DOKUMENTACIJA

http://mobishoptpo.epizy.com/

Praktikum iz Web Programiranja PHP

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Predmet: Praktikum iz Web Programiranja PHP

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1. Uvod

1.1 Korišćeni programski jezici

Za izradu sajta korišćeni su HTML, SASS/CSS, JavaScript/jQuery, PHP i XML(sitemap). Radno okruženje Visual Studio Code.

1.2 Opis funkcionalnosti

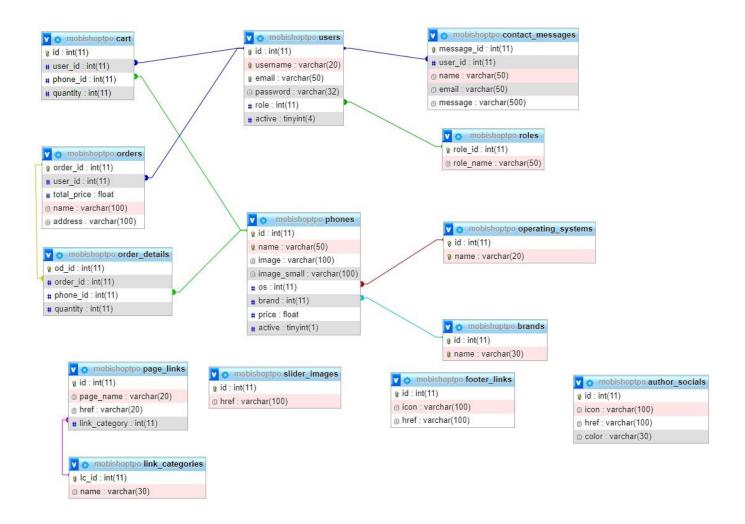
- Dinamičko ispisivanje menija iz baze podataka
- Dinamičko ispisivanje telefona iz baze podataka
- Pretraga I filtriranje telefona sa paginacijom
- Kreiranje naloga I logovanje
- Zaključavanje naloga i slanje mejla sa obaveštenjem
- Kontaktiranje administratora preko kontakt forme
- Sve forme su proverene I na klijentu I na serveru
- Dodavanje proizvoda u korpu
- Kreiranje porudžbine
- CRUD operacije nad korisnicima, telefonima, brendovima, operativnim sistemima, porudžbina I kontakt porukama
- Resize uploadovane slike pri dodavanju ili menjanju telefona
- Beleženje pristupa stranicama u log.txt fajl
- Statistika pristupa stranicama (u %) i prikaz koliko je bilo pristupa svakoj stranici u poslednjih 24h
- Beleženje grešaka u error_log.txt
- Beleženje pokušaja logovanja u login_log.txt
- Prikaz broja korisnika koji su se ulogovali tekućeg dana
- Export informacija o autoru sa autor stranice u Word fajl
- Export tabele sa korisnicima iz admin panela u Excel fajl

1.3 Template

Za izradu sajta nije korišćen template.

2. Organizacija

2.1 Dizajn baze podataka



2.2 Mapa sajta

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
  <url>
      <loc>http://mobishoptpo.epizy.com/index.php</loc>
     <lastmod>2021-06-09</lastmod>
     <changefreq>monthly</changefreq>
      <priority>0.8</priority>
   </url>
   <url>
     <loc>http://mobishoptpo.epizy.com/index.php?p=phones</loc>
     <lastmod>2021-06-09</lastmod>
     <changefreq>monthly</changefreq>
      <priority>0.7</priority>
   </url>
   <url>
     <loc>http://mobishoptpo.epizy.com/index.php?p=contact</loc>
     <lastmod>2021-06-09
     <changefreq>monthly</changefreq>
      <priority>0.6</priority>
   </url>
   <url>
     <loc>http://mobishoptpo.epizy.com/index.php?p=author</loc>
     <lastmod>2021-06-09</lastmod>
      <changefreq>monthly</changefreq>
      <priority>0.6</priority>
   </url>
   <url>
      <loc>http://mobishoptpo.epizy.com/index.php?p=cart</loc>
     <lastmod>2021-06-09</lastmod>
     <changefreq>monthly</changefreq>
      <priority>0.5</priority>
   </url>
   <url>
     <loc>http://mobishoptpo.epizy.com/index.php?p=login</loc>
     <lastmod>2021-06-09</lastmod>
     <changefreq>monthly</changefreq>
      <priority>0.4</priority>
   </url>
   <url>
     <loc>http://mobishoptpo.epizy.com/index.php?p=register</loc>
     <lastmod>2021-06-09</lastmod>
     <changefreq>monthly</changefreq>
     <priority>0.4</priority>
   </url>
 /urlset>
```

2.3 Struktura projekta

root

> admin
> assets
> config
> data
> models
> views

index.php

robots.txt
sitemap.xml

assets

✓ assets
> css
> documentation
> fonts
> icon
> img
> js

config



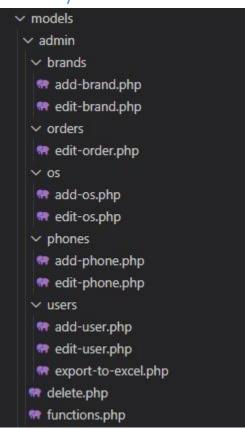
data

