

## WebProg2 – GPU Shop – Uroš Radulović 98/19

### Uvod

Korisćeni programski jezici

HTML, CSS, JavaScript. Korisćen je jQuery za AJAX zahteve i Bootstrap za dizajn.

Opis funkcijonalnost:

Navigacija i footer na svakoj stranici su dinamički generisani pomoću JS-a.

Korisnik na homepage-u vidi proizvode dinamički ispisani iz JSON fajla pozvanog preko AJAX-a. Iznad toga korisnik može da vidi opcije za filtriranje i sortiranje proizvoda. Checkbox-ovi za sortiranje po tipovima su takođe dinamički ispisani.

Klikom na dugme 'Add to Cart' proizvod se dodaje u localStorage. Ako ovo nije moguće prikazuje se greska. Takođe ako dođe do problema sa učitavanjem JSON fajla ispisuje se greška.

Odlaskom na stranicu 'Cart' korisniku se ispisuju svi proizvode koje je dodao u korpu i njihova količina. Takođe mu se daje opcija da isprazni korpu klikom na dugme 'Empty Cart'.

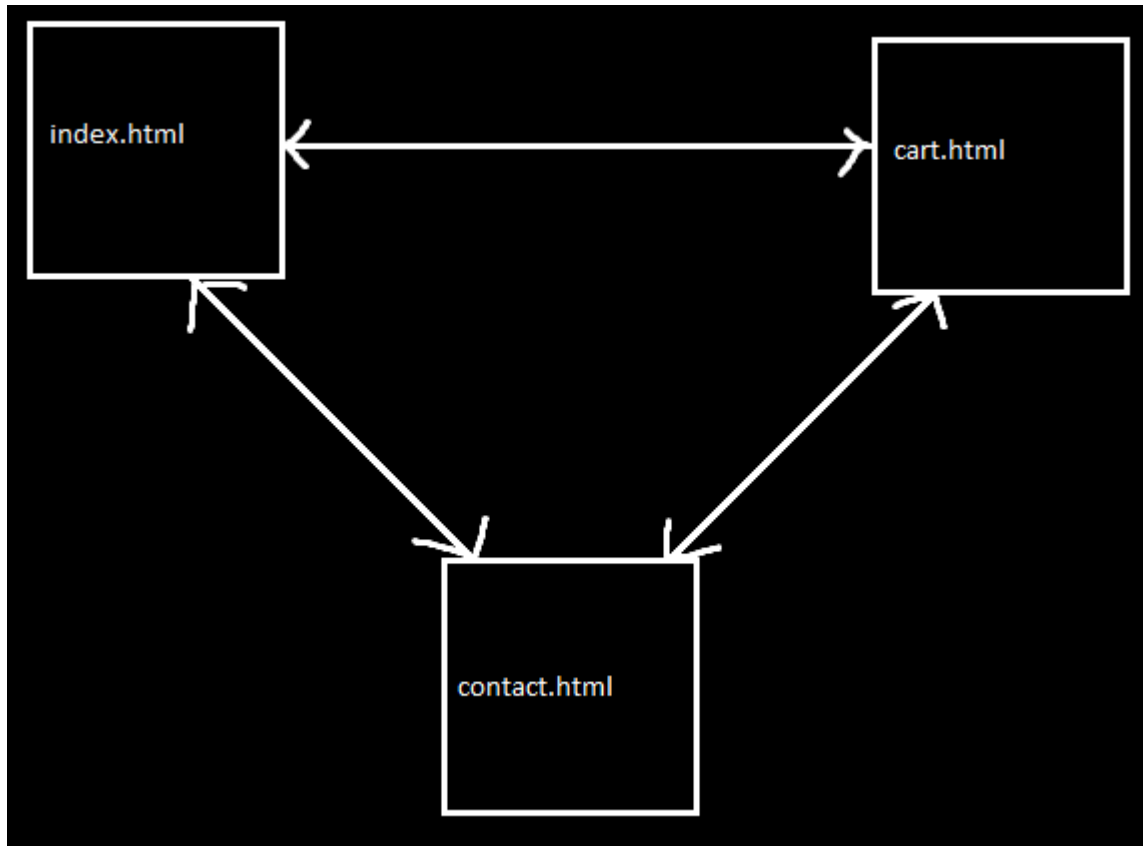
Odlaskom na stranicu 'Contact' korisnik može da pošalje poruku. Email se validira pomoću regEx-a. Polje za poruku ima maksimalni unos od 200 karaktera. U slučaju da forma nije popunjena pravilno to se ispisuje korisniku.

