other departments in the creation of the video game is essential to the competitive advantage of the product. In the

production phase, this translates into the quality assurance and testing of the product to see what flaws or weaks needed to make a professional product.

Translating the design of a game from conception, blueprint, and into the programming and vice versa requires, as the research shows, establishing and maintaining strong interpersonal relationships.

#### **DISADVANTAGES:**

The industry grappled with varied headwinds ranging from worsening macroeconomic conditions, a post-pandemic softening in demand, ongoing supply issues, changes in the mobile privacy framework and a significantly increased legal and regulatory focus.

The problem statement is a simple way of asking what the designer or team is trying to do with the game.

By identifying the design problem you are looking to solve, you eliminate situations in which you are simply copying the work of others and making something dull and uninspired.

#### **5 APPLICATION:**

The video game industry comprises a wide variety of occupations that have obvious differences but combined together, their respective skills and knowledge create one marketable product for the consumers. One barrier of entry to the game industry is having a strong knowledge of computer and technological experience. The research has shown communication as a strength within the video game industry, less so with the public but more so with relating with other team members within a company.

#### 6 CONCLUSION

We have consolidated our understanding of the video game industry by conducting an exploratory data analysis of the Kaggle Dataset. We have found interesting patterns between \*Genre\*, \*Publisher\* and \*Platform\* of the most popular and top-released and top-selling titles. The video game industry is a multifaceted industry, collecting a number of different talents and skills that ultimately produce a product for public consumption. This industry is heavily rooted in the knowledge of computer and technology related material. From this research, the video game industry also includes talented individuals in business and from the audio and visual arts. Since this industry has a diverse workforce, this research has shown communication when working in a teamwork

environment is important to be successful in the video game business. Also self-learning, the ability to teach yourself new and innovative technologies is important to solve complex problems within the industry.

#### **7 FUTURE SCOPE**

To separate the different domains of the video game industry, the career guidebook published by Prima Games became useful to categorize these occupations. The guidebook separated job types by focusing on sound, design, programming/engineering, and testing/quality assurance. The sound design field included concentrations in music and sound effects for video games. The design aspect included artistic abilities mainly in computer graphic design. The programming and engineering type focused on the technical capabilities between the interaction of a user and the video game program. The testing and quality assurance concentration, centers on the individuals testing the product to ensure there were no flaws in how the product runs. Following those guidelines, I reclassified each job title into one of four categories, with similar titles except for testing and quality assurance.