```
    ≡ error_log.txt
    ≡ log.txt
    ≡ login_log.txt
```

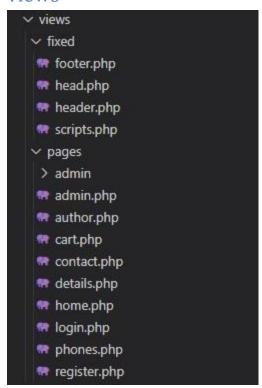
models

models
admin
author
cart
contact
footer
forms
nav
phones
slider
users

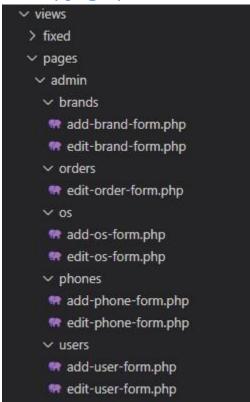
models/admin



views

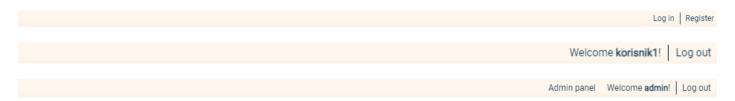


views/pages/admin



2.4 Slike stranica i opis funkcionalnosti

Na svim stranicama



Na vrhu svake stranice nalazi se traka za logovanje/registraciju. Ako korisnik nije ulogovan, na traci se nalaze linkovi za logovanje I registraciju. U koliko je korisnik ulogovan, na traci se ispisuje Poruka 'Welcome [username]!' I link koji omogućava korisniku da se izloguje. Dodatno, ako trenutni korisnik ima privilegije administratora, na traci će se pojaviti link za pristup Admin panelu.

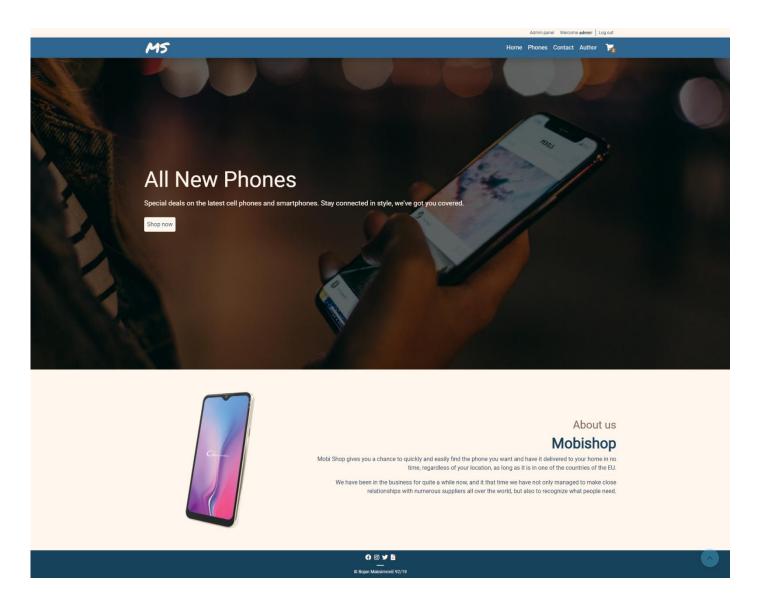


Ispod trake za logovanje nalazi se navigacioni meni (meni na velikim I meni na malim rezolucijama) dinamički ispisan iz tabele u bazi podataka. U njemu se takođe nalazi i link za pristup korpi (stranica cart.php) u čijem uglu piše koliko se proizvoda nalazi u korpi trenutno ulogovanog korisnika.



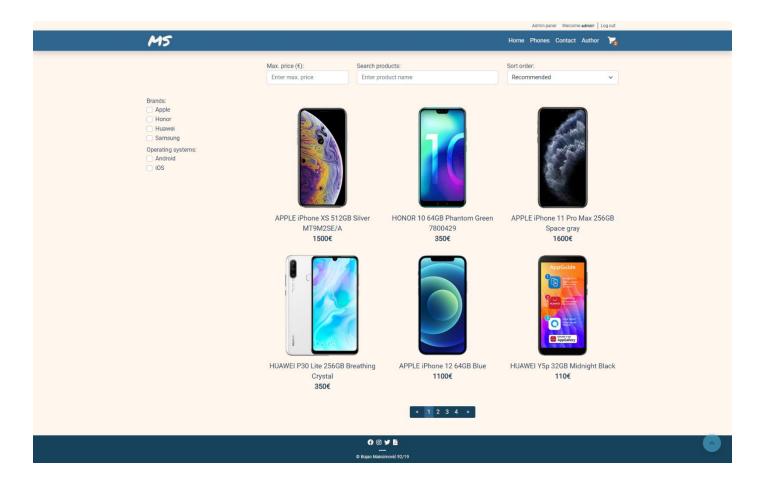
Na dnu svake stranice nalazi se footer u kom se nalaze linkovi do socijalnih mreža i dokumentacije koji su takođe učitani iz tabele u bazi podataka.

views/pages/home.php



Na početnoj stranici se nalazi slider u kom su slike dinamički učitane iz tabele u bazi podataka.

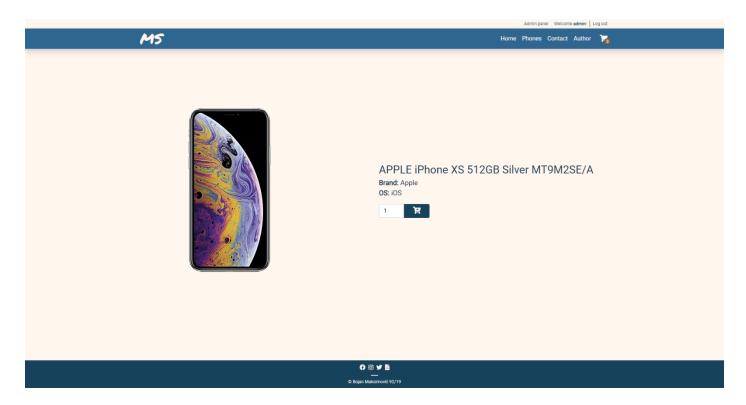
views/pages/phones.php



Na stranici 'Phones' nalaze se elementi za filtriranje I sortiranje prikazanih telefona. Checkbox-ovi u ovom div-u su dinamički učitani iz baze podataka iz tabela 'operating_systems' I 'brands'. Svi prikazani uređaji su takođe učitani iz baze podataka na osnovu izabranih filtera i prikazuje se slika manjih dimenzija. Na ovoj stranici postoji straničenje.

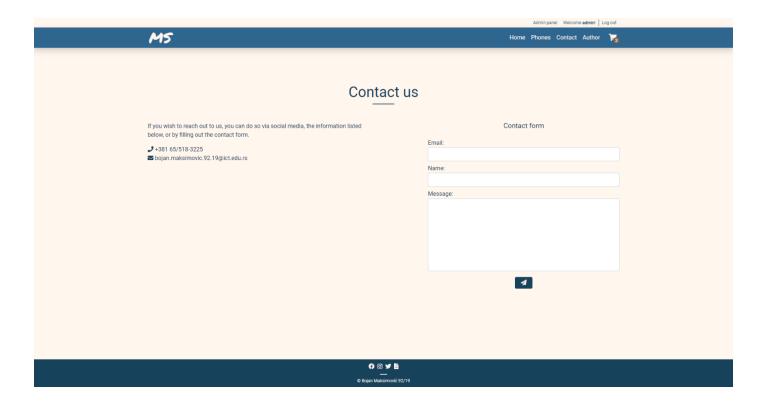
Hoverovanjem cursorom preko nekog uređaja pojavljuju se tasteri za dodavanje u korpu I taster koji otvara stranicu sa više detalja o uređaju. Ako je korisnik ulogovan klikom na taster za dodavanje u korpu uređaj se upisuje u tabelu 'cart' ili ako već postoji povećava mu se količina, a ako korisnik nije ulogovan preusmeren je na stranicu za logovanje.

views/pages/details.php



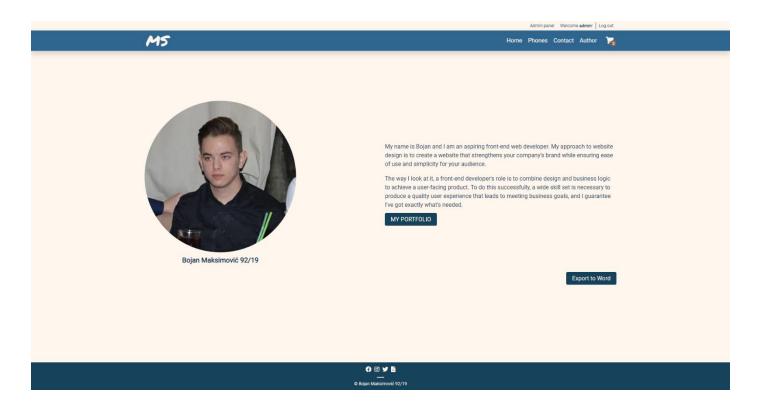
Na ovoj stranici se prikazuje slika telefona originalnih dimenzija, naziv telefona I neke karakteristike. Sa ove stranice takođe može telefon da se doda u korpu uz mogućnost da korisnik unese količinu.

views/pages/contact.php



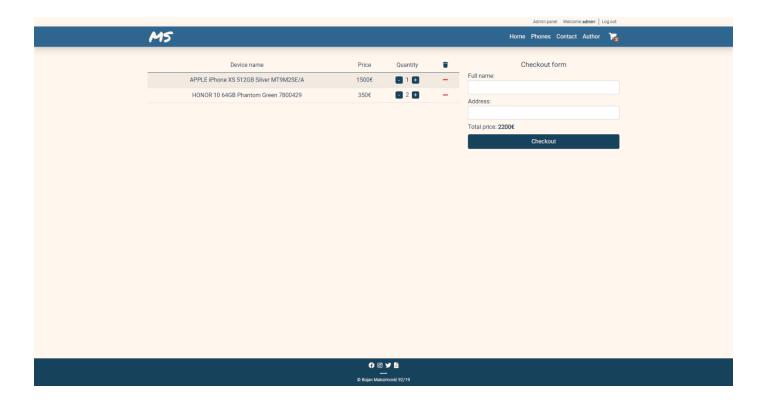
Na stranici se nalazi forma za kontaktiranje admnistratora. Unos u formu se I sa klijentske I sa serverske strane proverava regularnim izrazima. Ako je sve pravilno uneto, uneti podaci se upisuju u tabelu 'contact_messages' u bazi podataka. U slučaju da je korisnik bio ulogovan kad je poslao u poruku, u tabelu se takođe upisuje i ID tog korisnika, a u slučaju da nije, to polje dobija vrednost NULL.

views/pages/author.php



Na stranici author.php, linkovi do autorovih socijalnih mreža se učitavaju iz tabele 'authorsocials' iz baze podataka. Ovde takođe postoji i mogućnost da se podaci o autoru preuzmu u obliku Word dokumenta klikom na taster 'Export to Word' (web server na kom je sajt hostovan radi na Linux-u a klasa 'COM' je ekskluzivna za Windows pa će klik na taster da vrati error kod 500 ali kod za export I download postoji u models/author/export-to-word.php).

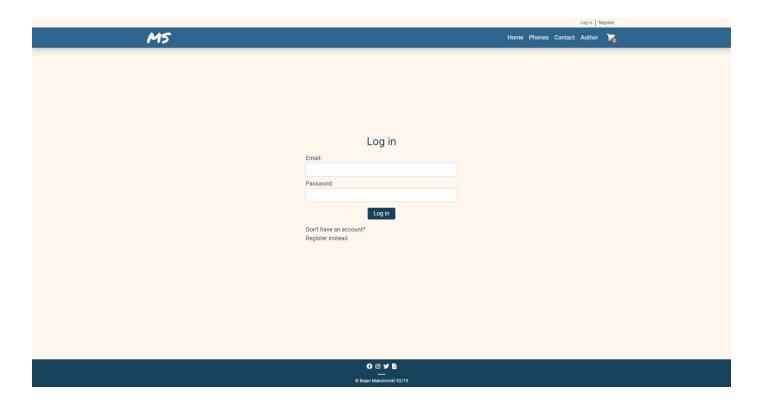
views/pages/cart.php



Na stranici cart.php, u slučaju da korisnik proba da joj pristupi preko url adrese, proverava se da li je korisnik ulogovan. U slučaju da nije, korisnik se redirektuje na Login stranicu koja mu govori da nema pristup korpi dok se ne uloguje.

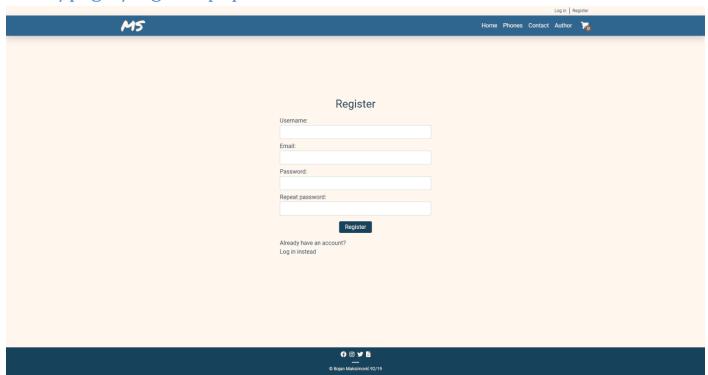
Ako je korisnik ulogovan i uspešno je pristupio stranici, ispisuje mu se tabela sa svim uređajima koji se nalaze u korpi i div sa formom za kreiranje porudžbine. Uneti sadržaj u formi se proverava regularnim izrazima sa klijentske i serverske strane, i ako je forma ispravno popunjena, korpa se prazni i uneti podaci sa sve ID-em korisnika I ukupnom cenom se unose u tabelu 'orders', a svi naručeni telefoni sa njihovim cenama i količinama se unose u svoje zasebne redove u tabeli 'order_details' I svi dobijaju kolonu u koju se automatski upisuje ID kreirane porudžbine.

views/pages/login.php



Stranica sa formom za logovanje sa proverom sa klijentske I serverske strane. Ako korisnik unese ispravan email ali pogrešnu lozinku tri puta u 5 minuta, nalog se zaključava i korisniku se šalje melj sa obaveštenjem (free hosting na infinityfree.com ne dozvoljava slanje mejla sa mail() funkcijom da bi umanjili spam ali kod postoji u models/users/login.php i models/users/functions.php). U slučaju da već ulogovani korisnik pokuša da pristupi ovoj stranici on se redirektuje na početnu stranicu.

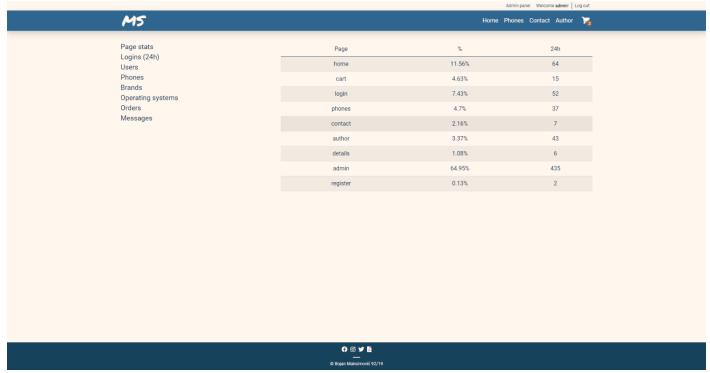
views/pages/register.php



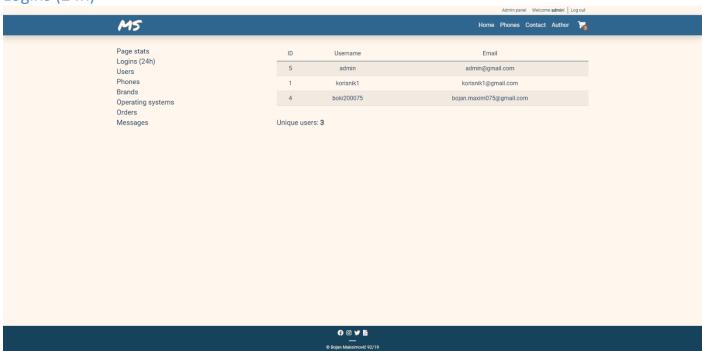
Stranica sa formom za registraciju sa proverom sa klijentske I serverske strane. Korisniku se ispisuje greška u slušaju da unese email ili username koji je već zauzet. U slučaju da već ulogovani korisnik pokuša da pristupi ovoj stranici on se redirektuje na početnu stranicu.

views/pages/admin.php

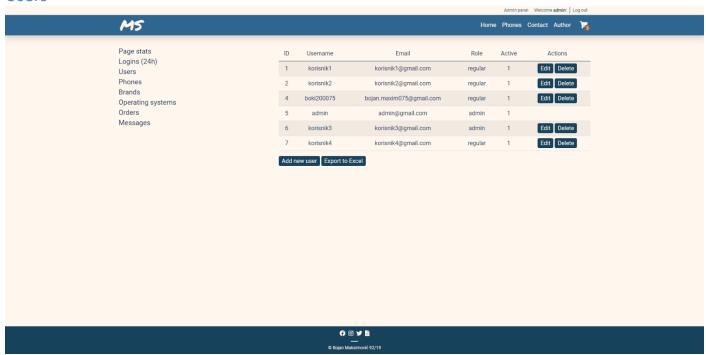
Page stats



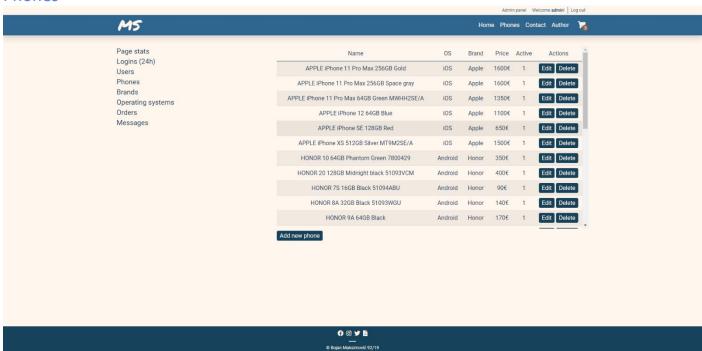
Logins (24h)



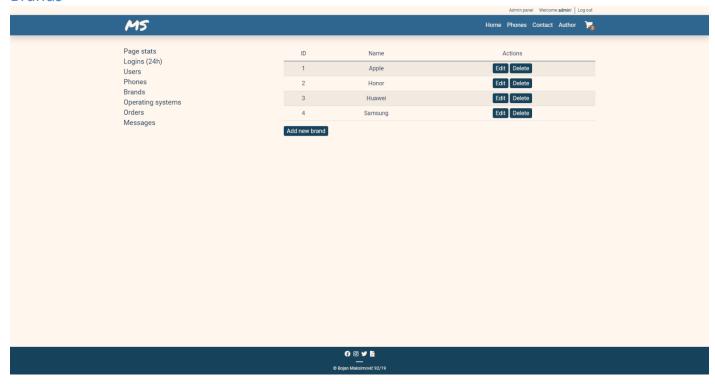
Users



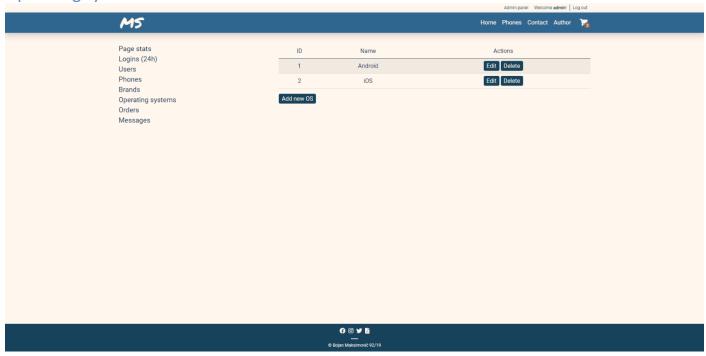
Phones



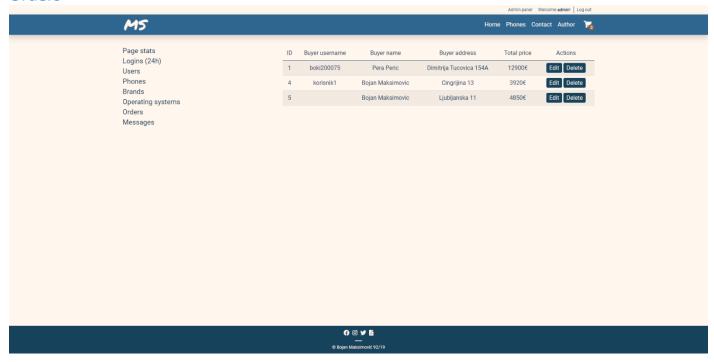
Brands



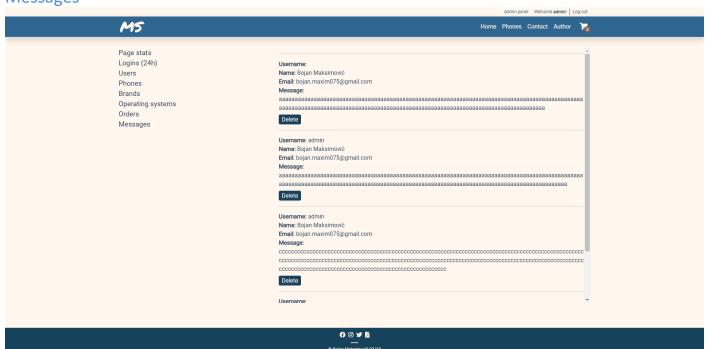
Operating systems



Orders



Messages



Admin panelu imaju pristup samo korisnici sa priviljegijama administratora. U slučaju da regularan korisnik pokuša da pristupi admin panelu putem url adrese biće redirektovan na početnu stranu.

U admin panelu moguće je vršiti CRUD operacije nad korisnicima, telefonima, brendovima, operativnim sistemima, porudžbinama I porukama poslatim putem kontakt forme.

Prilikom dodavanja novog telefona ili izmene postojećeg, uploadovana slika se čuva i u originalu i smanjenih dimenzija i obe putanje se upisuju u bazu.

U admin panelu takođe se nalazi i uvid u to koliko je koja stranica posećivana u procentima, koliko koja stranica ima poseta u poslednjih 24h I koji I koliko korisnika se ulogovalo u poslednjih 24h.

U sekciji za korisnike se nalazi I 'Export to Excel' taster koji tabelu sa korisnicima exportuje u Excel fajl I downloaduje ga (web server na kom je sajt hostovan radi na Linux-u a klasa 'COM' je ekskluzivna za Windows pa će klik na taster da vrati error kod 500 ali kod za export I download postoji u models/admin/users/export-to-excel.php).

3. Kodovi

3.1 PHP

index.php

