Visoka škola strukovnih studija za informacione i komunikacione tehnologije

Apple Store

Smer: Internet tehnologije

Modul: Web programiranje

Predmet: Web programiranje 2

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Sadržaj

1. Uvod

1.1 Korišćeni programski jezici/tehnologije

Za potrebe sajta korišćene su sledeće tehnologije:

- HTML 5
- CSS 3
- Bootstrap 4
- JavaScript
- jQuery
- Font awesome
- XML (sitemap)
- Visual Studio Code

Sajt je hostovan na Netlify

1.2 Opis funkcionalnosti

Funkcionalnosti sajta se mogu svrstati u sledeće kategorije:

- Dinamičko ispisivanje navigacionog menija na svim stranicama
- Klikom na bilo koji "Buy button" na pocetnoj stranici vas void do stranice store.html gde se nalaze svi proizvodi
- Kontakt forma je regulisana regularnim izrazima i vrednost koje korisnik unese u polja se klikom na dugme submit čuva u local storage-u i nakon refreshovanja stranice se u kontakt formu upisuju podaci koje je korisnik prethodno uneo.
- Nakon skrolovanja na dole na svakoj stranici ce u donjem desnom uglu pojavljuje strelica. Klikom na ovu strelicu bićete poslati na pocetak stranice.
- Na stranici sort.html svi proizvodi su dinamički učitani pozivom ajaxa I dohvatanjem fajla u kojem se nalaze svi proizvodi.

- Drop down liste su dinamički učitane na osnovu podataka koji su dohvaćeni AJAX-om I za svaki id se prikazuje u jednoj listi određeno ime proizvoda koje se nalazi pod tim id-jem.
- Odabirom stavke u drop down meniju se filtriraju proizvodi na osnovu odabrane stavke. Po učitavanju stranice su svi modeli prikazani, nakon odabira uređaja se modeli filtriraju I imaju samo opcije za tu vrstu uređaja.
- Boje koje se dostupne kod telefona su dinamički ispisane.
- Klikom na dugme "Buy" se u korpu ubacuje odabrani proizvod I preko local storage-a mu se pristupa na stranici cart.html gde se ispisuje prozivod koji je ispisan u formi – slika proizvoda, cena proizvoda I količina proizvoda. Ispod dinamički ispisanih proizvoda koje je korisnik odabrao se prikazuje ukupna cena svih izabranih proizvoda.
- Klikom na ikonicu "X" koja se nalazi levo od proizvoda, proizvod se brise i cena se izračunava shodno izbrisanom proizvodu.
- U koloni Quantity se nalaze strelice koje sluze da povećaju, odnosno smanje količinu izabranog proizvoda.
- "Total" cena se pojavljuje tek kada ima proizvoda u korpi.
- U footer sekciji se nalaze 3 linka koja vode na stranicu autor.html, sitemap I dokumentacija.

1.3 Template

Za izradu sajta nije korišćen gotov template. Ceo html i css kod je samostalno pisan.

2. Organizacija

2.1 Organizaciona šema

2.2 Mapa sajta

```
<urlset xmnls="https://www.sitemaps.org/schemas/sitemap/0.9/">
```
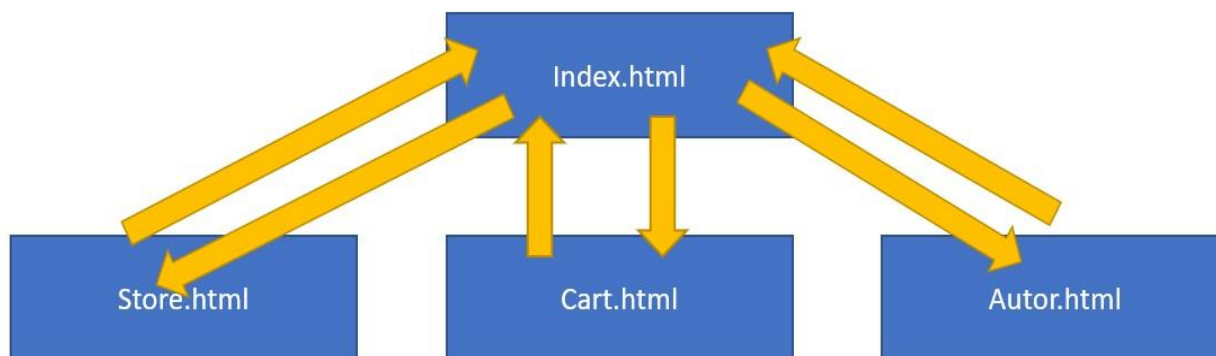
```xml
  <url>
    <loc>https://appleshopweb.netlify.app/index.html</loc>
    <lastmod>2021-3-10</lastmod>
    <changefreq>weekly</changefreq>
    <priority>0.8</priority>
  </url>
  <url>
    <loc>https://appleshopweb.netlify.app/store.html</loc>
    <lastmod>2021-3-10</lastmod>
    <changefreq>daily</changefreq>
    <priority>1.0</priority>
  </url>
  <url>
    <loc>https://appleshopweb.netlify.app/author.html</loc>
    <lastmod>2021-3-10</lastmod>
    <changefreq>monthly</changefreq>
    <priority>0.6</priority>
  </url>
  <url>
    <loc>https://appleshopweb.netlify.app/cart.html</loc>
    <lastmod>2021-3-10</lastmod>
    <changefreq>weekly</changefreq>
    <priority>0.9</priority>
  </url>
</urlset>
```

2.3 Slike odeljaka na stranici i opisi funkcionalnosti

2.3.1 index.html

Prilikom učitavanja stranice, meni se dinamički ispisuje tako sto se dohvata ajaxom fajl pod nazivom menu.json. Na kraju svake sekcije se nalazi button "Buy" koji vodi na stranicu gde se nalaze svi proizvodi (store.html).

Forma koja se nalazi na stranici index.html je regulisana regularnim izrazima. Nakon korektno unetih podataka forma će biti submitovana. Za čuvanje podataka koje korisnik unese korišćen je local storage koji omoćava da nakon refreshovanja stranice polja u formi ostanu popunjena kao sto ih je korisnik prethodno popunio.

iPad Pro
The most advanced iPad ever.