Template

Template nije korišćen.

## Organizacija

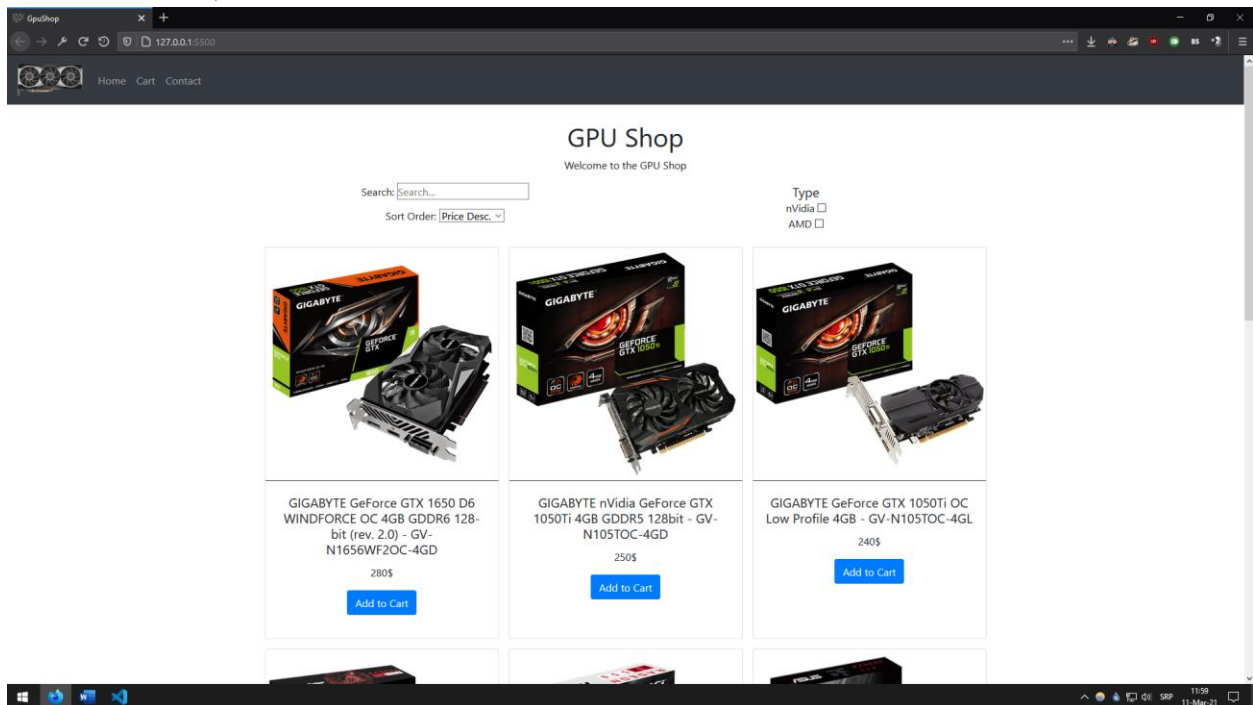
### Organizaciona šema



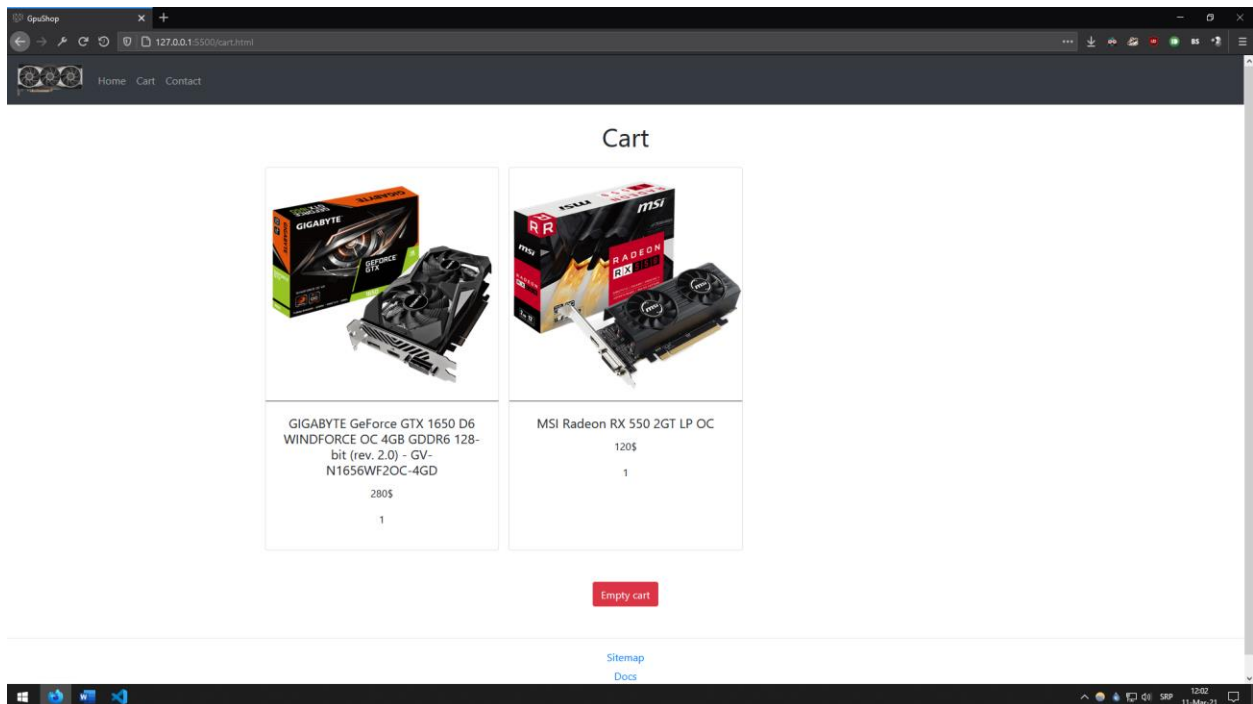
### Mapa Sajta

```
<url>
  <loc>https://nanibyte.github.io/gpu-shop-js/index.html</loc>
  <lastmod>2021-03-10T22:04:13+00:00</lastmod>
</url>
<url>