```
<?php
    session_start();
    require_once('config/connection.php');
    require_once('views/fixed/head.php');
    require_once('views/fixed/header.php');
   if(isset($_GET['p'])) {
        switch($_GET['p']) {
            case 'home':
                require_once('views/pages/home.php');
                break;
            case 'phones':
                require_once('views/pages/phones.php');
                break;
            case 'details':
                require_once('views/pages/details.php');
                break;
            case 'contact':
                require_once('views/pages/contact.php');
                break;
            case 'author':
                require_once('views/pages/author.php');
            case 'cart':
                require_once('views/pages/cart.php');
            case 'login':
                require_once('views/pages/login.php');
                break;
            case 'register':
                require_once('views/pages/register.php');
                break;
            case 'admin':
                require_once('views/pages/admin.php');
                break;
            default:
                require_once('views/pages/home.php');
    } else {
        require_once('views/pages/home.php');
    }
    require_once('views/fixed/footer.php');
    require_once('views/fixed/scripts.php');
```

views/fixed/header.php

```
<header class="fixed-top">
   <div id="loginbar">
       <div class="container d-flex align-items-center justify-content-end">
       <?php
              if(!isset($ SESSION['user'])): // checks if user is logged in
              <1i>>
                  <a href="index.php?p=login" class="px-2 right-border font-xs d-</pre>
block my-1">Log in</a>
              <
                  <a href="index.php?p=register" class="px-2 font-xs d-block my-</pre>
1">Register</a>
              <?php
              else:
                  $user = $ SESSION['user'];
                  if($user->role_name == 'admin'): // checks if user is an admin
              <1i>>
                  <a href="index.php?p=admin" class="px-2 font-xs d-block my-</pre>
1">Admin panel</a>
              <?php
                  endif;
              1"><label>Welcome <span class="fw-bold"><?= $user->username ?></span>!</label>
              <1i>>
                  <a href="models/users/logout.php" class="px-2 font-xs d-block my-</pre>
1">Log out</a>
              <?php
              endif;
       </div>
   </div>
   <nav id="navbar" class="shadow">
       <div class="container d-flex justify-content-between align-items-center">
           <div id="logo">
              <h1 class="m-0">
                  <a href="index.php?p=home" class="font-xl p-1 d-block">MS</a>
              </h1>
           </div>
           <div id="navAndCart" class="d-flex align-items-center">
              <div id="nav" class="d-none d-md-block me-2">
                  <?php
```

```
require_once('models/nav/functions.php');
                           $links = getNavLinks();
                           foreach($links as $1):
                           class="px-2">
                               <a href="index.php?p=<?= $1->href ?>" class="py-1 font-
small"><?= $1->page_name ?></a>
                       <?php
                           endforeach;
                   </div>
               <a href="index.php?p=cart" id="cart" class="font-medium p-2 position-</pre>
relative">
                   <i class="fas fa-shopping-cart"></i></i>
                   <span id="cartQuantity" class="position-absolute font-xs rounded-</pre>
circle d-flex align-items-center justify-content-center"></span>
               </a>
               <a href="#" id="hamburgerMenu" class="font-medium d-block d-md-none ms-</pre>
1 p-2">
                   <i class="fas fa-bars"></i></i>
               </a>
           </div>
       </div>
   </nav>
    <div id="sidenav" class="cover">
       <div id="sidenavContent">
2"><?php foreach($links as $1):?><a href='index.php?p=<?= $1->href ?>' class='py-
1 font-small d-block p-2'><?= $1->page_name ?></a><?php endforeach;?></div>
    </div>
</header>
<main id="main" class="min-vh-100">
```

views/fixed/head.php

```
<!DOCTYPE html>
<html lang="en">
        <meta charset="UTF-8"/>
        <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
        <title>Mobishop</title>
        <meta name="description" content="Mobi Shop gives you a chance to quickly and easi</pre>
ly find the phone you want and have it delivered to your home in no time..."/>
        <meta name="keywords" content="Mobi Shop, smartphones, cell phones, Shop, Home"/>
        <link rel="icon" href="assets/icon/favicon.ico"/>
        <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.8.2/css/all.c</pre>
ss" crossorigin="anonymous"/>
        <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-</pre>
beta3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-
eOJMYsd53ii+scO/bJGFsiCZc+5NDVN2yr8+0RDqr0Ql0h+rP48ckxlpbzKgwra6" crossorigin="anonymous"/
        <link rel="stylesheet" href="assets/css/style.min.css"/>
    </head>
    <body>
```

views/fixed/footer.php

```
</main>
<footer id="footer">
   <div class="container py-2 d-flex align-items-center justify-content-center flex-</pre>
       <div id="footerLinks">
           <?php
                   require_once('models/footer/functions.php');
                   $links = getFooterLinks();
                   foreach($links as $1):
                   <1i>>
                       <a href="<?= $1->href ?>" target="_blank" class="p-1 font-
small"><i class="<?= $1->icon ?>"></i></a>
               <?php
                   endforeach;
           </div>
       <div class="footerSeparator my-2">
       </div>
       <span class="font-xs">&copy; Bojan Maksimović 92/19</span>
   </div>
</footer>
<a href="#" id="toTop" class="position-fixed p-3 rounded-circle shadow">
   <div id="toTopArrow" class="position-relative m-1"></div>
```

views/fixed/scripts.php

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-</pre>
beta3/dist/js/bootstrap.bundle.min.js" integrity="sha384-
JEW9xMcG8R+pH31jmWH6WWP0WintQrMb4s7Z0dauHnUtxwoG2vI5DkLtS3qm9Ekf" crossorigin="anonymous">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></scrip</pre>
    <script src="assets/js/main.js"></script>
    <?php
        if(isset($_GET['p'])) {
            switch($_GET['p']) {
                case 'phones':
                    echo("<script src='assets/js/phones.min.js'></script>");
                    break:
                case 'details':
                    echo("<script src='assets/js/phones.min.js'></script>");
                    break;
                case 'contact':
                    echo("<script src='assets/js/form-validation.min.js'></script>");
                    echo("<script src='assets/js/contact.min.js'></script>");
                    break;
                case 'cart':
                    echo("<script src='assets/js/form-validation.min.js'></script>");
                    echo("<script src='assets/js/cart.min.js'></script>");
                    break;
                case 'login':
                    echo("<script src='assets/js/form-validation.min.js'></script>");
                    echo("<script src='assets/js/login.min.js'></script>");
                    break;
                case 'register':
                    echo("<script src='assets/js/form-validation.min.js'></script>");
                    echo("<script src='assets/js/register.min.js'></script>");
                    break;
                case 'admin':
                    echo("<script src='assets/js/form-validation.min.js'></script>");
                    echo("<script src='assets/js/admin.min.js'></script>");
                    break;
            }
</body>
</html>
```

views/pages/home.php

```
<div id="slider" class="carousel slide vh-100 position-relative" data-bs-ride="carousel">
  <div class="carousel-inner h-100">
   <?php
       require once('models/slider/functions.php');
       $sliderImages = getSliderImages();
       foreach($sliderImages as $key=>$i):
       <div class="carousel-item slider-image <?php if($key == 0) echo('active'); ?> h-
100" style="background-image: url('assets/img/slider/<?= $i->href ?>');">
       </div>
    <?php
       endforeach;
  </div>
  <div id="sliderText" class="position-absolute cover">
    <div class="container d-flex flex-column align-items-center align-items-md-</pre>
start justify-content-center h-100">
       <h2 class="font-xx1">All New Phones</h2>
       2">Special deals on the latest cell phones and smartphones. Stay connected in style, we've
 got you covered.
        <a href="index.php?p=phones" class="font-small d-block mt-2 p-</pre>
2 rounded">Shop now</a>
   </div>
 </div>
</div>
<div id="about">
   <div class="container py-5">
       <div class="row align-items-center">
           <div class="col-12 col-lg-4">
               <div id="aboutUsImage" class="mx-auto mb-4 mb-lg-0">
                   <img src="assets/img/other/aboutUsImage.png" alt="Phone" class="img-</pre>
fluid"/>
               </div>
           </div>
           <div class="col-12 col-lg-8 text-center text-lg-end">
               <h3 class="font-large">About us</h3>
               <h4 class="font-xl fw-bold">Mobishop</h4>
               Mobi Shop gives you a chance to quickly and easily find the phone you
want and have it delivered to your home in no time, regardless of your location, as long a
s it is in one of the countries of the EU.
               We have been in the business for quite a while now, and it that time w
e have not only managed to make close relationships with numerous suppliers all over the w
orld, but also to recognize what people need.
               </div>
       </div>
```

</div>

views/pages/phones.php

```
<div class="d-flex min-vh-100 py-5">
    <div class="container mt-5">
        <div class="mt-0 mt-md-3">
                    <div class="row">
                         <div class="col-12 col-md-3">
                             <form class="pt-0 pt-md-5">
                                 <div class="mb-2 mt-0 mt-md-5">
                                     <label>Brands:</label>
                                     <?php
                                         require once("models/phones/functions.php");
                                         $brands = getBrands();
                                         foreach($brands as $b):
                                     <div class="form-check">
                                         <input class="form-check-</pre>
input chbBrand" type="checkbox" value="<?= $b->id ?>" id="chbBrand<?= $b->id ?>">
                                         <label class="form-check-</pre>
label" for="chbBrand<?= $b->id ?>">
                                             <?= $b->name ?>
                                         </label>
                                     </div>
                                     <?php
                                         endforeach;
                                 </div>
                                 <div class="mb-2">
                                     <label>Operating systems:</label>
                                     <?php
                                         $operatingSystems = getOperatingSystems();
                                         foreach($operatingSystems as $o):
                                     <div class="form-check">
                                          <input class="form-check-</pre>
input chbOS" type="checkbox" value="<?= $o->id ?>" id="chbOS<?= $o->id ?>">
                                         <label class="form-check-label" for="chbOS<?= $o-</pre>
>id ?>">
                                              <?= $o->name ?>
                                         </label>
                                     </div>
                                     <?php
                                         endforeach;
                                 </div>
                             </form>
                         </div>
                         <div class="col-12 col-md-9">
                             <form>
                             <div class="row">
                                <div class="col-12 col-md-3">
```

```
<label for="tbMaxPrice" class="font-</pre>
small">Max. price (€):</label>
                                      <input type="number" name="tbMaxPrice" id="tbMaxPrice"</pre>
 class="form-control font-small" placeholder="Enter max. price"/>
                                 </div>
                                 <div class="col-12 col-md-5">
                                      <label for="tbSearch" class="font-</pre>
small">Search products:</label>
                                     <input type="search" name="tbSearch" id="tbSearch" cla</pre>
ss="form-control font-small" placeholder="Enter product name" autocomplete="off"/>
                                 </div>
                                 <div class="col-12 col-md-4">
                                      <label for="ddlSortOrder" class="font-</pre>
small">Sort order:</label>
                                     <select name="ddlSortOrder" id="ddlSortOrder" class="f</pre>
orm-select">
                                          <option value="0">Recommended</option>
                                          <option value="1">Name A-Z</option>
                                          <option value="2">Name Z-A</option>
                                          <option value="3">Price ascending</option>
                                          <option value="4">Price descending</option>
                                      </select>
                                 </div>
                             </div>
                             </form>
                                 <div id="phones" class="mt-5">
                                      <div class="row">
                                      </div>
                                      <div id="pagination" class="mt-4 d-flex align-items-</pre>
center justify-content-center">
                                      </div>
                             </div>
                         </div>
                     </div>
        </div>
    </div>
</div>
```