Starting at $799

Buy

Contact Us

First Name

Name must start with a capital letter

Last Name

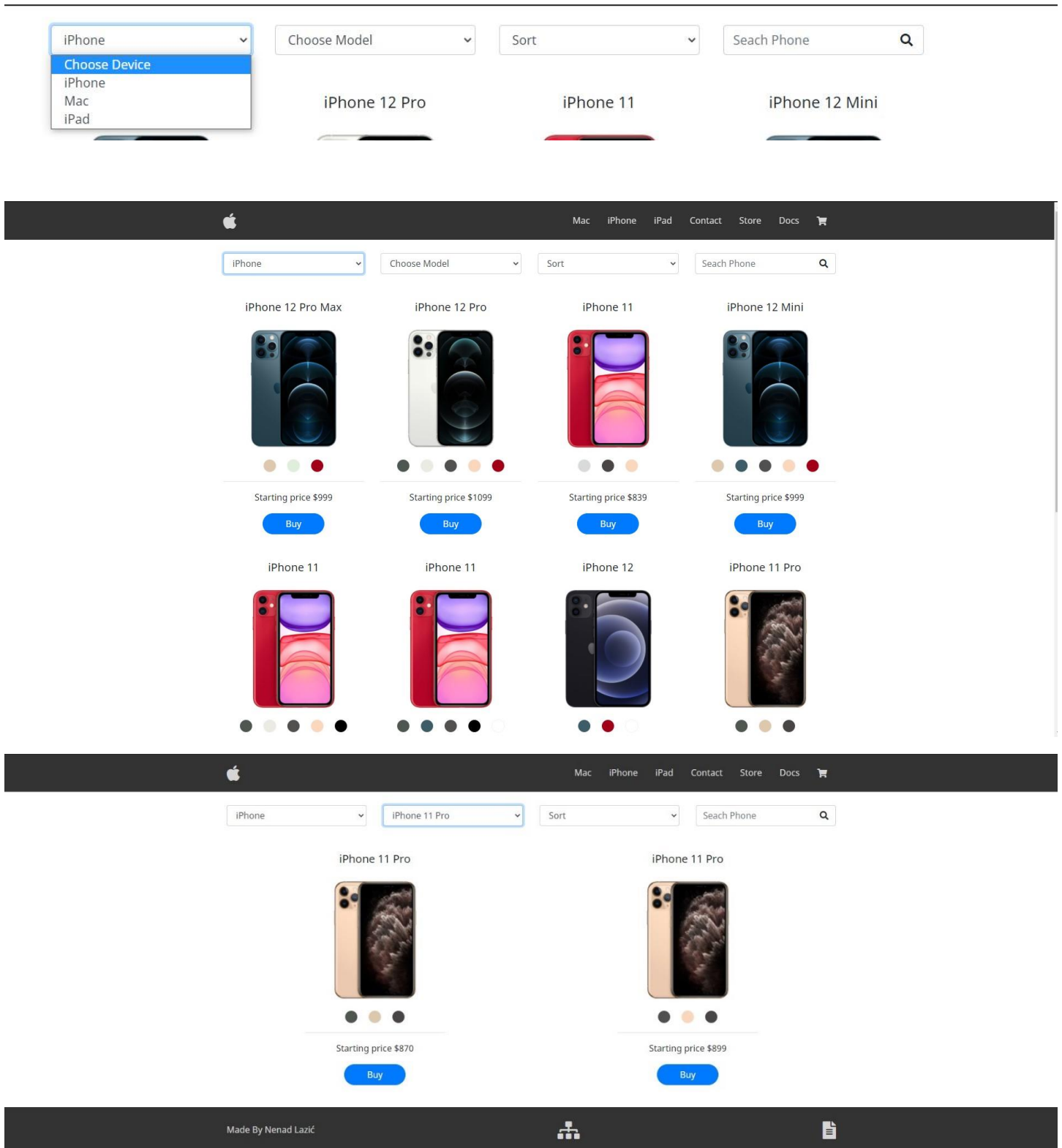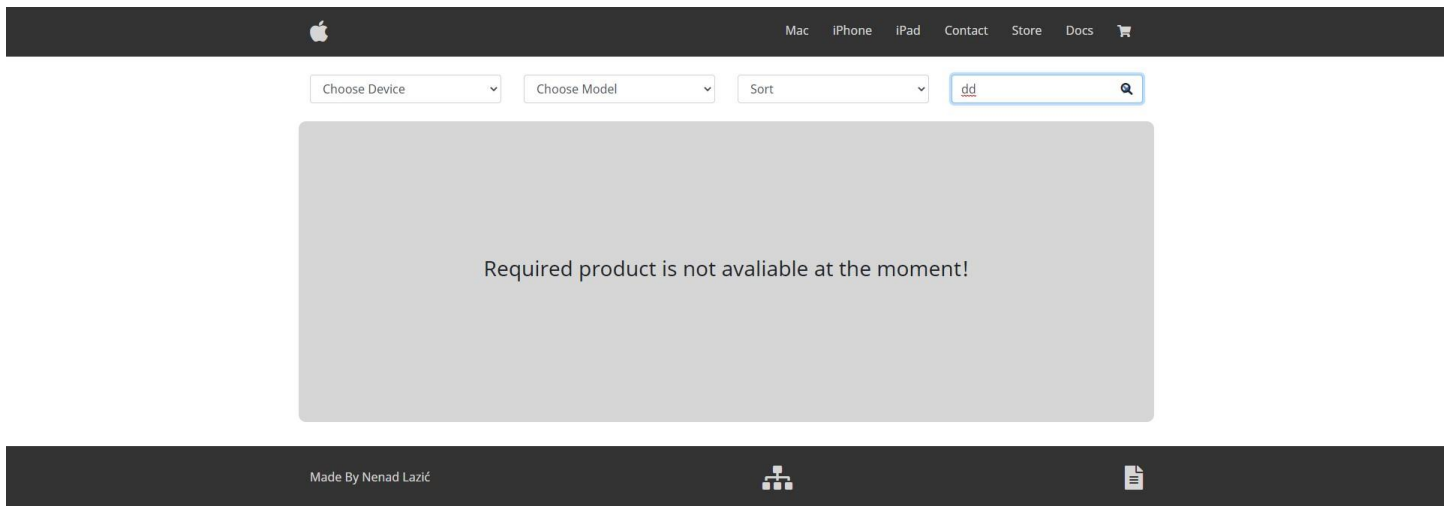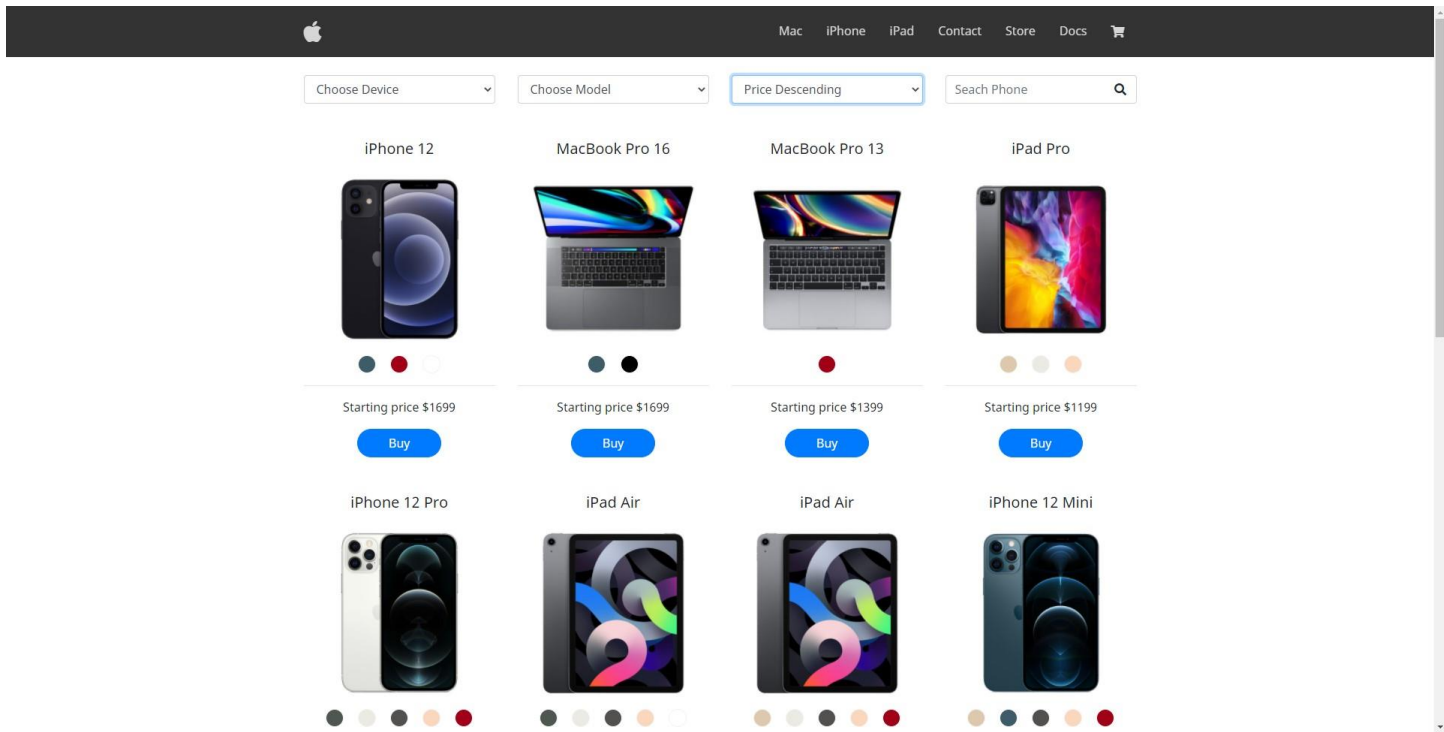Last name must start with a capital letter

Email

Email not valid

Enter your message

Message must contain at least 10 characters

Submit

Contact Us

Nenad

Lazic

w.nesa.97@hotmail.com

Enter your message

Message must contain at least 10 characters

Submit

2.3.2

Na stranici store.html se nazali prodavnica gde su svi proizvodi dinamički ispisani dohvatanjem podataka ajaxom. Pored proizvoda, dinamičke padajuće liste su takođe dinamički ispisanje na osnovu "id" i "name" vrednosti iz fajlova u kojima se nalaze svi podaci o proizvodima. Na krajnjoj desnoj strani ekrana se nalazi search bar koji se "triggeruje" na događaj keyup i vrši filtriranje prozivoda na osnovu kraktera unetih u ovaj input. Boje koje se prikazuju kao dostupne boje uređaja su dinamički ispisane. Klikom na dugme buy ispod svakog proizvoda se uređaj ubacuje u korpu I klikom na korpu se prelazi na stranicu cart.html gde se nalazi odabran proizvod, slika proizvoda, ime proizvoda, cena proizvoda kao i količina proizvoda. Ispod odabranih proizvoda iz korpe se nalazi ukupna cena koja je izračunata kao zbir selektovanih stavki. Sličica "x" sluzi za brisanje stavke iz korpe, dok strelice na levo I desno u sekciji koja pokazuje količinu proizvoda služe da povećaju odnosno smanje količinu proizvoda. Klikom na sliku određenog proizvoda se otvara modal u kojem su detalji određenog modela telefona dinamički ispisani.