  <loc>https://nanibyte.github.io/gpu-shop-js/cart.html</loc>
  <lastmod>2021-03-10T22:04:13+00:00</lastmod>
</url>
<url>
  <loc>https://nanibyte.github.io/gpu-shop-js/contact.html</loc>
  <lastmod>2021-03-10T22:04:13+00:00</lastmod>
</url>
```

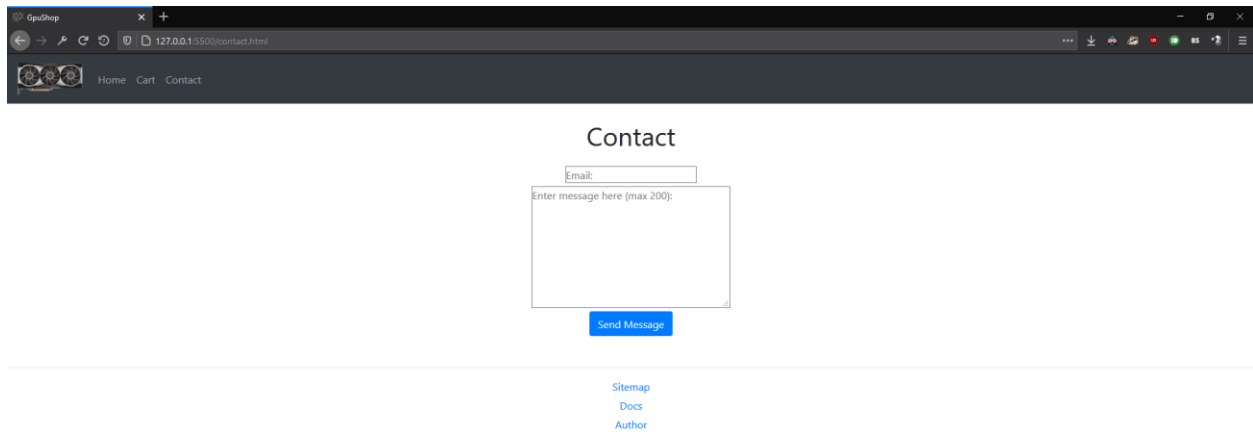
## Slike stranica i opis funkcionalnosti