views/pages/details.php

```
<?php
    if(!isset($_GET['id'])) {
        header("Location: index.php?p=phones");
        exit();
    require once("models/phones/functions.php");
    $phone = getPhoneById($ GET['id']);
    if(!$phone) {
        header("Location: index.php?p=phones");
    } else {
        if(!$phone->active) {
            header("Location: index.php?p=phones");
            exit();
<div class="d-flex align-items-center min-vh-100 py-5">
    <div class="container mt-5 mt-md-0">
            <div class="row">
                <div class="col-12 col-md-6">
                     <div id="phoneImage">
                         <img src="assets/img/phones/<?= $phone->image ?>" alt="<?= $phone-</pre>
>name ?>" class="img-fluid"/>
                     </div>
                </div>
                <div class="col-12 col-md-6 d-flex align-items-center align-items-md-</pre>
start justify-content-center flex-column">
                     <label id="phoneName" class="font-large text-center text-md-</pre>
start"><?= $phone->name ?></label>
                     <?php
                         $brand = getBrandById($phone->brand);
                         $os = getOSById($phone->os);
                     <div id="phoneBrand">
                         <label class="font-medium"><span class="fw-</pre>
bold">Brand: </span><?= $brand->name ?></label>
                     </div>
                     <div id="phoneOS">
                         <label class="font-medium"><span class="fw-</pre>
bold">OS: </span><?= $os->name ?></label>
                     </div>
                     <div id="addToCart" class="mt-3 d-flex justify-content-center justify-</pre>
content-md-start">
                         <input type="number" name="tbAddToCart" id="tbAddToCart" class="fo</pre>
rm-control font-small w-25 rounded-0 rounded-start" value="1"/>
                         <a href="#" data-
id="<?= $_GET['id'] ?>" id="btnAddToCart" class="text-center btn-primary font-medium py-
1 px-4 rounded-end">
                            <i class="fas fa-cart-plus"></i></i>
```

views/pages/contact.php

```
<div class="d-flex align-items-center min-vh-100 py-5">
<div class="container mt-5 mt-md-0">
   <h2 class="font-xl text-center">Contact us</h2>
   <div class="underline mb-5"></div>
   <div class="row mt-5 mt-md-0 justify-content-between">
       <div class="col-12 col-md-6 mb-4 mb-md-0">
           small">If you wish to reach out to us, you can do so via social media, the information lis
ted below, or by filling out the contact form.
           <i class="fas fa-phone me-1"></i>+381 65/518-
3225
               <i class="fas fa-envelope me-</pre>
1"></i>bojan.maksimovic.92.19@ict.edu.rs
           </div>
       <div class="col-12 col-md-5">
           <h3 class="font-medium text-center mb-4">Contact form</h3>
           <form action="models/contact/send-message.php" method="POST">
               <div class="mb-2">
                   <label for="tbEmail">Email:</label>
                   <input type="email" name="email" id="tbEmail" class="form-control"/>
                   <label class="font-small error-message text-</pre>
danger">examplename@example.com</label>
               </div>
               <div class="mb-2">
                   <label for="tbName">Name:</label>
                   <input type="text" name="name" id="tbName" class="form-control"/>
                   <label class="font-small error-message">
                      class="text-"
danger">- A name cannot have less than 3 characters
                          class="text-"
danger">- Each word of your name must be capitalized
                      </label>
               </div>
               <div class="mb-3">
                   <label for="tbMessage">Message:</label>
                   <textarea name="message" id="tbMessage" class="form-
control" style="resize: none; height: 200px;"></textarea>
                   <label class="font-small error-message text-</pre>
danger">Your message (without spacing characters) cannot be shorter than 20 characters or
longer than 500 characters in total.</label>
               </div>
               <div class="text-center mb-3">
                   <button id="btnSend" name="btnSend" class="py-1 px-3 rounded btn-</pre>
primary"><i class="fas fa-paper-plane font-small"></i></button>
               </div>
               <?php
```

views/pages/author.php

```
<div class="d-flex align-items-center min-vh-100 py-5">
<div class="container">
    <div class="row align-items-center justify-content-between mt-5 mt-md-0">
       <div class="col-12 col-md-4 d-flex flex-column align-items-center justify-content-</pre>
center">
           <div id="authorImage" class="position-relative rounded-circle overflow-</pre>
hidden">
               <img src="assets/img/author/author.jpg" alt="Author" class="img-fluid d-</pre>
block"/>
               <div id="authorSocials" class="position-absolute cover-white align-items-</pre>
center justify-content-center">
                   <?php
                           require once("models/author/functions.php");
                           $links = getAuthorSocials();
                           foreach($links as $1):
                       <1i>>
                           <a href="<?= $1->href ?>" target="_blank" class="p-1 font-
medium"><i class="<?= $1->icon ?>" style="color: <?= $1->color ?>;"></i></a>
                       <?php
                           endforeach;
                   </div>
           </div>
           <span class="font-medium fw-bold mt-2 text-</pre>
center">Bojan Maksimović 92/19</span>
       </div>
       <div class="col-12 col-md-6 text-center text-md-start mt-4 mt-md-0">
           My name is Bojan and I am an aspiring front-
end web developer. My approach to website design is to create a website that strengthens y
our company's brand while ensuring ease of use and simplicity for your audience.
           The way I look at it, a front-
end developer's role is to combine design and business logic to achieve a user-
facing product. To do this successfully, a wide skill set is necessary to produce a qualit
y user experience that leads to meeting business goals, and I guarantee I've got exactly w
hat's needed.
           <a href="https://bokule.github.io/portfolio/" target="_blank" class="font-</pre>
small rounded py-2 px-3 text-uppercase btn-primary" id="portfolioLink">My portfolio</a>
       </div>
   </div>
    <div class="mt-4 text-center text-md-end">
       <a href="models/author/export-to-word.php" class="font-small rounded py-2 px-</pre>
3 btn-primary">Export to Word</a>
   </div>
</div>
</div>
```

views/pages/cart.php

```
<?php
   if(!isset($ SESSION['user'])) {
      $ SESSION['errors'] = ["You need to be logged in in order to access your cart."];
      header("Location: index.php?p=login");
      exit();
<div class="d-flex min-vh-100 py-5">
   <div class="container mt-5">
      <div class="mt-0 mt-md-3">
          <div class="row flex-column-reverse flex-md-row">
              <div class="col-12 col-md-8 mt-4 mt-md-0">
                 <div class="table-responsive">
                     <table id="cartTable" class="font-small table table-striped table-
hover align-middle" cellspacing="0">
                               Device name
                               Price
                               Quantity
                               <td class="colRemove text-center px-
3"><i class="fas fa-trash"></i>
                            </thead>
                        </div>
              </div>
              <div class="col-12 col-md-4 mt-2">
                 <form action="models/cart/create-</pre>
order.php" method="POST" id="checkoutForm">
                     <h3 class="font-medium text-center">Checkout form</h3>
                     <div class="mb-2 mt-2">
                        <label for="tbName" class="font-small">Full name:</label>
                        <input type="text" name="tbName" id="tbName" class="form-</pre>
control font-small" autocomplete="off"/>
                        <label class="error-message">
                            class="text-"
danger">- A name cannot have less than 3 characters
                               class="text-"
danger">- Has to be at least 2 words
                               class="text-"
danger">- Each word must be capitalized
                            </label>
                     </div>
                     <div class="mb-2">
                        <label for="tbAddress" class="font-small">Address:</label>
```

```
<input type="text" name="tbAddress" id="tbAddress" class="form</pre>
-control font-small" autocomplete="off"/>
                             <label class="error-message font-small text-</pre>
danger">[Street Name] [Home Number]/[Apartment Number]</label>
                         </div>
                         <label>Total price: <span class="fw-</pre>
bold"><span id="totalPrice">0</span>&euro;</span></label>
                         <div class="mt-2 mb-3">
                             <input type="submit" value="Checkout" class="font-small btn-</pre>
primary d-block p-2 w-100 rounded" id="btnCheckout" name="btnCheckout"/>
                         </div>
                         <?php
                             require_once('models/forms/functions.php');
                             displayMessages();
                     </form>
                 </div>
            </div>
        </div>
    </div>
</div>
```

views/pages/login.php

```
<?php
   if(isset($_SESSION['user'])) {
       header("Location: index.php?p=home");
       exit();
   }
<div class="d-flex align-items-center min-vh-100 py-5">
   <div class="container">
       <div class="row">
           <div id="login-form" class="col-12 col-sm-8 col-md-6 col-lg-4 mx-auto">
              <h3 class="font-large mb-3 text-center">Log in</h3>
              <form action="models/users/login.php" method="POST">
                  <div class="mb-2">
                      <label for="tbEmail">Email:</label>
                      <input type="email" name="email" id="tbEmail" class="form-</pre>
control"/>
                      <label class="font-small error-message text-</pre>
danger">examplename@example.com</label>
                  </div>
                  <div class="mb-3">
                      <label for="tbPassword">Password:</label>
                      <input type="password" name="password" id="tbPassword" class="form</pre>
-control"/>
                      <label class="font-small error-message text-</pre>
danger">Your password must:
                         - contain 1 lowercase letter
                             - contain 1 uppercase letter
                             - contain 1 number
                             - contain 1 special character
                             - be 8 characters or longer
                         </label>
                  <div class="text-center mb-3">
                      <button id="btnLogIn" name="btnLogIn" class="py-1 px-</pre>
3 rounded btn-primary font-small">Log in</button>
                  </div>
                  <?php
                      require_once('models/forms/functions.php');
                      displayMessages();
              </form>
              <a href="index.php?p=register">Don't have an account?<br/>Register instead
</a>
           </div>
       </div>
   </div>
(/div>
```

views/pages/register.php

```
<?php
   if(isset($_SESSION['user'])) {
      header("Location: index.php?p=home");
      exit();
   }
<div class="d-flex align-items-center min-vh-100 py-5">
   <div class="container">
       <div class="row">
          <div id="register-form" class="col-12 col-sm-8 col-md-6 col-lg-4 mx-auto">
              <h3 class="font-large mb-3 text-center">Register</h3>
              <form action="models/users/register.php" method="POST">
                 <div class="mb-2">
                     <label for="tbUsername">Username:</label>
                     <input type="text" name="username" id="tbUsername" class="form-</pre>
control"/>
                     <label class="font-small error-message text-</pre>
danger">Your username must:
                        - start with a letter
danger">- be between 5 and 20 characters long
                            class="text-"
danger">- not contain special characters other than '_'
                        </label>
                 </div>
                 <div class="mb-2">
                     <label for="tbEmail">Email:</label>
                     <input type="email" name="email" id="tbEmail" class="form-</pre>
control"/>
                     <label class="font-small error-message text-</pre>
danger">examplename@example.com</label>
                 </div>
                 <div class="mb-2">
                     <label for="tbPassword">Password:</label>
                     <input type="password" name="password" id="tbPassword" class="form</pre>
-control"/>
                     <label class="font-small error-message text-</pre>
danger">Your password must:
                        - contain 1 lowercase letter
                            - contain 1 uppercase letter
                            - contain 1 number
                            - contain 1 special character
                            - be 8 characters or longer
                        </label>
                 </div>
                 <div class="mb-3">
```

```
<label for="tbRepeatPassword">Repeat password:</label>
                         <input type="password" name="repeatPassword" id="tbRepeatPassword"</pre>
 class="form-control"/>
                         <label class="font-small error-message text-</pre>
danger">Passwords don't match</label>
                     </div>
                     <div class="text-center mb-3">
                         <button id="btnRegister" name="btnRegister" class="py-1 px-</pre>
3 rounded btn-primary font-small">Register</button>
                     </div>
                     <?php
                         require_once('models/forms/functions.php');
                         displayMessages();
                </form>
                <a href="index.php?p=login">Already have an account?<br/>Log in instead</a</pre>
            </div>
        </div>
    </div>
</div>
```

views/pages/admin.php

```
<?php
   if(isset($_SESSION['user'])) {
       if($_SESSION['user']->role_name != 'admin') {
           header('Location: index.php?p=home');
           exit();
   } else {
       header('Location: index.php?p=home');
       exit();
<div class="d-flex min-vh-100 py-5">
   <div class="container mt-5">
       <div class="mt-0 mt-md-3">
           <div class="row">
               <div class="col-12 col-md-4">
                   <?php
                           require_once('models/admin/functions.php');
                           $links = getAdminLinks();
                           foreach($links as $1):
                       <1i>>
                           <a href="index.php?p=admin&ap=<?= $1->href ?>"><?= $1-</pre>
>page_name ?></a>
                       <?php
                           endforeach;
                   </div>
               <div class="col-12 col-md-8">
                   <?php
                       if(isset($_GET['ap'])) {
                           switch($_GET['ap']) {
                               case 'page-stats':
                                   require_once('admin/page-stats.php');
                                   break;
                               case 'logins':
                                   require_once('admin/logins.php');
                                   break;
                               case 'users':
                                   require_once('admin/users.php');
                                   break;
                               case 'add-user':
                                   require_once('admin/users/add-user-form.php');
                                   break;
                               case 'edit-user':
                                   require_once('admin/users/edit-user-form.php');
                                   break;
```

```
case 'phones':
                                    require_once('admin/phones.php');
                                    break;
                                case 'add-phone':
                                    require_once('admin/phones/add-phone-form.php');
                                    break;
                                case 'edit-phone':
                                    require_once('admin/phones/edit-phone-form.php');
                                    break;
                                case 'brands':
                                    require_once('admin/brands.php');
                                    break;
                                case 'add-brand':
                                    require_once('admin/brands/add-brand-form.php');
                                case 'edit-brand':
                                    require once('admin/brands/edit-brand-form.php');
                                    break;
                                case 'operating-systems':
                                    require_once('admin/operating-systems.php');
                                case 'add-os':
                                    require_once('admin/os/add-os-form.php');
                                    break;
                                case 'edit-os':
                                    require_once('admin/os/edit-os-form.php');
                                    break;
                                case 'orders':
                                    require_once('admin/orders.php');
                                    break;
                                case 'edit-order':
                                    require_once('admin/orders/edit-order-form.php');
                                    break;
                                case 'messages':
                                    require_once('admin/messages.php');
                                    break;
                                default:
                                    require_once('admin/page-stats.php');
                        } else {
                            require_once('admin/page-stats.php');
                        }
                    ?>
                </div>
            </div>
       </div>
    </div>
</div>
```