Required product is not avaliable at the moment!

Made By Nenad Lazić

Product	Price	Quantity	Equals
⊗ iPhone 12 Pro	1099$	← 1 →	1099 $
⊗ iPhone 11	839$	← 3 →	2517 $
⊗ iPhone 12 Mini	999$	← 1 →	999 $

Total: 4615 $

Buy

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---

appleshopweb.netlify.app says
Thanks for buying

OK

Product	Price	Quantity	Equals
⊗ iPhone 12 Pro	1099$	← 1 →	1099 $
⊗ iPhone 11	839$	← 3 →	2517 $
⊗ iPhone 12 Mini	999$	← 1 →	999 $

Total: 4615 $

Buy

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Your cart is empty. Go to shop!

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3. Kodovi

3.1 HTML

3.1.1 index.html

```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" />
    <meta name="keywords" content="Apple, Apple store, iphone, ipad, mac
book" />
    <meta
      name="description"
      content="Official apple store that provides all sort of apple prod
ucts over the web. You 'll find a  great offer of our iphone , macbook a
nd ipad devices."
    />
    <link rel="icon" sizes="60x60" href="assets/img/apple-icon-
60x60.png" />
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.2/css/all.min.css"
    />
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/boots
trap.min.css"
      integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css" />
```

```html
    <title>Apple Shop</title>
  </head>
  <body>
    <!-- Scroll To Top -->
    <a href="#home" class="scrollTop"><i class="fas fa-chevron-
up"></i></a>

    <!-- Navigation bar -->
    <nav class="navbar" id="home">
      <div class="container flex">
        <a href="index.html" class="navbar-logo"
          ><i class="fab fa-apple"></i
        ></a>
        <ul class="navbar-nav flex" id="menu">
          <!-- <li class="navbar-item">
            <a href="#mac" class="navbar-link p-3">Mac</a>
          </li>
          <li class="navbar-item">
            <a href="#iphone" class="navbar-link p-3">iPhone</a>
          </li>
          <li class="navbar-item">
            <a href="#ipad" class="navbar-link p-3">iPad</a>
          </li>
          <li class="navbar-item">
            <a href="#contact" class="navbar-link p-3">Contact</a>
          </li>
          <li class="navbar-item">
            <a href="store.html" class="navbar-link p-3">Store</a>
          </li>
          -->
          <li class="navbar-item">
            <a href="cart.html" class="shopping-cart navbar-link"
              ><i class="fas fa-shopping-cart p-3"></i
            ></a>
            <span id="itemNumber" class="text-white"></span>
          </li>
        </ul>
```

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```html
        </div>
      </nav>

      <!-- Section 1 -->
      <section class="section-1 pt-5">
        <div class="container">
          <div class="row">
            <div class="col-lg-12 flex">
              <div id="section-1-content">
                <h1>iPhone 11 Pro</h1>
                <h3>Pro cameras. Pro display. Pro performance.</h3>
                <p>From $30/mo. or $679 with trade in.</p>
                <a href="store.html" class="btn btn-primary mt-2">Buy</a>
              </div>
              <div id="section-1-image">
                <img
                  class="image-fluid"
                  src="assets/img/iphone12pro.png"
                  alt="iPhone 12 Pro"
                />
              </div>
            </div>
          </div>
        </div>
      </section>

      <!-- Section 2 -->
      <section class="section-2 p-5 my-5" id="mac">
        <div class="container grid">
          <img src="assets/img/macbook_pro.jpg" alt="Mac Book Pro" />
          <div class="section-2-content flex">
            <h5>16-inch model</h5>
            <h1>MackBook Pro</h1>
            <h3>The Best For Brightness</h3>
            <a href="store.html" class="btn btn-primary mt-3">Buy</a>
          </div>
        </div>
```

```html
    </section>

    <!-- Section 3 -->
    <section class="section-3 p-3 my-5" id="iphone">
      <div class="container grid">
        <div class="section-3-content flex">
          <h3>iPhone 12 Pro Max</h3>
          <h1>Just the right amount of everything.</h1>
          <p>From $18.70/mo. or $449 with trade-in</p>
          <a href="store.html" class="btn btn-primary">Buy</a>
        </div>
        <img src="assets/img/iphone12promax.jpg" alt="iPhone 12 Pro Max"
/>
      </div>
    </section>

    <!-- Section 4 -->
    <section class="section-4 p-5 my-5" id="ipad">
      <div class="container grid">
        <img src="assets/img/ipadpro.jpg" alt="iPad Pro" />
        <div class="section-4-content flex">
          <h1>iPad Pro</h1>
          <h3>The most advanced iPad ever.</h3>
          <p>Starting at $799</p>
          <a href="store.html" class="btn btn-primary">Buy</a>
        </div>
      </div>
    </section>

    <!-- Section 5 -->
    <section class="section-5 p-5 mt-5" id="contact">
      <div class="container">
        <h1 class="text-center">Contact Us</h1>
        <form action="" class="form-group">
          <input
            type="text"
            name="firstName"
```

```html
      id="firstName"
      class="form-control my-3"
      placeholder="First Name"
    />
    <span class="errorText" id="errorName"
      >Name must start with a capital letter
    </span>
    <input
      type="text"
      name="lastName"
      id="lastName"
      class="form-control my-3"
      placeholder="Last Name"
    />
    <span class="errorText" id="errorLastName"
      >Last name must start with a capital letter</span
    >
    <input
      type="email"
      name="email"
      id="email"
      class="form-control my-3"
      placeholder="Email"
    />
    <span class="errorText" id="errorEmail">Email not valid</span>
    <textarea
      name="taMessage"
      id="taMessage"
      cols="20"
      rows="5"
      class="form-control my-3"
      placeholder="Enter your message"
    ></textarea>
    <span class="errorText" id="errorTextArea"
      >Message must contain at least 10 characters</span
    >
```

```html
        <input
          type="button"
          value="Submit"
          class="btn btn-primary text-center"
          id="submit"
        />
        <span class="text-success" id="successText"
          >Successfully submited data</span
        >
      </form>
    </div>
  </section>

  <!-- Footer -->
  <footer class="footer py-3">
    <div class="container flex">
      <a href="author.html" class="developer">Made By Nenad Lazić</a>
      <a href="sitemap.xml" class="footer-links"
        ><i class="fas fa-sitemap"></i
      ></a>
      <a href="dokumentacija.pdf" class="footer-links"
        ><i class="fas fa-file-alt"></i
      ></a>
    </div>
  </footer>

  <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
  <script src="assets/js/main.js"></script>
  </body>
</html>
```

3.1.2 store.html

```html
<!DOCTYPE html>
```

```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" />
    <meta name="keywords" content="Store, Apple store, iphone, ipad, mac
book">
    <meta name="description" content="Our online store will amaze you wi
th our great offer of iphones, macbooks and ipads.">
    <link rel="icon" sizes="60x60" href="assets/img/apple-icon-
60x60.png" />
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.2/css/all.min.css"
    />
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/boots
trap.min.css"
      integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css" />
    <title>Apple Shop</title>
  </head>
  <body>
    <!-- Scroll To Top -->
    <a href="#home" class="scrollTop"><i class="fas fa-chevron-
up"></i></a>