Glavna stranica sajta ima dinamički generisane proizvode. Moguće je filtrirati i sortirati korz proizvode gde su type checkbox-ovi dinamički generisani. Klikom na dugme 'Add to Cart' proizvod se dodaje u localStorage. Ako ovo nije moguće prikazuje se greska. Takođe ako dođe do problema sa učitavanjem JSON fajla ispisuje se greška.



Na stranici 'Cart' korisniku se ispisuju svi porizvote koje je dodao u korpu I njihova količina Takođe mu se daje opcija da isprazni korpu klikom na dugme 'Empty Cart'.



Na stranici 'Contact' korisnik moze da posalje poruku. Email se validira pomoću regEx-a. Polje za poruku ima maksimali unos od 200 karaktera. U slučaju da forma nije popunjena pravilno to se ispisuje korisniku.

## Code

<https://github.com/NaniByte/gpu-shop-js>

## Style.css

```
* {
  margin: 0;
  padding: 0;
}

body {
  text-align: center;
}

.navbar-nav li a {
  transition: 0.3s;
}

.navbar-nav li a:hover {
  color: gray;
}
```

```

}

.gridCenter {
  display: grid;
  justify-items: center;
  gap: 5px;
}

.about__img {
  width: 500px;
}

.filter__container-inner {
  display: grid;
  grid-template-columns: 1fr 1fr;
  grid-template-columns: 1fr 1fr;
  align-items: center;
  justify-items: center;
}

.filter label,
.filter h5 {
  margin: 0;
}

.products {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  gap: 15px;
}

.products img {
  border-bottom: 1px solid #343a40;
}

@media only screen and (max-width: 767px) {
  .products {
    grid-template-columns: 1fr;
  }
}

#empty {
  grid-column: 2;
}

```

Product.json

```

[
  {
    "productID": "1",

```

```
    "name": "GIGABYTE nVidia GeForce GT 730 2GB GDDR5 64bit - GV-N730D5-2GL",
    "type": "nVidia",
    "price": "100",
    "img": "assets\\img\\product\\gpu1.png"
  },
  {
    "productID": "2",
    "name": "POWERCOLOR Radeon RX 550 4GB GDDR5 128-bit - AXRX 550 4GBD5-DH",
    "type": "AMD",
    "price": "190",
    "img": "assets\\img\\product\\gpu2.png"
  },
  {
    "productID": "3",
    "name": "MSI Radeon RX 550 2GT LP OC",
    "type": "AMD",
    "price": "120",
    "img": "assets\\img\\product\\gpu3.png"
  },
  {
    "productID": "4",
    "name": "ASUS Phoenix Radeon 550 2GB GDDR5 64-bit - PH-550-2G",
    "type": "AMD",
    "price": "110",
    "img": "assets\\img\\product\\gpu4.png"
  },
  {
    "productID": "5",
    "name": "GIGABYTE GeForce GTX 1650 D6 WINDFORCE OC 4GB GDDR6 128-bit (rev. 2.0) - GV-N1656WF20C-4GD",
    "type": "nVidia",
    "price": "280",
    "img": "assets\\img\\product\\gpu5.png"
  },
  {
    "productID": "6",
    "name": "GIGABYTE nVidia GeForce GTX 1050Ti 4GB GDDR5 128bit - GV-N105T0C-4GD",
    "type": "nVidia",
    "price": "250",
    "img": "assets\\img\\product\\gpu6.png"
  },
  {
    "productID": "7",
    "name": "GIGABYTE GeForce GTX 1050Ti OC Low Profile 4GB - GV-N105T0C-4GL",
```

```

    "type": "nVidia",
    "price": "240",
    "img": "assets\\img\\product\\gpu7.png"
  }
]