views/pages/admin/page-stats.php

```
<?php
   if(isset($_SESSION['user'])) {
      if($ SESSION['user']->role name != 'admin') {
          http_response_code(404);
          exit();
   } else {
      http_response_code(404);
      exit();
<div class="table-responsive">
   middle" cellspacing="0">
             Page
             %
             24h
          </thead>
      <?php
             $file = file(LOG_FILE);
             $totalVisits = 0;
             $pages = [];
             $visits = [];
             $visits24h = [];
             foreach($file as $row) {
                $values = explode(SEPARATOR, $row);
                $pageName = $values[2];
                $dateAndTime = trim($values[4]);
                if($pageName == '') continue;
                if(!in_array($pageName, $pages)) {
                    array_push($pages, $pageName);
                    array_push($visits, 1);
                    if(time() - getTime($dateAndTime) <= 60*60*24) {</pre>
                       array_push($visits24h, 1);
                    } else {
                       array_push($visits24h, 0);
                } else {
                    foreach($pages as $key=>$p) {
                       if($p == $pageName) {
                           $index = $key;
                           break;
```

views/pages/admin/logins.php

```
<?php
   if(isset($_SESSION['user'])) {
      if($ SESSION['user']->role name != 'admin') {
         http_response_code(404);
         exit();
   } else {
      http_response_code(404);
      exit();
<div class="table-responsive">
   middle" cellspacing="0">
      <thead>
            ID
            Username
            Email
         </thead>
      <?php
            require_once('models/users/functions.php');
            $file = file(LOGIN_LOG);
            $userIds = [];
            foreach($file as $row) {
               $values = explode(SEPARATOR, $row);
               $userId = $values[0];
               $dateAndTime = $values[2];
               $result = trim($values[3]);
               if(!in_array($userId, $userIds) && time() - getTime($dateAndTime) <= 6</pre>
0*60*24 && $result == '1') {
                  array_push($userIds, $userId);
               }
            $numberOfUsers = 0;
            foreach($userIds as $u):
               $user = getUser('id', $u);
                  if($user):
                     $numberOfUsers++;
            <?= $user->id ?>
               <?= $user->username ?>
               <?= $user->email ?>
            <?php
               endif;
```

views/pages/admin/users.php

```
<?php
  if(isset($_SESSION['user'])) {
     if($ SESSION['user']->role name != 'admin') {
       http_response_code(404);
       exit();
  } else {
     http_response_code(404);
     exit();
  require_once('models/forms/functions.php');
  displayMessages();
<div class="table-responsive">
  middle" cellspacing="0">
     <thead>
          ID
          Username
          Email
          Role
          Active
          Actions
       </thead>
     <?php
          $users = getAllUsers();
          foreach($users as $u):
          <?= $u->id ?>
             <?= $u->username ?>
             <?= $u->email ?>
             <?= $u->role_name ?>
             <?= $u->active ?>
             <?php
                  if($u->id != $_SESSION['user']->id):
               <a href="index.php?p=admin&ap=edit-user&id=<?= $u-</pre>
>id ?>" class="font-small btn-primary px-2 py-1 rounded">Edit</a>
               <a href="models/admin/delete.php?id=<?= $u-
>id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-1 rounded">Delete</a>
               <?php
                  endif;
```

views/pages/admin/phones.php

```
<?php
  if(isset($_SESSION['user'])) {
     if($ SESSION['user']->role name != 'admin') {
        http_response_code(404);
        exit();
  } else {
     http_response_code(404);
     exit();
  require_once('models/forms/functions.php');
  displayMessages();
<div class="table-responsive mb-2">
  middle" cellspacing="0">
     <thead>
          Name
          0S
          Brand
          Price
          Active
          Actions
       </thead>
     <?php
          require_once('models/phones/functions.php');
          $phones = getAllPhones();
          foreach($phones as $p):
          <?= $p->phone name ?>
             <?= $p->os_name ?>
             <?= $p->brand_name ?>
             <?= $p->price ?>&euro;
             <?= $p->active ?>
             <a href="index.php?p=admin&ap=edit-phone&id=<?= $p-</pre>
>phone id ?>" class="font-small btn-primary px-2 py-1 rounded">Edit</a>
               <a href="models/admin/delete.php?id=<?= $p-</pre>
>phone_id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-
1 rounded">Delete</a>
             <?php
          endforeach;
```

```
?>

</div>
<a href="index.php?p=admin&ap=add-phone" class="font-small btn-primary px-2 py-1 rounded">Add new phone</a>
```

views/pages/admin/brands.php

```
<?php
   if(isset($_SESSION['user'])) {
      if($ SESSION['user']->role name != 'admin') {
         http_response_code(404);
         exit();
   } else {
     http_response_code(404);
     exit();
   require_once('models/forms/functions.php');
   displayMessages();
<div class="table-responsive">
   middle" cellspacing="0">
            ID
            Name
            Actions
         </thead>
      <?php
            $brands = getAllBrands();
            foreach($brands as $b):
            <?= $b->id ?>
               <?= $b->name ?>
               <a href="index.php?p=admin&ap=edit-brand&id=<?= $b-</pre>
>id ?>" class="font-small btn-primary px-2 py-1 rounded">Edit</a>
                  <a href="models/admin/delete.php?id=<?= $b-</pre>
>id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-1 rounded">Delete</a>
               <?php
            endforeach;
      </div>
<a href="index.php?p=admin&ap=add-brand" class="font-small btn-primary px-2 py-</pre>
1 rounded">Add new brand</a>
```

views/pages/admin/operating-systems.php

```
<?php
  if(isset($_SESSION['user'])) {
     if($ SESSION['user']->role name != 'admin') {
        http_response_code(404);
        exit();
   } else {
     http_response_code(404);
     exit();
  require_once('models/forms/functions.php');
  displayMessages();
<div class="table-responsive">
   middle" cellspacing="0">
           ID
           Name
           Actions
        </thead>
     <?php
           $os = getAllOS();
           foreach($os as $o):
           <?= $o->id ?>
              <?= $o->name ?>
              <a href="index.php?p=admin&ap=edit-os&id=<?= $o-
>id ?>" class="font-small btn-primary px-2 py-1 rounded">Edit</a>
                 <a href="models/admin/delete.php?id=<?= $o-</pre>
>id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-1 rounded">Delete</a>
              <?php
           endforeach;
      </div>
<a href="index.php?p=admin&ap=add-os" class="font-small btn-primary px-2 py-</pre>
1 rounded">Add new OS</a>
```

views/pages/admin/orders.php

```
<?php
  if(isset($_SESSION['user'])) {
     if($ SESSION['user']->role name != 'admin') {
       http_response_code(404);
       exit();
  } else {
     http_response_code(404);
     exit();
  require_once('models/forms/functions.php');
  displayMessages();
<div class="table-responsive">
  middle" cellspacing="0">
     <thead>
          ID
          Buyer username
          Buyer name
          Buyer address
          Total price
          Actions
       </thead>
     <?php
          $orders = getAllOrders();
          foreach($orders as $o):
          <?= $o->order_id ?>
             <?= $o->username ?>
             <?= $o->name ?>
             <?= $o->address ?>
             <?= $o->total price ?>&euro;
             <a href="index.php?p=admin&ap=edit-order&id=<?= $o-</pre>
>order_id ?>" class="font-small btn-primary px-2 py-1 rounded">Edit</a>
               <a href="models/admin/delete.php?id=<?= $o-</pre>
>order_id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-
1 rounded">Delete</a>
             <?php
          endforeach;
```

</div>

views/pages/admin/messages.php

```
<?php
    if(isset($_SESSION['user'])) {
        if($ SESSION['user']->role name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
    require_once('models/forms/functions.php');
    displayMessages();
<div class="messagesDiv overflow-auto">
<?php
    $messages = getAllMessages();
    foreach($messages as $m):
<div class="messageDiv">
    <hr/>
        <label class="font-small">
            <span class="fw-bold">Username: </span><?= $m->username ?>
        </label>
        <br/>
        <label class="font-small">
            <span class="fw-bold">Name: </span><?= $m->name ?>
        </label>
        <br/>
        <label class="font-small">
            <span class="fw-bold">Email: </span><?= $m->email ?>
        </label>
        <br/>
        <label class="font-small">
            <span class="fw-bold">Message: </span>
        </label>
        <span class="text-break d-block mb-2"><?= $m->message ?></span>
        <a href="models/admin/delete.php?id=<?= $m-</pre>
>message_id ?>&ap=<?= $_GET['ap'] ?>" class="font-small btn-primary px-2 py-
1 rounded">Delete</a>
</div>
<?php
    endforeach;
```

views/pages/admin/users/add-user-form.php

```
<?php
   if(isset($_SESSION['user'])) {
      if($ SESSION['user']->role name != 'admin') {
          http_response_code(404);
          exit();
   } else {
      http_response_code(404);
      exit();
<form action="models/admin/users/add-user.php" method="POST">
   <div class="mb-2">
      <label for="tbAddUserUsername">Username:</label>
      <input type="text" name="username" id="tbAddUserUsername" class="form-control"/>
      <label class="font-small error-message text-danger">Your username must:
          - start with a letter
             - be between 5 and 20 characters long
             class="text-"
danger">- not contain special characters other than ' '
      </label>
   </div>
   <div class="mb-2">
      <label for="tbAddUserEmail">Email:</label>
      <input type="email" name="email" id="tbAddUserEmail" class="form-control"/>
      <label class="font-small error-message text-</pre>
danger">examplename@example.com</label>
   </div>
   <div class="mb-2">
      <label for="tbAddUserPassword">Password:</label>
      <input type="password" name="password" id="tbAddUserPassword" class="form-</pre>
control"/>
      <label class="font-small error-message text-danger">Your password must:
          - contain 1 lowercase letter
             - contain 1 uppercase letter
             - contain 1 number
             - contain 1 special character
             - be 8 characters or longer
          </label>
   </div>
   <div class="mb-2">
      <label for="ddlAddUserRole">Role:</label>
      <select name="role" id="ddlAddUserRole" class="form-select">
          <?php
             $roles = getAllRoles();
             foreach($roles as $r):
```

views/pages/admin/users/edit-user-form.php

```
<?php
   if(isset($_SESSION['user'])) {
       if($ SESSION['user']->role name != 'admin') {
           http response code(404);
           exit();
    } else {
       http_response_code(404);
       exit();
   if(!isset($_GET['id'])) {
       http response code(400);
       exit();
   require once('models/users/functions.php');
    $user = getUser('id', $_GET['id']);
<form action="models/admin/users/edit-user.php" method="POST">
    <input type="hidden" name="id" value="<?= $user->id ?>"/>
    <div class="mb-2">
       <label for="tbEditUserUsername">Username:</label>
       <input type="text" name="username" id="tbEditUserUsername" value="<?= $user-</pre>
>username ?>" class="form-control"/>
       <label class="font-small error-message text-danger">Your username must:
           - start with a letter
               - be between 5 and 20 characters long
               class="text-"
danger">- not contain special characters other than '_'
           </label>
   </div>
    <div class="mb-2">
       <label for="tbEditUserEmail">Email:</label>
       <input type="email" name="email" id="tbEditUserEmail" value="<?= $user-</pre>
>email ?>" class="form-control"/>
       <label class="font-small error-message text-</pre>
danger">examplename@example.com</label>
   </div>
   <div class="mb-2">
       <label for="tbEditUserPassword">Password:</label>
       <input type="password" name="password" id="tbEditUserPassword" class="form-</pre>
control mb-1"/>
       <div class="form-check">
           <input class="form-check-</pre>
input" type="checkbox" name="chbChangePassword" value="changePassword" id="chbChangePasswo
rd">
           <label class="form-check-label" for="chbChangePassword">
```

```
Change password
          </label>
       </div>
       <label class="font-small error-message text-danger">Your password must:
          - contain 1 lowercase letter
              - contain 1 uppercase letter
              - contain 1 number
              - contain 1 special character
              - be 8 characters or longer
          </label>
   </div>
   <div class="mb-2">
      <label for="ddlEditUserRole">Role:</label>
       <select name="role" id="ddlEditUserRole" class="form-select">
          <?php
              $roles = getAllRoles();
              foreach($roles as $r):
          <option <?php if($r->role_id == $user-
>role) echo('selected'); ?> value="<?= $r->role_id ?>"><?= $r->role_name ?></option>
          <?php
              endforeach;
       </select>
   </div>
   <div class="mb-2">
       <label for="ddlEditUserActive">Active:</label>
       <select name="active" id="ddlEditUserActive" class="form-select">
          <?php
              for($i = 0; $i <=1; $i++):
          <option <?php if($i == $user-</pre>
>active) echo('selected'); ?> value="<?= $i ?>"><?= $i ?></option>
          <?php
              endfor;
      </select>
   </div>
   <div class="text-center mb-3">
       <button id="btnEditUser" name="btnEditUser" class="py-1 px-3 rounded btn-</pre>
primary font-small">Edit User</button>
   </div>
   <?php
      require_once('models/forms/functions.php');
      displayMessages();
/form>
```