- Audio
- Design
- Programming/Engineering
- Production

# 8 APPENDIX A.SOURCE CODE:

```
<!DOCTYPE html>
<html lang="en">

<head>
<meta charset="utf-8">
<meta content="width=device-width, initial-scale=1.0" name="viewport">

<title>Uncovering Gaming Industry Bootstrap Template - Index</title>
<meta content="" name="description">
<meta content="" name="keywords">

<!-- Favicons -->
```

```
<link href="assets/img/favicon.png" rel="icon">
 <link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
 <!-- Google Fonts -->
 k
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:300,30
0i,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">
 k 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: Uncovering Gaming Industry
 * 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">Uncovering Gaming
Industry</a></h1>
   <!-- Uncomment below if you prefer to use an image logo -->
   <!-- <a href="index.html" class="logo me-auto"><img
src="assets/img/logo.png" alt="" class="img-fluid"></a>-->
   <nav id="navbar" class="navbar">
    ul>
     <a class="nav-link scrollto active" href="#hero">Home</a>
     <a class="nav-link scrollto" href="#about">About</a>
     <a class="nav-link scrollto" href="#analysis dashboard">Analysis</a>
Dashboard</a>
     <a class="nav-link scrollto" href="#Analysis Story">Analysis</a>
Story</a>
  </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"</p>
order-2 order-lg-1" data-aos="fade-up" data-aos-delay="200">
     <h1>Uncovering Gaming Industry</h1>
     <div class="d-flex justify-content-center justify-content-lg-start">
      <a href="#about" class="btn-get-started scrollto">Get Started</a>
     </div>
    </div>
    <div class="col-lg-6 order-1 order-lg-2 hero-img" data-aos="zoom-in" data-
aos-delay="200">
     <img src="assets/img/hero-img.png" class="img-fluid animated" alt="">
    </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">
      >
       The video game industry has grown from niche to mainstream. As of July
2018, video games generated US$134.9 billion annually in global sales. In the US,
the industry earned about $9.5 billion in 2007, $11.7 billion in 2008, and US$25.1
billion in 2010, according to the ESA annual report
      ul>
       <i class="ri-check-double-line"></i> Over one third of the world's
population are active gamers.
       <i class="ri-check-double-line"></i> China and the US dominate the
gaming market.
       <i class="ri-check-double-line"></i> Most US game purchases are now
made digitally.
      </div>
     <div class="col-lg-6 pt-4 pt-lg-0">
       Global Esports audiences are set to rise above half a billion by 2024.
      </div>
    </div>
```

```
</div>
  </section><!-- End About Us Section -->
  <!-- ===== Frequently Asked Questions Section ====== -->
  <section id="faq" class="faq section-bg">
   <div class="container" data-aos="fade-up">
    <div class="section-title">
     <center>Analysis Dashboard</center>
     <div class='tableauPlaceholder' id='viz1681305345606' style='position:</pre>
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src='https://public.tableau.com/static/images/Da/
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style='border: none' /></a></noscript><object class='tableauViz'
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divElement.offsetWidth > 500) {
vizElement.style.width='1700px';vizElement.style.height='827px';} else {
vizElement.style.width='100%';vizElement.style.height='1827px';} var
scriptElement = document.createElement('script'); scriptElement.src =
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```
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'https://public.tableau.com/javascripts/api/viz v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>
       </div>
    <div class="faq-list">
     ul>
        </div>
      </div>
```

```
</div>
  </section><!-- End Frequently Asked Questions Section -->
 <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>
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</html><!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="utf-8">
 <meta content="width=device-width, initial-scale=1.0" name="viewport">
 <title>Uncovering Gaming Industry Bootstrap Template - Index</title>
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 <!-- Favicons -->
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 <!-- Google Fonts -->
```

```
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Industry</a></h1>
   <!-- Uncomment below if you prefer to use an image logo -->
```

k

```
<!-- <a href="index.html" class="logo me-auto"><img
src="assets/img/logo.png" alt="" class="img-fluid"></a>-->
   <nav id="navbar" class="navbar">
    ul>
     <a class="nav-link scrollto active" href="#hero">Home</a>
     <a class="nav-link scrollto" href="#about">About</a>
     <a class="nav-link scrollto" href="#analysis dashboard">Analysis</a>
Dashboard</a>
     <a class="nav-link scrollto" href="#Analysis Story">Analysis</a>
Story</a>
  </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</pre>
order-2 order-lg-1" data-aos="fade-up" data-aos-delay="200">
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     </div>
    </div>
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    </div>
   </div>
  </div>
 </section><!-- End Hero -->
```

```
<main id="main">
  <!-- ===== About Us Section ====== -->
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   <div class="container" data-aos="fade-up">
    <div class="section-title">
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    </div>
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     <div class="col-lg-6">
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2018, video games generated US$134.9 billion annually in global sales. In the US,
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population are active gamers.
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gaming market.
       <i class="ri-check-double-line"></i> Most US game purchases are now
made digitally.
      </div>
     <div class="col-lg-6 pt-4 pt-lg-0">
       Global Esports audiences are set to rise above half a billion by 2024.
      </div>
    </div>
   </div>
  </section><!-- End About Us Section -->
```

```
<!-- ===== Frequently Asked Questions Section ====== -->
  <section id="faq" class="faq section-bg">
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value='yes' /><param name='display overlay' value='yes' /><param
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) { vizElement.style.width='1700px';vizElement.style.height='827px';} else if (
divElement.offsetWidth > 500) {
vizElement.style.width='1700px';vizElement.style.height='827px';} else {
vizElement.style.width='100%';vizElement.style.height='1827px';} var
scriptElement = document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>
     <center>Analysis Story</center>
     <div class='tableauPlaceholder' id='viz1681298619832' style='position:</pre>
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ory8_16809585314060/Story1/1_rss.png' style='border: none'
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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('viz1681298619832'); var vizElement =
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'https://public.tableau.com/javascripts/api/viz v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>
       </div>
    <div class="faq-list">
     ul>
        </div>
      </div>
   </div>
  </section><!-- End Frequently Asked Questions Section -->
 <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>

```
<!-- 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/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>
```