    <!-- Navigation bar -->
    <nav class="navbar" id="home">
      <div class="container flex">
        <a href="index.html" class="navbar-logo"
```

```html
      ><i class="fab fa-apple"></i
    ></a>
    <ul class="navbar-nav flex" id="menu">
      <li class="navbar-item">
        <a href="cart.html" class="shopping-cart navbar-link"
          ><i class="fas fa-shopping-cart p-3"></i
        ></a>
        <span id="itemNumber" class="text-white"></span>
      </li>
    </ul>
  </div>
</nav>

<section class="section-main">
  <div class="container">
    <div class="row" id="list">
      <!-- <div class="col-lg-3 col-xs-12">
        <select name="deviceType" id="deviceType" class="form-
control my-4">
          <option value="0  ">Izaberite</option>
          <option value="1">iPhone</option>
          <option value="2">Mac</option>
          <option value="3">iPad</option>
        </select>
      </div> -->
      <div class="col-lg-3 col-xs-12" id="deviceTypeDiv"></div>
      <div class="col-lg-3 col-xs-12" id="modelDiv"></div>
      <div class="col-lg-3 col-xs-12" id="sortList">
        <select name="" id="sort" class="form-control my-4">
          <option value="sort">Sort</option>
          <option value="nameAsc">Name Ascending</option>
          <option value="nameDsc">Name Descending</option>
          <option value="priceAsc">Price Ascending</option>
          <option value="priceDesc">Price Descending</option>
        </select>
      </div>
      <div class="col-lg-3 col-xs-12" id="search-bar">
```
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```
            <input
              type="search"
              name=""
              id="searchInput"
              class="form-control my-4"
              placeholder="Seach Phone"
            />
            <span class="search-span"><i class="fas fa-
search"></i></span>
          </div>
        </div>
        <div class="row" id="products">
          <!-- <div class="container col-lg-3"> -->
            <!-- <div class="product">
              <h5 class="text-center">iPhone 12 Pro</h5>
              <a href="#" id="modal"
                ><img src="assets/img/iphone12promaxshop.jpg" alt=""
              /></a>
              <div class="color-holder d-flex justify-content-center">
                <div class="color" style="background-
color: #f4f4f4"></div>
                <div class="color" style="background-
color: #f4f4f4"></div>
                <div class="color" style="background-
color: #f4f4f4"></div>
              </div>
              <hr />
              <p class="text-center">Starting price $999</p>
              <a href="" style="display: block" class="btn btn-
primary m-auto"
                >Buy</a
              >
            </div> -->
          </div>
        </div>
      </div>
    </section>
```

```html
    <div id="myModal" class="modal">
      <div class="modal-content">
        <span class="close text-right">&times;</span>
        <h1>iPhone 11 Pro</h1>
        <hr />
        <div class="prodImg d-flex justify-content-center"></div>
        <div class="tableDiv mt-2">
          <table class="table">
            <tbody>
              <tr>
                <td>Price:</td>
                <td>999</td>
              </tr>
            </tbody>
          </table>
        </div>
        <hr />
      </div>
    </div>


    <!-- Footer -->
    <footer class="footer py-3">
      <div class="container flex">
        <a href="author.html" class="developer">Made By Nenad Lazić</a>
        <a href="sitemap.xml" class="footer-links"><i class="fas fa-
sitemap"></i></a>
        <a href="dokumentacija.pdf" class="footer-
links"><i class="fas fa-file-alt"></i></a>
      </div>
    </footer>


    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.6.0/jqu
ery.min.js"></script>
    <script src="assets/js/main.js"></script>
  </body>
</html>
```

3.1.3 Cart.html

```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" />
    <meta name="keywords" content="Store, Apple store, iphone, ipad, mac
book" />
    <meta
      name="description"
      content="Our online store will amaze you with our great offer of i
phones, macbooks and ipads."
    />
    <link rel="icon" sizes="60x60" href="assets/img/apple-icon-
60x60.png" />
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.2/css/all.min.css"
    />
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/boots
trap.min.css"
      integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="assets/css/style.css" />
    <title>Apple Shop</title>
  </head>
```

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```html
<body>
    <!-- Scroll To Top -->
    <a href="#home" class="scrollTop"><i class="fas fa-chevron-
up"></i></a>

    <!-- Navigation bar -->
    <nav class="navbar" id="home">
      <div class="container flex">
        <a href="index.html" class="navbar-logo"
          ><i class="fab fa-apple"></i
        ></a>
        <ul class="navbar-nav flex" id="menu">
          <li class="navbar-item">
            <a href="cart.html" class="shopping-cart navbar-link"
              ><i class="fas fa-shopping-cart p-3"></i
            ></a>
            <span id="itemNumber" class="text-white"></span>
          </li>
        </ul>
      </div>
    </nav>

    <!-- <div class="row">
      <div class="container">
        <div class="col-12 mt-5">
          <div class="row">
            <div class="col-6 border text-center">
              <h3>Product</h3>
            </div>
            <div class="col-3 border text-center"><h3>Price</h3></div>
            <div class="col-3 border text-center">
              <h3>Quantity</h3>
            </div>
          </div>
        </div>
        <div class="col-12 mb-5">-->
    <div class="row">
```
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```html
      <div class="container text-center" id="products-header">
        <!-
- <h1>Your cart is empty. <a href="store.html">Go to shop!</a></h1> -->
      </div>
      <div class="container text-center" id="products-cart"></div>
    </div>
    <!-- </div>
        <div class="col-12">
          <a href="" class="btn btn-primary mb-4">Buy</a>
        </div>
      </div>
    </div>  -->

    <footer class="footer py-3">
      <div class="container flex">
        <a href="author.html" class="developer">Made By Nenad Lazić</a>
        <a href="" class="footer-links"><i class="fas fa-
sitemap"></i></a>
        <a href="dokumentacija.pdf" class="footer-links"
          ><i class="fas fa-file-alt"></i
        ></a>
      </div>
    </footer>

    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.6.0/jqu
ery.min.js"></script>
    <script src="assets/js/main.js"></script>
  </body>
</html>
```