views/pages/admin/phones/add-phone-form.php

```
<?php
   if(isset($_SESSION['user'])) {
        if($ SESSION['user']->role name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
<form action="models/admin/phones/add-phone.php" enctype="multipart/form-</pre>
data" method="POST">
    <div class="mb-2">
        <label for="tbAddPhoneName">Name:</label>
        <input type="text" name="name" id="tbAddPhoneName" class="form-control"/>
        <label class="font-small error-message text-</pre>
danger">Phone name cannot contain special characters other than '-' and '/'</label>
   </div>
    <div class="mb-2">
        <label for="ddlAddPhoneOS">OS:</label>
        <select name="os" id="ddlAddPhoneOS" class="form-select">
            <?php
                $os = getAllOS();
                foreach($os as $o):
            <option value="<?= $o->id ?>"><?= $o->name ?></option>
            <?php
                endforeach;
        </select>
    </div>
    <div class="mb-2">
        <label for="ddlAddPhoneBrand">Brand:</label>
        <select name="brand" id="ddlAddPhoneBrand" class="form-select">
            <?php
                $brands = getAllBrands();
                foreach($brands as $b):
            <option value="<?= $b->id ?>"><?= $b->name ?></option>
            <?php
                endforeach;
        </select>
    </div>
    <div class="mb-2">
        <label for="tbAddPhonePrice">Price:</label>
        <input type="number" name="price" id="tbAddPhonePrice" class="form-control"/>
        <label class="font-small error-message text-danger">You must enter a price</label>
    </div>
```

views/pages/admin/phones/edit-phone-form.php

```
<?php
    if(isset($_SESSION['user'])) {
        if($ SESSION['user']->role name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
    if(!isset($_GET['id'])) {
        http_response_code(400);
        exit();
    require once('models/users/functions.php');
    $phone = getPhone('id', $_GET['id']);
<form action="models/admin/phones/edit-phone.php" enctype="multipart/form-</pre>
data" method="POST">
    <input type="hidden" name="id" value="<?= $phone->id ?>"/>
    <div class="mb-2">
        <label for="tbEditPhoneName">Name:</label>
        <input type="text" name="name" id="tbEditPhoneName" class="form-</pre>
control" value="<?= $phone->name ?>"/>
        <label class="font-small error-message text-</pre>
danger">Phone name cannot contain special characters other than '-' and '/'</label>
    </div>
    <div class="mb-2">
        <label for="ddlEditPhoneOS">OS:</label>
        <select name="os" id="ddlEditPhoneOS" class="form-select">
            <?php
                $os = getAllOS();
                foreach($os as $o):
            <option <?php if($o->id == $phone->os) echo('selected'); ?> value="<?= $o-</pre>
>id ?>"><?= $o->name ?></option>
            <?php
                endforeach;
        </select>
    </div>
    <div class="mb-2">
        <label for="ddlEditPhoneBrand">Brand:</label>
        <select name="brand" id="ddlEditPhoneBrand" class="form-select">
            <?php
                $brands = getAllBrands();
                foreach($brands as $b):
```

```
<option <?php if($b->id == $phone->brand) echo('selected'); ?> value="<?= $b-</pre>
>id ?>"><?= $b->name ?></option>
            <?php
                endforeach;
        </select>
    </div>
    <div class="mb-2">
        <label for="tbEditPhonePrice">Price:</label>
        <input type="number" name="price" id="tbEditPhonePrice" value="<?= $phone-</pre>
>price ?>" class="form-control"/>
        <label class="font-small error-message text-danger">You must enter a price</label>
    </div>
    <div class="mb-2">
        <label for="fileEditPhoneImage" class="form-label mb-1">Image:</label>
        <input class="form-control mb-</pre>
1" type="file" id="fileEditPhoneImage" name="image"/>
        <div class="form-check">
            <input class="form-check-</pre>
input" type="checkbox" name="chbChangeImage" value="changeImage" id="chbChangeImage">
            <label class="form-check-label" for="chbChangeImage">
                Change image
            </label>
        </div>
        <label class="font-small error-message text-</pre>
danger">You must choose an image</label>
    </div>
    <div class="mb-2">
        <label for="ddlEditPhoneActive">Active:</label>
        <select name="active" id="ddlEditPhoneActive" class="form-select">
            <?php
                for($i = 0; $i <= 1; $i++):
            <option <?php if($i == $phone-</pre>
>active) echo('selected'); ?> value="<?= $i ?>"><?= $i ?></option>
            <?php
                endfor;
        </select>
    </div>
    <div class="text-center mb-3">
        <button id="btnEditPhone" name="btnEditPhone" class="py-1 px-3 rounded btn-</pre>
primary font-small">Edit Phone</button>
    </div>
    <?php
        require_once('models/forms/functions.php');
        displayMessages();
/form>
```

views/pages/admin/os/add-os-form.php

```
<?php
   if(isset($_SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
    }
<form action="models/admin/os/add-os.php" method="POST">
    <div class="mb-2">
        <label for="tbAddOSName">Name:</label>
        <input type="text" name="name" id="tbAddOSName" class="form-control"/>
        <label class="font-small error-message text-</pre>
danger">OS name cannot contain special characters or numbers</label>
   </div>
    <div class="text-center mb-3">
        <button id="btnAddOS" name="btnAddOS" class="py-1 px-3 rounded btn-primary font-</pre>
small">Add OS</button>
   </div>
   <?php
        require_once('models/forms/functions.php');
        displayMessages();
```

views/pages/admin/os/edit-os-form.php

```
<?php
   if(isset($_SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
   if(!isset($_GET['id'])) {
        http_response_code(400);
        exit();
   $os = getOS('id', $_GET['id']);
<form action="models/admin/os/edit-os.php" method="POST">
    <input type="hidden" name="id" value="<?= $os->id ?>"/>
    <div class="mb-2">
        <label for="tbEditOSName">Name:</label>
        <input type="text" name="name" id="tbEditOSName" class="form-</pre>
control" value="<?= $os->name ?>"/>
        <label class="font-small error-message text-</pre>
danger">OS name cannot contain special characters or numbers</label>
   </div>
    <div class="text-center mb-3">
        <button id="btnEditOS" name="btnEditOS" class="py-1 px-3 rounded btn-primary font-</pre>
small">Edit OS</button>
    </div>
   <?php
        require once('models/forms/functions.php');
        displayMessages();
(/form>
```

views/pages/admin/brands/add-brand-form.php

```
<?php
    if(isset($_SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
    }
<form action="models/admin/brands/add-brand.php" method="POST">
    <div class="mb-2">
        <label for="tbAddBrandName">Name:</label>
        <input type="text" name="name" id="tbAddBrandName" class="form-control"/>
        <label class="font-small error-message text-</pre>
danger">Brand name cannot contain special characters or numbers</label>
    </div>
    <div class="text-center mb-3">
        <button id="btnAddBrand" name="btnAddBrand" class="py-1 px-3 rounded btn-</pre>
primary font-small">Add brand</button>
    </div>
    <?php
        require_once('models/forms/functions.php');
        displayMessages();
```

views/pages/admin/brands/edit-brand-form.php

```
<?php
    if(isset($_SESSION['user'])) {
        if($ SESSION['user']->role name != 'admin') {
            http_response_code(404);
            exit();
    } else {
        http_response_code(404);
        exit();
    if(!isset($_GET['id'])) {
        http_response_code(400);
        exit();
    $brand = getBrand('id', $_GET['id']);
<form action="models/admin/brands/edit-brand.php" method="POST">
    <input type="hidden" name="id" value="<?= $brand->id ?>"/>
    <div class="mb-2">
        <label for="tbEditBrandName">Name:</label>
        <input type="text" name="name" id="tbEditBrandName" class="form-</pre>
control" value="<?= $brand->name ?>"/>
        <label class="font-small error-message text-</pre>
danger">Brand name cannot contain special characters or numbers</label>
    </div>
    <div class="text-center mb-3">
        <button id="btnEditBrand" name="btnEditBrand" class="py-1 px-3 rounded btn-</pre>
primary font-small">Edit Brand</button>
    </div>
    <?php
        require once('models/forms/functions.php');
        displayMessages();
(/form>
```

views/pages/admin/orders/edit-order-form.php

```
<?php
   if(isset($_SESSION['user'])) {
       if($ SESSION['user']->role name != 'admin') {
           http_response_code(404);
           exit();
   } else {
       http_response_code(404);
       exit();
   if(!isset($_GET['id'])) {
       http_response_code(400);
       exit();
   $order = getOrder('order_id', $_GET['id']);
<form action="models/admin/orders/edit-order.php" method="POST">
   <input type="hidden" name="id" value="<?= $order->order_id ?>"/>
   <div class="mb-2">
       <label for="tbEditOrderName">Name:</label>
       <input type="text" name="name" id="tbEditOrderName" class="form-</pre>
control" value="<?= $order->name ?>"/>
       <label class="error-message">
           - A name cannot have less than 3 characters
               - Has to be at least 2 words
               - Each word must be capitalized
           </label>
   </div>
   <div class="mb-2">
       <label for="tbEditOrderAddress">Address:</label>
       <input type="text" name="address" id="tbEditOrderAddress" class="form-</pre>
control" value="<?= $order->address ?>"/>
       <label class="font-small error-message text-</pre>
danger">[Street Name] [Home Number]/[Apartment Number]</label>
   </div>
   <div class="text-center mb-3">
       <button id="btnEditOrder" name="btnEditOrder" class="py-1 px-3 rounded btn-</pre>
primary font-small">Edit Order</button>
   </div>
   <?php
       require_once('models/forms/functions.php');
       displayMessages();
</form>
```

models/nav/functions.php

```
<?php
   function getNavLinks() {
      return executeQuery("SELECT * FROM page_links pl INNER JOIN link_categories lc ON
pl.link_category = lc.lc_id WHERE lc.name = 'nav'");
   }
}</pre>
```

models/slider/functions.php

```
<?php
   function getSliderImages() {
     return executeQuery("SELECT * FROM slider_images");
  }
}</pre>
```

models/footer/functions.php

```
<?php
  function getFooterLinks() {
    return executeQuery("SELECT * FROM footer_links");
  }
}</pre>
```

models/users/functions.php

```
function getUser($column, $value) {
        global $conn;
        $exec = $conn-
>prepare("SELECT * FROM users u INNER JOIN roles r ON u.role = r.role_id WHERE $column = ?
");
        $exec->execute([$value]);
        $result = $exec->fetch();
        return $result;
    function registerUser($username, $email, $password) {
        try {
            $encPassword = md5($password);
            global $conn;
            $exec = $conn-
>prepare("INSERT INTO users(username, email, password, role) VALUES (?, ?, ?, 2)");
            $result = $exec->execute([$username, $email, $encPassword]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    function updateLoginLog($userId, $result) {
        $file = fopen(LOGIN_LOG, 'a');
        if($file) {
            $ipAddress = $_SERVER['REMOTE_ADDR'];
            $text = $userId . SEPARATOR . $ipAddress . SEPARATOR . getDateAndTime() . SEPA
RATOR . $result . "\n";
            fwrite($file, $text);
            fclose($file);
    function getFailedAttempts($id, $minutes) {
        $attempts = 0;
        $currentTime = time();
        $file = file(LOGIN_LOG);
        foreach($file as $row) {
            $row = trim($row);
            $values = explode(SEPARATOR, $row);
            if(intval($values[0]) == $id) {
                $loginTime = getTime($values[2]);
                if($currentTime - $loginTime <= 60 * $minutes && $values[3] == '0') {</pre>
                    $attempts++;
                }
```

```
return $attempts;
   function lockAccount($id) {
       try {
           global $conn;
           $exec = $conn->prepare("UPDATE users SET active = 0 WHERE id = ?");
           $result = $exec->execute([$id]);
           return $result;
       } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
   function sendEmail($user) {
       $to = $user->email;
       $subject = 'Your account has been locked';
       $message = "Your account <b>$user-
>username</b> has been locked due to suspicious activity. To unlock your account, contact
the website administrator.";
       $headers = "From: mobishop@noreply.com" . "\r\n" . "Content-
Type: text/html; charset=ISO-8859-1\r\n";
       return mail($to, $subject, $message, $headers);
```