```

Cart.json

```

const root = document.querySelector(".products")
const cartItems = []

$.ajax({
  url: "./assets/data/product.json",
  dataType: "json",
  success: function (data) {
    window["productData"] = data
    for (let index = 0; index < localStorage.length; index++) {
      const productID = localStorage.key(index)
      cartItems.push([productID, localStorage.getItem(productID)])
    }
    genProductMarkup()
  },
})

function genProductMarkup() {
  root.innerHTML = ""
  if (!cartItems.length) {
    root.innerHTML = "<p id='empty'>Cart is empty.</p>"
  }

  cartItems.forEach(cartItem => {
    const item = productData.find(itemData => itemData.productID == cartItem[0])
    let markup = `
      <div class="card">
        
        <div class="card-body">
          <h5 class="card-title">${item.name}</h5>
          <p class="card-text">${item.price}</p>
          <p>${cartItem[1]}</p>
        </div>
      </div>
    `
    root.innerHTML += markup
  })
}

```

```
document.querySelector("#clear").addEventListener("click", () => {
  localStorage.clear()
  root.innerHTML = "<p id='empty'>Cart is empty.</p>"
})
```

Contact.js

```
const form = document.querySelector("#form")
form.addEventListener("submit", e => validate(e))

function showMsg(text, type = 0) {
  const msg = document.getElementById("msg")
  msg.innerText = text

  msg.classList = ""
  msg.classList.add(type ? "bg-success" : "bg-danger")
}

let errCount = 0
function validate(event) {
  event.preventDefault()

  const email = document.querySelector("#email").value
  const textLength = document.querySelector("#text").value.length

  const emailRegex = /^[^@\s]+@[^@\s\.]+\.[^@\.\s]+$/
  if (!emailRegex.test(email)) {
    showMsg("Invalid email address!")
    errCount++
  }
  if (textLength > 200) {
    showMsg("Message too long! Max length is 200 characters.")
    errCount++
  }
  if (errCount == 0) showMsg("Message sent successfully!", 1)
  else errCount = 0
}
```

Markup.js

```
if (document.querySelector("#nav")) {
  const navMarkup = `
    <nav class="navbar navbar-dark bg-dark mb-4">
      <a href="index.html"></a>
```



```

        <ul class="navbar-nav mr-auto">

            <li class="nav-item">
                <a class="nav-link" href="index.html">Home</a>
            </li>
            <li class="nav-item">
                <a class="nav-link" href="cart.html">Cart</a>
            </li>
            <li class="nav-item">
                <a class="nav-link" href="contact.html">Contact</a>
            </li>

        </ul>

    </nav>
`

document.querySelector("#nav").innerHTML = navMarkup
}
if (document.querySelector("#footer")) {
    let footerMarkup = `
        <hr class="mt-5">
        <div class="gridCenter">
            <a href="sitemap.txt">Sitemap</a>
            <a download="" href="docs.pdf">Docs</a>
            <a href="author.html">Author</a>
        </div>
    `

    document.querySelector("#footer").innerHTML = footerMarkup
}

```

Script.js

```

/** Type Checkbox Generator
$.ajax({
    url: "./assets/data/product.json",
    dataType: "json",
    success: function (data) {
        const uniqueType = []
        data.forEach(element => {
            if (!uniqueType.includes(element.type)) uniqueType.push(element.type)
        })

        const root = document.querySelector("#type")
        root.innerHTML = ""
    }
})

```

```

uniqueType.forEach(type => {
  let markup = `
    <div>
      <label for="${type}">${type}</label>
      <input type="checkbox" name="type" id="${type}" value="${type}">
    </div>
  `

  root.innerHTML += markup
})
document
  .querySelectorAll("input[name='type']")
  .forEach(e => e.addEventListener("change", renderProduct))
},
error: function (error) {
  handleError(error)
},
})

/* Search and Filter functionality */
$.ajax({
  url: "./assets/data/product.json",
  dataType: "json",
  success: function (data) {
    window["productData"] = data
    renderProduct()
  },
})

function handleError(error) {
  const errMarkup = `
    <h2 class="text-danger mt-5">Sorry! Our servers seem to be down at the moment. Try again later.</h2>
    <p class="small">${error.responseText}</p>
  `

  document.querySelector("#main").innerHTML = errMarkup
}

function renderProduct() {
  let filterData = productData

  filterData = searchFilter(filterData)
  filterData = orderSort(filterData)
  filterData = typeFilter(filterData)
  genProductMarkup(filterData)
}