3.2 CSS

3.2.1 style.css

```css
@import url('https://fonts.googleapis.com/css2?family=Noto+Sans&display=sw
ap');

:root {
  --background-color: #000000cc;
  --black-color: #000;
  --white-color: #fff;
  --text-color: #d6d6d6;
}

* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  scroll-behavior: smooth;
}

body {
  font-family: 'Noto Sans', sans-serif;
  line-height: 1.6;
}

img {
  width: 100%;
}

a {
  text-decoration: none;
  color: var(--text-color);
}

ul {
  list-style-type: none;
}
```

```css
/* Scroll Top */
.scrollTop {
  position: fixed;
  display: flex;
  justify-content: center;
  align-items: center;
  bottom: 0;
  right: 0;
  margin: 20px 30px;
  z-index: 19;
  width: 45px;
  height: 45px;
  border-radius: 50%;
  background: var(--text-color);
  color: var(--black-color);
}

.scrollTop:hover {
  text-decoration: none;
  color: rgba(0, 0, 0, 0.8);
  transition: color 0.3s ease;
}

/* Nav bar */
#home {
  position: sticky;
  top: 0;
  opacity: 1;
  z-index: 10;
}

.navbar-item {
  position: relative;
}

nav.navbar {
```

```css
    background: var(--background-color);
    min-height: 7vh;
}

nav ul.flex {
    flex-direction: row;
    justify-content: center;
    align-items: center;
}

nav .navbar-logo {
    font-size: 2rem;
}

nav .navbar-logo:hover {
    color: var(--white-color);
    transition: color 0.3s ease;
}

nav .navbar-link:hover {
    color: var(--white-color);
    text-decoration: none;
    transition: color 0.3s ease;
}

nav .shopping-cart i {
    color: var(--text-color);
    cursor: pointer;
}

nav .shopping-cart i:hover {
    color: var(--white-color);
    text-decoration: none;
    transition: color 0.3s ease;
}

/* Section-1 */
```

```css
section.section-1 {
  background: var(--black-color);
}

#section-1-image {
  justify-content: center;
  align-content: center;
  align-items: center;
}

#section-1-image {
  justify-content: center !important;
  text-align: center;
}

#section-1-image img {
  width: 600px !important;
  margin: auto;
}

section.section-1 .flex {
  justify-content: center;
  align-items: center;
}

#section-1-content {
  text-align: center;
  color: var(--text-color);
}

.btn.btn-primary {
  width: 7rem;
  border-radius: 20px;
}

.section-2 .grid .flex {
  display: flex;
```

```css
  flex-direction: column;
  justify-content: center;
  align-items: center;
}

/* Section 3 */
section.section-3 {
  background: var(--black-color);
}

section.section-3 .grid .flex {
  display: flex;
  flex-direction: column;
  justify-content: center;
  align-items: center;
  text-align: center;
  color: var(--text-color);
}

/* Section 5 */
section.section-5 {
  background: var(--black-color);
}

section.section-5 .container {
  width: 40%;
}

section.section-5 .btn {
  border-radius: 5px;
}

.section-5 h1 {
  color: var(--text-color);
}

/* Search Span */
```

```css
#search-bar {
  position: relative;
}
.search-span {
  position: absolute;
  right: 10%;
  top: 50%;
  transform: translateY(-50%);
  cursor: pointer;
}

/* Color holder */
.color {
  display: inline;
  width: 24px;
  height: 24px;
  border: 1px solid #f4f4f4;
  border-radius: 50%;
  margin: 0 0.6rem;
}

/* Modal */
.modal {
  display: none;
  position: fixed;
  z-index: 10;
  left: 0;
  top: 0;
  width: 100%;
  height: 100%;
  overflow: hidden;
  background-color: rgb(0, 0, 0);
  background-color: rgba(0, 0, 0, 0.7);
}

.modal-content {
  background-color: #fefefe;
```

```css
  margin: 15% auto;
  padding: 20px;
  border: 1px solid #888;
  width: 40%;
  overflow: hidden;
  top: -250px;
}

.close {
  color: #aaa;
  float: right;
  font-size: 28px;
  font-weight: bold;
}

.close:hover,
.close:focus {
  color: black;
  text-decoration: none;
  cursor: pointer;
}

/* Footer */
.footer {
  min-height: 7vh;
  background-color: var(--background-color);
  margin-top: 1rem;
}

.footer .flex {
  display: flex;
  justify-content: space-between;
  align-items: center;
}

/* Utilities */
section .grid {
```

```css
  display: grid;
  grid-template-columns: repeat(2, 1fr);
  gap: 2rem;
}

#itemNumber {
  position: absolute;
  top: 1%;
  right: 7%;
  background: #a72a21;
  border-radius: 50%;
  width: 13px;
  text-align: center;
}

.developer {
  justify-self: flex-start;
}
.developer:hover {
  text-decoration: none;
  color: var(--white-color);
  transition: color 0.3s ease;
}

.footer-links {
  justify-self: flex-end;
  font-size: 2rem;
}

.footer-links:hover {
  text-decoration: none;
  color: var(--white-color);
  transition: color 0.3s ease;
}

.error {
  border: 2px solid #dc3545 !important;
```

```css
}

.success {
  border: 2px solid #28a745 !important;
}

.errorText {
  color: #dc3545;
  display: none;
}

#successText {
  display: none;
}

.no-products {
  height: 400px;
  background-color: var(--text-color);
  border-radius: 10px;
}

/* Cart Page */

.author-image {
  border-radius: 10px;
  width: 350px;
}

.image-cart {
  width: 150px;
}

.quantity i {
  padding: 0 20px;
  padding-bottom: 2px;
  cursor: pointer;
}
```

```css
.quantity i.far {
  position: absolute;
  left: -75px;
  padding: 0 20px;
  padding-bottom: 2px;
  cursor: pointer;
  font-size: 1.3rem;
}

.prodImg {
  width: 150px;
}

/* #products-header {
  min-height: 400px;
  display: flex;
  align-items: center;
  justify-content: center;
} */
```

3.3 JavaScript

```javascript
let modal = document.getElementById('myModal');
// let btn = document.getElementById('modal');
let firstName = document.getElementById('firstName');
let lastName = document.getElementById('lastName');
let email = document.getElementById('email');
let textarea = document.getElementById('taMessage');
let submit = document.getElementById('submit');
let url = window.location.href.split('/');
```

```javascript
let adresa = url[url.length - 1];
console.log(adresa);

// Document ready (jQuery)
$(document).ready(function () {
  checkLocalStorageData();

  $('#searchInput').keyup(filterChange);
  $('#submit').click(getFormValues);
  $('#sort').change(filterChange);
  //Scroll To Top
  $('.scrollTop').on('click', () => {
    window.scrollTo(0, 0);
  });

  $.ajax({
    method: 'get',
    url: 'assets/data/products.json',
    success: function (data) {
      setItemToLocalStorage('products', data);
    },
  });

  //Initially hidden button
  $('.scrollTop').hide(); // Initally hidden
  $(document).scroll(function () {
    if ($(document).scrollTop() > 200) {
      $('.scrollTop').fadeIn();
    } else {
      $('.scrollTop').fadeOut();
    }
  });
});

// Window onload
window.onload = function () {
  ajaxCall('menu', printMenu);
```

```javascript
  if (adresa == 'index.html') {
    submit.addEventListener('click', checkForm);
  } else if (adresa == 'cart.html') {
  } else if (adresa == 'store.html') {
    ajaxCall('products', printProducts);

    $.ajax({
      method: 'get',
      url: 'assets/data/models.json',
      success: function (data) {
        createDropDownList(data, 'modelsDDL', 'modelDiv', 'Model');
      },
      error: function (xhr, status, err) {
        console.log(xhr);
        console.log(status);
        console.log(err);
      },
    });

    $.ajax({
      method: 'get',
      url: 'assets/data/category.json',
      success: function (data) {
        createDropDownList(data, 'deviceTypeDDL', 'deviceTypeDiv', 'Device
');
      },
      error: function (xhr, status, err) {
        console.log(xhr);
        console.log(status);
        console.log(err);
      },
    });

    // Modal

    // btn.addEventListener('click', function (e) {
```

```javascript
    //    e.preventDefault;
    //    modal.style.display = 'block';
    // });
    // span.addEventListener('click', function () {
    //    modal.style.display = 'none';
    // });

    window.onclick = function (event) {
      if (event.target == modal) {
        modal.style.display = 'none';
      }
    };
  }
};


// Ajax Call Function
function ajaxCall(fileName, functionName) {
  $.ajax({
    url: `assets/data/${fileName}.json`,
    method: 'get',
    dataType: 'json',
    success: function (data) {
      functionName(data);
    },
    error: function (xhr, status, err) {
      console.log(xhr);
      console.log(status);
      console.log(err);
    },
  });
}
// Function for printing menu
function printMenu(data) {
  html = '';
  console.log(data);

  for (let object of data) {
```

```javascript
    html += `
      <li class="navbar-item">
        <a href="${object.href}" class="navbar-link p-
3">${object.text}</a>
      </li>
    `;
  }

  html += `
  <li class="navbar-item">
    <a href="cart.html" class="shopping-cart navbar-link"
      ><i class="fas fa-shopping-cart p-3"></i
    ></a>
    <span id="itemNumber" class="text-white"></span>
  </li>
  `;

  document.getElementById('menu').innerHTML = html;
  onLoadCartNumber();
}
// Function for printing products
function printProducts(data) {
  onLoadCartNumber();
  // data = filterDevice(data);
  data = searchPhone(data);
  data = sort(data);
  data = filterDevice(data);
  data = filterModel(data);
  // console.log(data);
  if (data.length == 0) {
    $('#products').html(`
    <div class=" col-12 no-products d-flex justify-content-center align-
items-center mb-3">
    <h3> Required product is not avaliable at the moment! </h3>
    </div>
    `);
  } else {
```
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```javascript
    html = '';

    for (let obj of data) {
      html += `
    <div class="container col-lg-3 col-md-4 col-xs-12 my-4 ">
      <div class="product">
        <h5 class="text-center">${obj.name}</h5>
        <a href="#" class="modals"><img class="slika-
klik" src="${obj.img}" alt="${obj.name}" data-idm="${obj.id}"/></a>
        <div class="color-holder d-flex justify-content-center">`;
      for (let color of obj.colors) {
        html += `
        <div class="color" style="background-color: ${color}"></div>
        `;
      }
      html += `
        </div class=>
          <hr/>
          <p class="text-center"> Starting price $${obj.price}</p>
          <a href="#" data-
id=${obj.id} style="display: block" class="btn btn-primary m-auto add-
cart">
            Buy
          </a>
      </div>
    </div>
      `;
    }

    document.getElementById('products').innerHTML = html;
  }
  $('.add-cart').click(addToCart);
  $('.slika-klik').click(openModal);
}
// Open modal
function openModal(e) {
  modal.style.display = 'block';
```