models/users/get-current-user.php

models/users/login.php

```
<?php
              if(isset($_POST['btnLogIn'])) {
                             session start();
                            require once("../../config/connection.php");
                             require_once("functions.php");
                            $email = $ POST['email'];
                            $password = $_POST['password'];
                            // regular expressions
                            pregExpEmail = "/^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/";
                            properties = \frac{1}{2} \cdot \frac
9])(?=.*[!@#\$%\^&\*])(?=.{8,})/";
                            // validation
                            $errors = [];
                            if(!preg_match($regExpEmail, $email)) {
                                            array_push($errors, "Email example: examplename@example.com;");
                            if(!preg_match($regExpPassword, $password)) {
                                            array_push($errors, "Your password must: contain 1 lowercase letter; contain 1
   uppercase letter; contain 1 number; contain 1 special character; be 8 characters or longe
r;");
                            if(count($errors)) {
                                            $_SESSION['errors'] = $errors;
                                           http_response_code(400);
                            } else {
                                            $user = getUser('email', $email);
                                            if(!$user) { // checks if user exists
                                                          $_SESSION['errors'] = ["Invalid credentials."];
                                                          http_response_code(409);
                                            } else {
                                                          $encPassword = md5($password);
                                                          if($user->password != $encPassword) { // checks if password is correct
                                                                         $_SESSION['errors'] = ["Invalid credentials."];
                                                                         updateLoginLog($user->id, 0);
                                                                         if(getFailedAttempts($user->id, 5) >= 3) {
                                                                                        if(lockAccount($user->id)) sendEmail($user);
                                                                         http_response_code(409);
                                                           } else {
                                                                         if($user->active) { // checks if account is active
                                                                                        $_SESSION['user'] = $user;
                                                                                       updateLoginLog($user->id, 1);
```

models/users/register.php

```
<?php
              if(isset($_POST['btnRegister'])) {
                            session start();
                           require_once("../../config/connection.php");
                            require_once("functions.php");
                           $username = $_POST['username'];
                           $email = $_POST['email'];
                           $password = $_POST['password'];
                           $repeatPassword = $_POST['repeatPassword'];
                           regExpUsername = "/^[a-zA-Z] \w{4,20}$/";
                           pregExpEmail = "/^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/";
                           properties = \frac{1}{2} \cdot \frac
9])(?=.*[!@#\$%\^&\*])(?=.{8,})/";
                           // validation
                           $errors = [];
                           if(!preg_match($regExpUsername, $username)) {
                                          array_push($errors, "Your username must: start with a letter; be between 5 and
   20 characters long; not contain special characters other than '_';");
                           if(!preg_match($regExpEmail, $email)) {
                                          array_push($errors, "Email example: examplename@example.com;");
                           if(!preg_match($regExpPassword, $password)) {
                                          array_push($errors, "Your password must: contain 1 lowercase letter; contain 1
   uppercase letter; contain 1 number; contain 1 special character; be 8 characters or longe
r;");
                           if($password != $repeatPassword) {
                                          array_push($errors, "Passwords don't match;");
                           if(count($errors)) {
                                          $_SESSION['errors'] = $errors;
                                          http_response_code(400);
                            } else {
                                          if(getUser('email', $email)) {
                                                        array_push($errors, "That email is taken;");
                                          if(getUser('username', $username)) {
                                                         array_push($errors, "That username is taken;");
                                          if(count($errors)) {
                                                        $_SESSION['errors'] = $errors;
                                                        http_response_code(400);
                                          } else {
```

models/users/logout.php

```
<?php
    session_start();
    if(isset($_SESSION['user'])) {
        unset($_SESSION['user']);
    }
    header("Location: ../../index.php?p=home");
    exit();
}>
```

models/phones/functions.php

```
<?php
    function getAllPhones() {
        return executeQuery("SELECT p.id AS phone_id, p.name AS phone_name, price, active,
b.name AS brand name, os.name AS os name FROM phones p INNER JOIN brands b ON p.brand = b
.id INNER JOIN operating_systems os ON p.os = os.id ORDER BY p.name");
    }
   function getBrands() {
        return executeQuery("SELECT * FROM brands ORDER BY name");
   function getOperatingSystems() {
        return executeQuery("SELECT * FROM operating_systems ORDER BY name");
   function getPhoneById($id) {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM phones WHERE id = ?");
        $exec->execute([$id]);
        return $exec->fetch();
    function getBrandById($id) {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM brands WHERE id = ?");
        $exec->execute([$id]);
        return $exec->fetch();
    function getOSById($id) {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM operating_systems WHERE id = ?");
        $exec->execute([$id]);
        return $exec->fetch();
    }
```

models/phones/get-phones.php

```
<?php
    require_once("../../config/connection.php");
    // creating the query
   $query = "SELECT * FROM phones WHERE active = 1";
    $params = [];
    if(isset($ GET['search'])) {
        $query .= " AND name LIKE ?";
        $search = "%" . $_GET['search'] . "%";
        array_push($params, $search);
   if(isset($_GET['os'])) {
        $placeholders = implode(',', array_fill(0, count($_GET['os']), '?'));
        $query .= " AND os IN ($placeholders)";
        foreach($_GET['os'] as $os) {
            array_push($params, $os);
   if(isset($_GET['brand'])) {
        $placeholders = implode(',', array_fill(0, count($_GET['brand']), '?'));
        $query .= " AND brand IN ($placeholders)";
        foreach($_GET['brand'] as $brand) {
            array_push($params, $brand);
    }
   if(isset($_GET['maxPrice'])) {
        if(preg_match("/^[0-9]+(\.[0-9]*)?$/", $_GET['maxPrice'])) {
            $query .= " AND price <= ?";</pre>
            $maxPrice = floatval($_GET['maxPrice']);
            array_push($params, $maxPrice);
   $orderValues = ['1', '2', '3', '4'];
    if(isset($_GET['order'])) {
        $order = $_GET['order'];
        if(in_array($order, $orderValues)) {
            $text = '';
            switch($order) {
                case '1':
                    $text = "name";
                    break;
                case '2':
                    $text = "name DESC";
                case '3':
                    $text = "price";
                    break;
                case '4':
                    $text = "price DESC";
                    break;
```

```
$query .= " ORDER BY $text";
}
// executing the query
global $conn;
$exec = $conn->prepare($query);
$exec->execute($params);
$result = $exec->fetchAll();
$numberOfPhones = count($result);
// getting only 6 phones
$phonesPerPage = $_GET['phonesPerPage'];
$page = ($_GET['page'] - 1) * $phonesPerPage;
$phones = [];
for($i = $page; $i < $phonesPerPage + $page; $i++) {</pre>
    if($i >= count($result)) break;
    array_push($phones, $result[$i]);
$response = ['phones' => $phones, 'numberOfPhones' => $numberOfPhones];
http_response_code(200);
header("Content-type: application/json");
echo(json_encode($response));
```

models/contact/functions.php

```
    function sendMessage($email, $name, $message) {
        $userId = NULL;
        if(isset($_SESSION['user'])) {
            $userId = $_SESSION['user']->id;
        }
        $message = addslashes($message);
        global $conn;
        $exec = $conn-
>prepare("INSERT INTO contact_messages(user_id, email, name, message) VALUES (?, ?, ?, ?)"
);
        $result = $exec->execute([$userId, $email, $name, $message]);
        return $result;
    }
}
```

models/contact/send-message.php

```
if(isset($_POST['btnSend'])) {
        session start();
       require_once("../../config/connection.php");
        require_once("functions.php");
       $email = $ POST['email'];
       $name = $_POST['name'];
       $message = $_POST['message'];
       $errors = [];
       // regular expressions
       regExpName = "/^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽ][a-zšđčćž]{2,})*$/";
       pregExpEmail = "/^[a-z][a-z0-9\-_\.]{2,}@([a-z0-9\-_]{2,}\.)+[a-z]{2,}$/";
       // validation
       if(!preg_match($regExpEmail, $email)) {
            array_push($errors, "Email example: examplename@example.com;");
       if(!preg_match($regExpName, $name)) {
            array_push($errors, "A name cannot have less than 3 characters; Each word of y
our name must be capitalized;");
       $numberOfSpaces = substr_count($message, ' ');
       if(strlen($message) - $numberOfSpaces < 20 || strlen($message) > 500) {
            array_push($errors, "Your message (without spacing characters) cannot be short
er than 20 characters or longer than 500 characters in total;");
       if(!count($errors)) {
           try {
                if(sendMessage($email, $name, $message)) {
                    $_SESSION['messages'] = ["Your message was sent successfully."];
                    http_response_code(200);
                } else {
                    $_SESSION['errors'] = "We encountered an error. Please try again later
";
                    http_response_code(500);
            } catch (PDOException $ex) {
                $_SESSION['errors'] = ["We encountered an error. Contact the website admin
istrator for more info."];
               updateErrorLog($ex->getMessage());
               http_response_code(500);
       } else {
           $_SESSION['errors'] = $errors;
           http_response_code(400);
```

```
header("Location: ../../index.php?p=contact");
    exit();
} else {
    http_response_code(400);
}
```

models/author/functions.php

```
<?php
   function getAuthorSocials() {
     return executeQuery("SELECT * FROM author_socials");
  }
}</pre>
```

models/author/export-to-word.php

```
require_once("../../config/connection.php");
   // creating the file
   $word = new COM("word.application") or die("Unable to instantiate Word.");
    $word->Visible = 1;
   $word->Documents->Add();
    $word->Selection->TypeText("My name is Bojan and I am an aspiring front-
end web developer. My approach to website design is to create a website that strengthens y
our company's brand while ensuring ease of use and simplicity for your audience.\nThe way
I look at it, a front-
end developer's role is to combine design and business logic to achieve a user-
facing product. To do this successfully, a wide skill set is necessary to produce a qualit
y user experience that leads to meeting business goals, and I guarantee I've got exactly w
hat's needed.");
    $location = ABSOLUTE_PATH . "data/author.doc";
   $word->Documents[1]->SaveAs($location);
   $word->Quit();
   $word = null;
   $file = file_get_contents($location);
   header("Content-type: application/vnd.ms-word");
   header("Content-Disposition: attachment;filename=author.doc");
    echo($file);
    // delete
   if(file_exists($location)) {
        unlink($location);
```

models/cart/functions.php

```
<?php
    function addToCart($userId, $phoneId, $quantity) {
       global $conn;
       $cart = alreadyIsInCart($userId, $phoneId);
       try {
            if($cart) {
                $quantity += $cart->quantity;
                $exec = $conn->prepare("UPDATE cart SET quantity = ? WHERE id = ?");
                $result = $exec->execute([$quantity, $cart->id]);
            } else {
               $exec = $conn-
>prepare("INSERT INTO cart(user_id, phone_id, quantity) VALUES (?, ?, ?)");
               $result = $exec->execute([$userId, $phoneId, $quantity]);
            return $result;
       } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
   function alreadyIsInCart($userId, $phoneId) {
       global $conn;
       $exec = $conn->prepare("SELECT * FROM cart WHERE user_id = ? AND phone_id = ?");
       $exec->execute([$userId, $phoneId]);
       return $exec->fetch();
   function getCartQuantity($userId) {
       global $conn;
       exec = conn-
>prepare("SELECT IFNULL(SUM(quantity), 0) as quantity FROM cart WHERE user_id = ?");
       $exec->execute([$userId]);
       $result = $exec->fetch();
       return $result->quantity;
   function getCart($userId) {
       global $conn;
       $exec = $conn-
>prepare("SELECT c.id, c.quantity, p.name, p.price, p.id AS phone_id FROM cart c INNER JOI
N phones p ON c.phone_id = p.id WHERE c.user_id = ? AND p.active = 1");
       $exec->execute([$userId]);
       $result = $exec->fetchAll();
       return $result;
   function changeQuantity($id, $change) {
       $quantity = getItemQuantity($id);
       if(!$quantity) return false;
```

```
switch($change) {
            case 'increase':
                $quantity++;
                break;
            case 'decrease':
                if($quantity > 1) $quantity--;
                break;
       try {
            global $conn;
            $exec = $conn->prepare("UPDATE cart SET quantity = ? WHERE id = ?");
            $result = $exec->execute([$quantity, $id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
   function getItemQuantity($id) {
       global $conn;
       $exec = $conn->prepare("SELECT quantity FROM cart WHERE id = ?");
       $exec->execute([$id]);
       $result = $exec->fetch();
       if($result) return $result->quantity;
       return false;
   function removeItem($id) {
       try {
            global $conn;
            $exec = $conn->prepare("DELETE FROM cart WHERE id = ?");
            $result = $exec->execute([$id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
           return false;
    function createOrder($userId, $name, $address, $cart) {
       $totalPrice = 0;
       foreach($cart as $c) {
            $totalPrice += $c->quantity * $c->price;
       try {
            global $conn;
            $conn->beginTransaction();
            $exec = $conn-
>prepare("INSERT INTO orders(user_id, total_price, name, address) VALUES (?, ?, ?, ?)");
           $exec->execute([$userId, $totalPrice, $name, $address]);
```

```
$orderId = $conn->lastInsertId();
            foreach($cart as $c) {
                $exec = $conn-
>prepare("INSERT INTO order_details(order_id, phone_id, quantity) VALUES (?, ?, ?)");
                $exec->execute([$orderId, $c->phone_id, $c->quantity]);
           $conn->commit();
           clearCart($userId);
            return true;
        } catch (PDOException $ex) {
            $conn->rollBack();
            updateErrorLog($ex->getMessage());
            return false;
    function clearCart($userId) {
        try {
            global $conn;
            $exec = $conn->prepare("DELETE FROM cart WHERE user_id = ?");
            $result = $exec->execute([$userId]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
```