```

```

/* Filter Functions
function searchFilter(data) {
  const searchValue = document.querySelector("#search").value.toUpperCase()
  return data.filter(item => item.name.toUpperCase().includes(searchValue))
}
function orderSort(data) {
  const sortIndex = document.querySelector("#sort").selectedIndex
  if (sortIndex === 0) return data.sort((a, b) => (a.price < b.price ? 1 : -1))
  else return data.sort((a, b) => (a.price > b.price ? 1 : -1))
}
function typeFilter(data) {
  const checkedType = []
  document.querySelectorAll("input[name='type']").forEach(element => {
    if (element.checked) checkedType.push(element.value)
  })
  if (checkedType.length === 0) return data
  return data.filter(item => checkedType.includes(item.type))
}
function genProductMarkup(data) {
  const root = document.querySelector(".products")
  root.innerHTML = ""

  data.forEach(item => {
    let markup = `
    <div class="card">
      
      <div class="card-body">
        <h5 class="card-title">${item.name}</h5>
        <p class="card-text">${item.price}</p>
        <p id=${item.productID} class="addToCart btn btn-primary">Add to Cart</p>
      </div>
    </div>
    `
    root.innerHTML += markup
  })
  document
    .querySelectorAll(".addToCart")
    .forEach(e => e.addEventListener("click", addToCart))
}

function addToCart() {
  const root = document.querySelector("#msg")

  const addedProduct = productData.find(product => product.productID == this.id)

```

```

root.innerHTML = `Item: <b>${addedProduct.name}</b> - added to cart.`
root.classList.add("bg-success")
window.scrollTo(0, 0)

if (localStorage) {
  const addedProductID = addedProduct.productID
  const itemQuantity = localStorage.getItem(addedProductID)
  if (!itemQuantity) {
    localStorage.setItem(addedProductID, 1)
  } else localStorage.setItem(addedProductID, parseInt(itemQuantity, 10) + 1)
} else alert("Sorry! Local Storage is disabled and the cart cannot work.")
}

/* Event Listeners
document.querySelector("#search").addEventListener("input", renderProduct)
document.querySelector("#sort").addEventListener("change", renderProduct)

```

author.html

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>GpuShop</title>
    <meta
      name="description"
      content="GpuShop is your one stop shop for all your GPU needs."
    />
    <meta name="keywords" content="GPU, Shop, Sale" />
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.
css"
      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css?v=2" />
    <link
      rel="shortcut icon"
      href="assets/img/logo_small.png"
      type="image/x-icon"
    />

```

```

    />
</head>
<body>
  <div id="nav" class="navbar-expand"></div>
  <h1 class="mb-4">Author</h1>

  <div class="container">
    <div class="row">
      <div class="col-md d-flex justify-content-center">
        
      </div>
      <div class="col-md">
        <p class="a1" style="opacity: 1">
          Uroš Radulović - student. I am currently studying at ICT college in
          Belgrade. I like pretentious Japanese cartoons, complicated video
          games and the competitive Star Craft scene. I will hopefully become
          a full stack developer one day. I am also interested in UX design.
          Always check if the milk is in date.
        </p>
        <a
          class="btn btn-primary"
          href="https://nanibyte.github.io/portfolio_school/"
          >Portfolio</a>
        <a class="btn btn-primary" href="https://github.com/NaniByte"
          >Github</a>
        <a class="btn btn-primary" download="" href="docs.pdf">Docs</a>
      </div>
    </div>
  </div>

  <footer id="footer"></footer>

  <script src="./assets/js/jquery.js"></script>
  <script src="./assets/js/markup.js"></script>
</body>
</html>

```

Cart.html

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />

```

```

<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>GpuShop</title>
<meta
  name="description"
  content="GpuShop is your one stop shop for all your GPU needs."
/>
<meta name="keywords" content="GPU, Shop, Sale" />
<link
  rel="stylesheet"
  href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.
css"
  integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
  crossorigin="anonymous"
/>
<link rel="stylesheet" href="assets/css/style.css?v=2" />
<link
  rel="shortcut icon"
  href="assets/img/logo_small.png"
  type="image/x-icon"
/>
</head>

<body>
  <div id="nav" class="navbar-expand"></div>
  <h1 class="mb-4">Cart</h1>
  <main id="main">
    <section class="products container">
      <div class="card">
        
        <div class="card-body">
          <h5 class="card-title">
            GIGABYTE nVidia GeForce GT 730 2GB GDDR5 64bit - GV-N730D5-2GL
          </h5>
          <p class="card-text">100$</p>
          <a href="#" class="btn btn-primary">Add to Cart</a>
        </div>
      </div>
    </section>
    <button id="clear" class="btn btn-danger mt-5">Empty cart</button>
  </main>
</body>

```

```

    </main>
    <footer id="footer"></footer>
    <script src="./assets/js/jquery.js"></script>
    <script src="./assets/js/cart.js"></script>
    <script src="./assets/js/markup.js"></script>
  </body>
</html>

```

Contact.html

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>GpuShop</title>
    <meta
      name="description"
      content="GpuShop is your one stop shop for all your GPU needs."
    />
    <meta name="keywords" content="GPU, Shop, Sale" />
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.
css"
      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css?v=2" />
    <link
      rel="shortcut icon"
      href="assets/img/logo_small.png"
      type="image/x-icon"
    />
  </head>

  <body>
    <div id="nav" class="navbar-expand"></div>
    <h1 class="mb-4">Contact</h1>
    <p id="msg"></p>
    <form id="form" class="form gridCenter" action="contact.php" method="post">
      <input name="email" id="email" placeholder="Email:" />
      <textarea

```

```

        name="text"
        id="text"
        cols="30"
        rows="7"
        placeholder="Enter message here (max 200):"
    ></textarea>
    <button class="btn btn-primary" type="submit">Send Message</button>
</form>
<footer id="footer"></footer>
<script src="./assets/js/markup.js"></script>
<script src="./assets/js/contact.js"></script>
</body>
</html>

```

Index.html<!DOCTYPE html>

```

<html lang="en">
<head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>GpuShop</title>
    <meta
        name="description"
        content="GpuShop is your one stop shop for all your GPU needs."
    />
    <meta name="keywords" content="GPU, Shop, Sale" />
    <link
        rel="stylesheet"
        href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.
css"
        integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
        crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css?v=2" />
    <link
        rel="shortcut icon"
        href="assets/img/logo_small.png"
        type="image/x-icon"
    />
</head>

<body>
    <div id="nav" class="navbar-expand"></div>

```



```

<h1>GPU Shop</h1>
<p id="msg">Welcome to the GPU Shop</p>
<main id="main">
  <section class="filter mb-4">
    <div class="container filter__container-inner">
      <div>
        <label for="search">Search: </label>
        <input
          type="text"
          id="search"
          name="search"
          placeholder="Search..."
        />
      </div>
      <h5>Type</h5>
      <div>
        <label for="sort">Sort Order: </label>
        <select name="sort" id="sort">
          <option value="0">Price Desc.</option>
          <option value="1">Price Asc.</option>
        </select>
      </div>
      <div id="type">
        <div>
          <label for="nvidia">nVidia</label>
          <input type="checkbox" name="type" id="nVidia" value="nVidia" />
        </div>
        <div>
          <label for="amd">AMD</label>
          <input type="checkbox" name="type" id="AMD" value="AMD" />
        </div>
      </div>
    </div>
  </section>
  <section class="products container">
    <div class="card">
      
      <div class="card-body">
        <h5 class="card-title">
          GIGABYTE nVidia GeForce GT 730 2GB GDDR5 64bit - GV-N730D5-2GL
        </h5>
      </div>
    </div>
  </section>
</main>

```

```
        </h5>
        <p class="card-text">100$</p>
        <a href="#" class="btn btn-primary">Add to Cart</a>
    </div>
</div>
</section>
</main>

<footer id="footer"></footer>

<script src="./assets/js/jquery.js"></script>
<script src="./assets/js/markup.js"></script>
<script src="./assets/js/script.js"></script>
</body>
</html>
```