```javascript
    e.preventDefault();
    let idImage = $(this).data('idm');
    console.log(idImage);

    let productsFromLS = getItemFromLocalStorage('products');
    productsFromLS = productsFromLS.filter((p) => p.id == idImage);
    console.log(productsFromLS);
    printModal(productsFromLS);
}

//Modal Function
function printModal(data) {
    console.log(data);
    console.log(data[0].name);
    $('#myModal').html(`
        <div class="modal-content">
            <span class="close text-right"> &times; </span>
            <h1 class="text-center"> ${data[0].name} </h1>
            <hr>
            <div class="divImg d-flex justify-content-center">
                <img src="${data[0].img}" alt="${data[0].name}" class="prodImg">
            </div>
            <div class="tableDiv mt-2">
                <table class="table">
                    <tbody>
                        <tr>
                            <td> Price: </td>
                            <td> ${data[0].price} $ </td>
                        </tr>
                        <tr>
                            <td> Unlock </td>
                            <td> ${data[0].unlock} </td>
                        </tr>
                        <tr>
                            <td> Processor: </td>
                            <td> ${data[0].processor} </td>
                        </tr>
```

```html
          <tr>
            <td> Battery: </td>
            <td> ${data[0].battery} </td>
          </tr>
          <tr>
            <td>
                Display:
            </td>
            <td>
                ${printObject(data[0].display)}
            </td>
          </tr>
          <tr>
            <td>Colors Available: </td>
            <td class="d-flex  align-items-center"> ${printColors(
              data[0].colors
            )} </td>
          </tr>
          </tr>
            <td> Camera: </td>
            <td> ${printObject(data[0].camera)} </td>
          </tr>
          <tr>
            <td> Capacity: </td>
            <td> ${printArray(data[0].capacity)} </td>
          </tr>
        </tbody>
      </table>
  </div>
`);
var span = $('.close')[0];
span.addEventListener('click', function () {
  modal.style.display = 'none';
});
console.log(span);
function printObject(object) {
  html = '';
```

```javascript
    for (let obj in object) {
      html += `
      <li>
        ${obj}: ${object[obj]}
      </li>
      `;
    }
    return html;
  }

  function printColors(array) {
    html = '';
    array.forEach((color) => {
      html += `
      <span class="color" style="background-color: ${color}"> </span>
      `;
    });
    return html;
  }

  function printArray(array) {
    html = '';
    array.forEach((element) => {
      html += `
      <li>
        ${element}
      </li>
      `;
    });
    return html;
  }
}

// Local Storage set and get
function setItemToLocalStorage(name, data) {
  localStorage.setItem(name, JSON.stringify(data));
}
```

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```javascript
function getItemFromLocalStorage(name) {
  return JSON.parse(localStorage.getItem(name));
}

function addToCart(e) {
  e.preventDefault();
  let id = $(this).data('id');
  let productsFromCart = getItemFromLocalStorage('productsCart');

  if (productsFromCart) {
    if (productIsAlreadyInCart()) {
      updateQuantity();
      onLoadCartNumber();
    } else {
      addToLocalStorage();
      onLoadCartNumber();
    }
  } else {
    addFirstItemToLocalStorage();
    onLoadCartNumber();
  }

  // Add First Item To Local Storage
  function addFirstItemToLocalStorage() {
    let products = [];
    products[0] = {
      id: id,
      quantity: 1,
    };

    setItemToLocalStorage('productsCart', products);
  }

  //Function if product is already in local storage
  function productIsAlreadyInCart() {
    return productsFromCart.filter((x) => x.id == id).length;
```

```javascript
  }

  //Function updateQuantity
  function updateQuantity() {
    let productsFromLS = getItemFromLocalStorage('productsCart');
    console.log(productsFromLS);
    productsFromLS.forEach((value) => {
      console.log(value);
      if (value.id == id) {
        value.quantity += 1;
      }
    });

    setItemToLocalStorage('productsCart', productsFromLS);
  }

  // Function addToLocalStorage
  function addToLocalStorage() {
    let productsFromLS = getItemFromLocalStorage('productsCart');
    productsFromLS.push({
      id: id,
      quantity: 1,
    });
    setItemToLocalStorage('productsCart', productsFromLS);
  }
}
// Function on load cart number
function onLoadCartNumber() {
  let productNumbers = getItemFromLocalStorage('productsCart');
  if (productNumbers != null) {
    var broj = 0;
    productNumbers.forEach((value) => {
      broj += value.quantity;
    });
    // console.log(broj);
    displayCartData();
```

```javascript
    // let numberOfProducts = productNumbers.length;
    document.querySelector('#itemNumber').textContent = broj;
  } else {
    emptyCartData();
  }
}

// Function for displaying on cart html
function displayCartData() {
  var productsFromLS = getItemFromLocalStorage('productsCart');
  var allProducts = getItemFromLocalStorage('products');
  let array = [];

  array = allProducts.filter((p) => {
    for (let prod of productsFromLS) {
      if (p.id == prod.id) {
        p.quantity = prod.quantity;
        return true;
      }
    }
  });
  // console.log(array);

  $('#products-header').html(`
  <div class="col-12 mt-5">
  <div class="row">
    <div class="col-3 border text-center">
      <h3>Product</h3>
    </div>
    <div class="col-3 border text-center">
      <h3>Price</h3>
    </div>
    <div class="col-3 border text-center">
      <h3>Quantity</h3>
    </div>
    <div class="col-3 border text-center">
    <h3>Equals</h3>
```

```
    </div>

  </div>
</div>
  `);

  printCartItems(array);
}

//Function for printing cart items
function printCartItems(array) {
  html = '';
  var total = 0;
  for (let obj of array) {
    total += obj.price * obj.quantity;
    console.log(obj);
    html += `
    <div class="col-12">
      <div class="row">
        <div class="col-3 border d-flex justify-content-center align-
items-center quantity">
          <i class="far fa-times-circle delete-
icon" onclick="return removeFromCart(${
            obj.id
          })"></i>
          <img src="${obj.img}" alt="${obj.name}" class="image-cart">
          <p class="pt-1"> ${obj.name}<p>
        </div>
        <div class="col-3 border d-flex justify-content-center align-
items-center">
          <h5 class="text-center"> ${obj.price}$ </h5>
        </div>
        <div class="col-3 border d-flex justify-content-center align-
items-center quantity">
          <i class="fas fa-arrow-left" onclick="return decreseQuantity(${
            obj.id
          })"></i>
```

```
                <h5 class="text-center"> ${obj.quantity} </h5>
                <i class="fas fa-arrow-
right" onclick="return increaseQuantity(${
                    obj.id
                })"></i>
            </div>
            <div class="col-3 border d-flex justify-content-center align-
items-center">
                <h5> ${obj.price * obj.quantity} $ </h5>
            </div>
        </div>
    </div>


    `;
  }
  html += `
    <div class="mt-3">
        <h2> Total: ${total} $ </h2>
    </div>
    <div class="row>
    <div class="container">
        <input type="button" id="button-buy" class="btn btn-primary mt-
2" value="Buy">
    </div>
 </div>
    `;
  $('#products-cart').html(html);
  $('#button-buy').click(function () {
    alert('Thanks for buying');
    clearCart();
  });
}

// Function clear Cart
function clearCart() {
  localStorage.removeItem('productsCart');
```
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```javascript
    location.reload();
}

//Empty cart data function
function emptyCartData() {
  $('#products-header').html(
    '<h1 class="mt-
3">Your cart is empty. <a href="store.html">Go to shop!</a></h1>'
  );
}

// Functiion remove from cart
function removeFromCart(id) {
  let products = getItemFromLocalStorage('productsCart');
  let filtered = products.filter((p) => p.id != id);

  setItemToLocalStorage('productsCart', filtered);

  displayCartData();
}

// Function for decreasing quantity
function decreseQuantity(id) {
  let products = getItemFromLocalStorage('productsCart');
  products.forEach((value) => {
    if (value.id == id) {
      if (value.quantity >= 1) {
        value.quantity--;
      }
    }
  });

  setItemToLocalStorage('productsCart', products);
  displayCartData();
}

// Function for increasing quantity
```

```javascript
function increaseQuantity(id) {
  let products = getItemFromLocalStorage('productsCart');
  products.forEach((value) => {
    if (value.id == id) {
      value.quantity++;
    }
  });
  // location.reload();

  setItemToLocalStorage('productsCart', products);
  displayCartData();
}

// Function for creating drop down List
function createDropDownList(data, idList, idBlock, name) {
  var ddl = `
      <select id="${idList}" class="form-control my-4">
        <option value="0"> Choose ${name} </option>
  `;

  for (let obj of data) {
    ddl += `
      <option value="${name == 'Device' ? obj.idCat : obj.idModel}">${
      obj.name
    }</option>
    `;
  }

  ddl += '</select>';

  document.getElementById(idBlock).innerHTML = ddl;
  $('#' + idList).change(filterChange);
}

// Local Storage getting and setting values of form
function getFormValues() {
  let emailV = $('#email').val();
```

```javascript
  let firstNameV = $('#firstName').val();
  let lastNameV = $('#lastName').val();
  let textAreaV = $('#taMessage').val();
  setUsersData(emailV, firstNameV, lastNameV, textAreaV);
}

// Setting users values
function setUsersData(email, firstName, lastName, textArea) {
  localStorage.setItem('email', email);
  localStorage.setItem('firstName', firstName);
  localStorage.setItem('lastName', lastName);
  localStorage.setItem('textarea', textArea);
}

// Checking if local storage is empty
function checkLocalStorageData() {
  let email = localStorage.getItem('email');
  let firstName = localStorage.getItem('firstName');
  let lastName = localStorage.getItem('lastName');
  let textarea = localStorage.getItem('textarea');
  if (
    email != null &&
    firstName != null &&
    lastName != null &&
    textarea != null
  ) {
    $('#email').val(email);
    $('#firstName').val(firstName);
    $('#lastName').val(lastName);
    $('#taMessage').val(textarea);
  }
}

// Function Sort
function sort(data) {
  const sortType = document.getElementById('sort').value;
  if (sortType == 'priceAsc') {
```

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```javascript
      return data.sort((a, b) => (a.price > b.price ? 1 : -1));
    } else if (sortType == 'priceDesc') {
      return data.sort((a, b) => (a.price < b.price ? 1 : -1));
    }
    return data;
}

// Filter function
function filterDevice(data) {
  var deviceType = $('#deviceTypeDDL').val();
  var modelType = $('#modelsDDL').val();
  if (deviceType == 0) {
    return data;
  } else if (deviceType == 1) {
    data = data.filter((x) => x.idCat == 1);
  } else if (deviceType == 2) {
    data = data.filter((x) => x.idCat == 2);
  } else if (deviceType == 3) {
    data = data.filter((x) => x.idCat == 3);
  }
  // createDropDownList(data, 'modelsDDL', 'modelDiv', 'Model');

  console.log(data);
  return data;
}

// Filter model function
function filterModel(data) {
  var deviceType = $('#deviceTypeDDL').val();
  var modelType = $('#modelsDDL').val();
  for (let obj of data) {
    //console.log(obj.idModel);
    if (modelType == 0) {
      return data;
    } else if (modelType == obj.idModel) {
      // console.log('usao');
      data = data.filter((x) => x.idModel == obj.idModel);
```

```javascript
      deviceType = obj.idCat;
    }
  }
  return data;
}


// Seach Filtering
function searchPhone(data) {
  let searchVal = $('#searchInput').val().toLowerCase();
  if (searchVal) {
    return data.filter((el) => {
      return el.name.toLowerCase().indexOf(searchVal) !== -1;
    });
  }
  return data;
}


// Filter Change
function filterChange() {
  ajaxCall('products', printProducts);
}


// Regular Expression
function checkForm() {
  let regExName = /[A-ZĆČŠĐŽ][a-zčćžšđ]{2,12}/;
  let regExEmail = /^[a-zA-Z0-9\.\-]+@[a-zA-Z0-9\.\-]+$/;

  var error = [];
  if (!regExName.test(firstName.value)) {
    error.push('Name is not valid');
    firstName.classList.add('error');
    errorName.style.display = 'block';
  } else {
    firstName.classList.remove('error');
    firstName.classList.add('success');
    errorName.style.display = 'none';
  }
```

```javascript
  if (!regExName.test(lastName.value)) {
    error.push('Last name is not valid');
    lastName.classList.add('error');
    errorLastName.style.display = 'block';
  } else {
    lastName.classList.remove('error');
    lastName.classList.add('success');
    errorLastName.style.display = 'none';
  }

  if (!regExEmail.test(email.value)) {
    error.push('Email Not Valid');
    email.classList.add('error');
    errorEmail.style.display = 'block';
  } else {
    email.classList.remove('error');
    email.classList.add('success');
    errorEmail.style.display = 'none';
  }

  if (textarea.value.length < 10) {
    error.push('Textarea not valid');
    textarea.classList.add('error');
    errorTextArea.style.display = 'block';
  } else {
    textarea.classList.remove('error');
    textarea.classList.add('success');
    errorTextArea.style.display = 'none';
  }

  if (error.length == 0) {
    successText.style.display = 'block';
    location.reload();
  }
}
```

3.5 JSON

3.5.1 Category.json

```json
4.  [
5.    {
6.      "idCat": 1,
7.      "name": "iPhone"
8.    },
9.    {
10.     "idCat": 2,
11.     "name": "Mac"
12.    },
13.    {
14.     "idCat": 3,
15.     "name": "iPad"
16.   }
17. ]
```

3.4.2 Menu.json

```json
[
  {
    "href": "index.html#mac",
    "text": "Mac"
  },
  {
    "href": "index.html#iphone",
    "text": "iPhone"
  },
  {
    "href": "index.html#ipad",
    "text": "iPad"
  },
```

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```json
  {
    "href": "index.html#contact",
    "text": "Contact"
  },
  {
    "href": "store.html",
    "text": "Store"
  },
  {
    "href": "dokumentacija.pdf",
    "text": "Docs"
  }
]
```

3.4.3 models.json

```json
[
  {
    "idModel": 1,
    "name": "iPhone 11",
    "idCat": 1
  },
  {
    "idModel": 2,
    "name": "iPhone 11 Pro",
    "idCat": 1
  },
  {
    "idModel": 3,
    "name": "iPhone 12 Mini",
    "idCat": 1
  },
  {
    "idModel": 4,
    "name": "iPhone 12",
    "idCat": 1
  },
```

```json
  {
    "idModel": 5,
    "name": "iPhone 12 Pro",
    "idCat": 1
  },
  {
    "idModel": 6,
    "name": "iPhone 12 Pro Max",
    "idCat": 1
  },
  {
    "idModel": 7,
    "name": "MacBook Pro 13",
    "idCat": 2
  },
  {
    "idModel": 8,
    "name": "MacBook Pro 16",
    "idCat": 2
  },
  {
    "idModel": 9,
    "name": "iPad Pro",
    "idCat": 3
  },
  {
    "idModel": 10,
    "name": "iPad Air",
    "idCat": 3
  },
  {
    "idModel": 11,
    "name": "iPad",
    "idCat": 3
  }
]
```

3.4.4 products.json

```json
[
  {
    "id": 1,
    "idCat": 1,
    "idModel": 6,
    "name": "iPhone 12 Pro Max",
    "img": "assets/img/iphone12promaxshop.jpg",
    "imgHover": "assets/img/iphone12promaxshophover.jpg",
    "colors": ["#dec9af", "#dfefdb", "#a20018"],
    "price": 999,
    "display": {
      "size": "5.8",
      "type": "Super Retina XDR display"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A13",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["64GB", "128GB", "256GB"],
    "inCart": 0
  },

  {
    "id": 2,
    "idCat": 1,
    "idModel": 5,
    "name": "iPhone 12 Pro ",
    "img": "assets/img/iphone12proshop.jpg",
    "colors": ["#4E5851", "#EBEBE3", "#535150", "#FAD7BD", "#a20018"],
    "price": 1099,
    "display": {
      "size": "6.1",
```

```json
      "type": "Zaslon Retina HD",
      "touch": "Haptic Touch"
    },
    "camera": {
      "sensor": "16mp",
      "recording": "4K Resolution on all 3 cameras at the same time",
      "blend": "blende ƒ/1,8",
      "optic stabilization": "Stable image"
    },
    "unlock": "FaceID",
    "processor": "A14 Bionic",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": [ "128GB", "256GB", "512GB"]

  },

  {
    "id": 3,
    "idCat": 1,
    "idModel": 1,
    "name": "iPhone 11",
    "img": "assets/img/iphone11shop.jpg",
    "colors": ["#d8dbda","#4a4646", "#FAD7BD"],
    "price": 839,
    "display": {
      "size": "6.1",
      "type": "Super Retina XDR display"
    },
    "camera": {
      "sensor": "14mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A13 NG",
    "battery": "Highest quality batteries for 2018 year",
    "capacity": ["64GB", "128GB", "256GB"]
```

```json
  },

  {
    "id": 4,
    "idCat": 1,
    "idModel": 3,
    "name": "iPhone 12 Mini",
    "img": "assets/img/iphone12promaxshop.jpg",
    "colors": ["#dec9af", "#3e5d69", "#535150", "#FAD7BD", "#a20018"],
    "price": 999,
    "display": {
      "size": "5.8",
      "type": "Zaslon Super Retina XDR",
      "tone": "True Tone",
      "touch": "Haptic Touch"
    },
    "camera": {
      "sensor": "16mp",
      "recording": "4K Resolution 120FPS"
    },
    "unlock": "FaceID",
    "processor": "A14 Bionic",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["64GB", "128GB", "256GB"]

  },

  {
    "id": 5,
    "idCat": 2,
    "idModel": 7,
    "name": "MacBook Pro 13",
    "img": "assets/img/macbookpro13.jpg",
    "colors": ["#a20018"],
    "price": 1399,
    "display": {
      "size": "7.2",
```

```json
      "type": "Zaslon Retina 5K"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "3,7 GHz 6-Core",
    "battery": "Hight quality battery that last for more than 48h",
    "capacity": ["512GB", "1TB"]

  },

  {
    "id": 6,
    "idCat": 3,
    "idModel": 9,
    "name": "iPad Pro",
    "img": "assets/img/ipadproshop.jpg",
    "colors": ["#dec9af", "#EBEBE3", "#FAD7BD"],
    "price": 1199,
    "display": {
      "size": "11",
      "type": "Liquid Retina",
      "technology": "ProMotion"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A12Z Bionic sa 64-bitnom arhitekturom",
    "battery": "Hight quality battery that last for more than 32h",
    "capacity": ["128GB", "512GB", "1TB"]

  },
```

```json
{
  "id": 7,
  "idCat": 3,
  "idModel": 11,
  "name": "iPad",
  "img": "assets/img/ipadshop.jpg",
  "colors": ["#3e5d69", "#dfefdb", "#535150", "#FAD7BD", "#000"],
  "price": 929,
  "display": {
    "size": "7.3",
    "type": "Liquid Retina",
    "touch": "Haptic Touch"
  },
  "camera": {
    "sensor": "12mp",
    "recording": "4K Resolution on recordin available now"
  },
  "unlock": "FaceID",
  "processor": "A12Z Bionic sa 64-bitnom arhitekturom",
  "battery": "Hight quality battery that last for more than 26h",
  "capacity": ["64GB", "128GB", "256GB"]

},

{
  "id": 8,
  "idCat": 1,
  "idModel": 1,
  "name": "iPhone 11",
  "img": "assets/img/iphone11shop.jpg",
  "colors": ["#4E5851", "#EBEBE3", "#535150", "#FAD7BD", "#000"],
  "price": 829,
  "display": {
    "size": "5.9",
    "type": "Super Retina XDR display",
    "touch":"Haptic Touch"
  },
```

```json
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A13 NG",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["128GB", "256GB", "512GB"]

  },

  {
    "id": 9,
    "idCat": 1,
    "idModel": 1,
    "name": "iPhone 11",
    "img": "assets/img/iphone11shop.jpg",
    "colors": ["#4E5851", "#3e5d69", "#535150","#000", "#fff"],
    "price": 829,
    "display": {
      "size": "5.8",
      "type": "Super Retina XDR display"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A13",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["64GB", "128GB", "256GB"]

  },

  {
    "id": 10,
    "idCat": 2,
```

```json
      "idModel": 8,
      "name": "MacBook Pro 16",
      "img": "assets/img/macbookpro16.jpg",
      "colors": ["#3e5d69", "#000"],
      "price": 1699,
      "display": {
        "size": "5.8",
        "type": "Super Retina XDR display"
      },
      "camera": {
        "sensor": "12mp",
        "recording": "4K Resolution on recordin available now"
      },
      "unlock": "FaceID",
      "processor": "A13",
      "battery": "Hight quality battery that last for more than 26h",
      "capacity": ["64GB", "128GB", "256GB"]

    },

    {
      "id": 11,
      "idCat": 1,
      "idModel": 4,
      "name": "iPhone 12 ",
      "img": "assets/img/iphone12shop.jpg",
      "colors": ["#3e5d69","#a20018", "#fff"],
      "price": 1699,
      "display": {
        "size": "5.8",
        "type": "Super Retina XDR display"
      },
      "camera": {
        "sensor": "12mp",
        "recording": "4K Resolution on recordin available now"
      },
      "unlock": "FaceID",
```

```json
      "processor": "A13",
      "battery": "Hight quality battery that last for more than 26h",
      "capacity": ["64GB", "128GB", "256GB"]

  },

  {
    "id": 12,
    "idCat": 3,
    "idModel": 10,
    "name": "iPad Air",
    "img": "assets/img/ipadairshop.jpg",
    "colors": ["#dec9af", "#EBEBE3", "#535150", "#FAD7BD", "#a20018"],
    "price": 999,
    "display": {
      "size": "5.8",
      "type": "Super Retina XDR display"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution on recordin available now"
    },
    "unlock": "FaceID",
    "processor": "A13",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["64GB", "128GB", "256GB"]

  },

  {
    "id": 13,
    "idCat": 3,
    "idModel": 10,
    "name": "iPad Air",
    "img": "assets/img/ipadairshop-2.jpg",
    "colors": ["#4E5851", "#EBEBE3", "#535150", "#FAD7BD", "#fff"],
    "price": 999,
```

```json
      "display": {
        "size": "5.8",
        "type": "Super Retina XDR display"
      },
      "camera": {
        "sensor": "12mp",
        "recording": "4K Resolution on recordin available now"
      },
      "unlock": "FaceID",
      "processor": "A13",
      "battery": "Hight quality battery that last for more than 26h",
      "capacity": ["64GB", "128GB", "256GB"]

    },

    {
      "id": 14,
      "idCat": 1,
      "idModel": 2,
      "name": "iPhone 11 Pro",
      "img": "assets/img/iphone11proshop-1.jpg",
      "colors": ["#4E5851", "#dec9af", "#4a4646"],
      "price": 870,
      "display": {
        "size": "6.1",
        "type":"Zaslon Retina 5K",
        "touch":"Haptic Touch"
      },
      "camera": {
        "sensor": "12mp",
        "recording": "4K Resolution on recordin available now"
      },
      "unlock": "FaceID",
      "processor": "A13",
      "battery": "Hight quality battery that last for more than 26h",
      "capacity": ["64GB", "128GB", "512GB"]
```

```json
  },

  {
    "id": 15,
    "idCat": 1,
    "idModel": 2,
    "name": "iPhone 11 Pro",
    "img": "assets/img/iphone11proshop.jpg",
    "colors": ["#535150", "#FAD7BD", "#4a4646"],
    "price": 899,
    "display": {
      "size": "5.8",
      "type": "Super Retina XDR display"
    },
    "camera": {
      "sensor": "12mp",
      "recording": "4K Resolution",
      "blend":"blende ƒ/1,8"
    },
    "unlock": "FaceID",
    "processor": "A13",
    "battery": "Hight quality battery that last for more than 26h",
    "capacity": ["256GB"]

  }

]
```