models/cart/add-to-cart.php

```
if($_SERVER['REQUEST_METHOD'] == 'POST') {
    require_once('../../config/connection.php');
    require_once('functions.php');

    $userId = $_POST['userId'];
    $phoneId = $_POST['phoneId'];
    $quantity = $_POST['quantity'];

    if(addToCart($userId, $phoneId, $quantity)) {
        http_response_code(200);
        echo(json_encode('Item successfully added to cart.'));
    } else {
        http_response_code(500);
        echo(json_encode('We encountered an error.'));
    }
} else {
    http_response_code(400);
}
```

models/cart/change-quantity.php

```
<?php
   if($_SERVER['REQUEST_METHOD'] == "POST") {
        require_once('.../.../config/connection.php');
        require_once('functions.php');
        $id = $ POST['id'];
        $change = $_POST['change'];
        $changeValues = ['increase', 'decrease'];
        if(!in_array($change, $changeValues)) {
            http_response_code(400);
            exit();
        if(changeQuantity($id, $change)) {
            http_response_code(200);
            echo(json_encode(1));
        } else {
            http_response_code(500);
            echo('We encountered an error.');
        http_response_code(400);
```

models/cart/create-order.php

```
<?php
    session_start();
    if(isset($ POST['btnCheckout'])) {
       require once('.../config/connection.php');
        require_once('functions.php');
       $userId = $ SESSION['user']->id;
       $name = $_POST['tbName'];
       $address = $_POST['tbAddress'];
       regExpName = "/^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽ][a-zšđčćž]{2,})+$/";
       $regExpAddress = "/^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽa-zšđčćž][a-
zšđčćž]{2,})*\s\d+[A-Z]?(\/\d+)*$/";
       // validation
       $errors = [];
       if(!preg_match($regExpName, $name)) {
            array_push($errors, "A name cannot have less than 3 characters; Has to be at 1
east 2 words; Each word must be capitalized;");
       if(!preg_match($regExpAddress, $address)) {
            array_push($errors, "Address example: [Street Name] [Home Number]/[Apartment N
umber];");
       if(count($errors)) {
            $_SESSION['errors'] = $errors;
           http_response_code(400);
       } else {
            $cart = getCart($userId);
            if(!count($cart)) {
               $_SESSION['errors'] = ['Your cart is empty.'];
               http_response_code(409);
            } else {
                if(createOrder($userId, $name, $address, $cart)) {
                    $_SESSION['messages'] = ['Your order was created successfully.'];
                    http_response_code(200);
                } else {
                    $_SESSION['errors'] = ['We encountered an error.'];
                    http_response_code(500);
                }
       header("Location: ../../index.php?p=cart");
       exit();
    } else {
       http_response_code(400);
```

models/cart/get-cart-quantity.php

```
<?php
    session_start();
    $response = 0;
    if(isset($_SESSION['user'])) {
        require_once('../../config/connection.php');
        require_once('functions.php');
        $response = getCartQuantity($_SESSION['user']->id);
    }
    http_response_code(200);
    echo(json_encode($response));
}
```

models/cart/get-cart.php

```
    session_start();

    if(isset($_SESSION['user'])) {
        require_once('../../config/connection.php');
        require_once('functions.php');

        $userId = $_SESSION['user']->id;
        $cart = getCart($userId);

        http_response_code(200);
        echo(json_encode($cart));
    } else {
        http_response_code(400);
    }
}
```

models/cart/remove-item.php

```
if($_SERVER['REQUEST_METHOD'] == "POST") {
    require_once('../../config/connection.php');
    require_once('functions.php');
    $id = $_POST['id'];
    if(removeItem($id)) {
        http_response_code(200);
        echo(json_encode(1));
    } else {
        http_response_code(500);
        echo('We encountered an error.');
    }
} else {
    http_response_code(400);
}
```

models/forms/functions.php

```
<?php
   function displayMessages() {
      $text = "";
      if(isset($_SESSION['messages'])) {
          $text .= '<div class="alert alert-info">';
          foreach($_SESSION['messages'] as $key=>$m) {
             if($key > 0) $text .= '<br/>';
             $text .= "$m";
          $text .= '</div>';
          unset($_SESSION['messages']);
      if(isset($_SESSION['errors'])) {
          $text .= '<div class="alert alert-danger">';
          foreach($_SESSION['errors'] as $key=>$e) {
             if($key > 0) $text .= '<br/>';
             $text .= "$e";
          $text .= '</div>';
          unset($_SESSION['errors']);
      echo($text);
```

models/admin/functions.php

```
<?php
    function getAdminLinks() {
        return executeQuery("SELECT * FROM page links pl INNER JOIN link categories lc ON
pl.link category = lc.lc id WHERE lc.name = 'admin'");
    function getAllUsers() {
        return executeQuery("SELECT * FROM users u INNER JOIN roles r ON u.role = r.role i
d");
   function getAllBrands() {
        return executeQuery("SELECT * FROM brands");
   function getAllOS() {
        return executeQuery("SELECT * FROM operating_systems");
    function getAllOrders() {
        return executeQuery("SELECT * FROM orders o LEFT OUTER JOIN users u ON o.user id =
 u.id");
    function getAllMessages() {
        return executeQuery("SELECT message_id, u.username, cm.name, cm.email, message FRO
M contact_messages cm LEFT OUTER JOIN users u ON u.id = cm.user_id");
    function deleteMessage($id) {
        try {
            global $conn;
            $exec = $conn->prepare("DELETE FROM contact messages WHERE message id = ?");
           $result = $exec->execute([$id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
   function deleteOrder($id) {
        try {
            global $conn;
           $conn->beginTransaction();
           $exec = $conn->prepare("DELETE FROM order_details WHERE order_id = ?");
            $result = $exec->execute([$id]);
           if($result) {
                $exec = $conn->prepare("DELETE FROM orders WHERE order_id = ?");
                $result = $exec->execute([$id]);
```

```
if($result) {
                $conn->commit();
        return $result;
    } catch (PDOException $ex) {
        $conn->rollBack();
        updateErrorLog($ex->getMessage());
        return false;
function deleteOS($id) {
   try {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM phones WHERE os = ?");
        $exec->execute([$id]);
        $phones = $exec->fetchAll();
        if(count($phones)) {
            return false;
        } else {
            $exec = $conn->prepare("DELETE FROM operating_systems WHERE id = ?");
            $result = $exec->execute([$id]);
        return $result;
   } catch (PDOException $ex) {
        updateErrorLog($ex->getMessage());
        return false;
function deleteBrand($id) {
   try {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM phones WHERE brand = ?");
        $exec->execute([$id]);
        $phones = $exec->fetchAll();
        if(count($phones)) {
            return false;
        } else {
            $exec = $conn->prepare("DELETE FROM brands WHERE id = ?");
            $result = $exec->execute([$id]);
        return $result;
   } catch (PDOException $ex) {
        updateErrorLog($ex->getMessage());
        return false;
function deletePhone($id) {
```

```
global $conn;
            $exec = $conn->prepare("SELECT * FROM order_details WHERE phone id = ?");
            $exec->execute([$id]);
            $orders = $exec->fetchAll();
            if(count($orders)) {
                return false;
            } else {
                $conn->beginTransaction();
                $exec = $conn->prepare("DELETE FROM cart WHERE phone_id = ?");
                $result = $exec->execute([$id]);
                if($result) {
                    $exec = $conn->prepare("DELETE FROM phones WHERE id = ?");
                    $result = $exec->execute([$id]);
                    if($result) {
                        $conn->commit();
            }
            return $result;
        } catch (PDOException $ex) {
            $conn->rollBack();
            updateErrorLog($ex->getMessage());
            return false;
    }
   function deleteUser($id) {
       if($_SESSION['user']->id == $id) return false;
       try {
           global $conn;
            $conn->beginTransaction();
            $exec = $conn->prepare("DELETE FROM cart WHERE user_id = ?");
            $result = $exec->execute([$id]);
            if($result) {
                $exec = $conn-
>prepare("UPDATE orders SET user_id = NULL WHERE user_id = ?");
                $result = $exec->execute([$id]);
                if($result) {
                    $exec = $conn-
>prepare("UPDATE contact_messages SET user_id = NULL WHERE user_id = ?");
                    $result = $exec->execute([$id]);
                    if($result) {
                        $exec = $conn->prepare("DELETE FROM users WHERE id = ?");
                        $result = $exec->execute([$id]);
                        if($result) {
                            $conn->commit();
            return $result;
        } catch (PDOException $ex) {
```

```
$conn->rollBack();
        updateErrorLog($ex->getMessage());
        return false;
}
function addBrand($name) {
    try {
        global $conn;
        $exec = $conn->prepare("INSERT INTO brands(name) VALUES (?)");
        $result = $exec->execute([$name]);
        return $result;
    } catch (PDOException $ex) {
        updateErrorLog($ex->getMessage());
        return false;
}
function getBrand($column, $value) {
    global $conn;
    $exec = $conn->prepare("SELECT * FROM brands WHERE $column = ?");
    $exec->execute([$value]);
    return $exec->fetch();
function editBrand($id, $name) {
    try {
        global $conn;
        $exec = $conn->prepare("UPDATE brands SET name = ? WHERE id = ?");
        $result = $exec->execute([$name, $id]);
        return $result;
    } catch (PDOException $ex) {
        updateErrorLog($ex->getMessage());
        return false;
function addOS($name) {
    try {
        global $conn;
        $exec = $conn->prepare("INSERT INTO operating_systems(name) VALUES (?)");
        $result = $exec->execute([$name]);
        return $result;
    } catch (PDOException $ex) {
        updateErrorLog($ex->getMessage());
        return false;
function getOS($column, $value) {
    global $conn;
    $exec = $conn->prepare("SELECT * FROM operating_systems WHERE $column = ?");
```

```
$exec->execute([$value]);
       return $exec->fetch();
    }
   function editOS($id, $name) {
       try {
            global $conn;
            $exec = $conn->prepare("UPDATE operating_systems SET name = ? WHERE id = ?");
            $result = $exec->execute([$name, $id]);
            return $result;
       } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    function getOrder($column, $value) {
       global $conn;
       $exec = $conn->prepare("SELECT * FROM orders WHERE $column = ?");
       $exec->execute([$value]);
       return $exec->fetch();
   function editOrder($id, $name, $address) {
       try {
            global $conn;
            $exec = $conn-
>prepare("UPDATE orders SET name = ?, address = ? WHERE order_id = ?");
            $result = $exec->execute([$name, $address, $id]);
            return $result;
       } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
   function getAllRoles() {
       return executeQuery("SELECT * FROM roles");
   function addUser($username, $email, $encPassword, $role) {
       try {
           global $conn;
            $exec = $conn-
>prepare("INSERT INTO users(username, email, password, role) VALUES (?, ?, ?, ?)");
            $result = $exec->execute([$username, $email, $encPassword, $role]);
            return $result;
       } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
```

```
function editUserWithPassword($id, $username, $email, $encPassword, $role, $active) {
        try {
            global $conn;
            $exec = $conn-
>prepare("UPDATE users SET username = ?, email = ?, password = ?, role = ?, active = ? WHE
RE id = ?");
            $result = $exec-
>execute([$username, $email, $encPassword, $role, $active, $id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    function editUserWithoutPassword($id, $username, $email, $role, $active) {
        try {
            global $conn;
            $exec = $conn-
>prepare("UPDATE users SET username = ?, email = ?, role = ?, active = ? WHERE id = ?");
            $result = $exec->execute([$username, $email, $role, $active, $id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    }
    function getPhone($column, $value) {
        global $conn;
        $exec = $conn->prepare("SELECT * FROM phones WHERE $column = ?");
        $exec->execute([$value]);
        return $exec->fetch();
    }
    function addPhone($name, $price, $os, $brand, $originalImageLocation, $smallImageLocat
ion) {
        try {
            global $conn;
            $exec = $conn-
>prepare("INSERT INTO phones(name, price, os, brand, image, image_small) VALUES (?, ?, ?,
?, ?, ?)");
            $result = $exec-
>execute([$name, $price, $os, $brand, $originalImageLocation, $smallImageLocation]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
```

```
function editPhoneWithImage($id, $name, $price, $os, $brand, $active, $originalImageNa
me, $smallImageName) {
        try {
            global $conn;
            $exec = $conn-
>prepare("UPDATE phones SET name = ?, price = ?, os = ?, brand = ?, active = ?, image = ?,
 image_small = ? WHERE id = ?");
            $result = $exec-
>execute([$name, $price, $os, $brand, $active, $originalImageName, $smallImageName, $id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    function editPhoneWithoutImage($id, $name, $price, $os, $brand, $active) {
        try {
            global $conn;
            $exec = $conn-
>prepare("UPDATE phones SET name = ?, price = ?, os = ?, brand = ?, active = ? WHERE id =
?");
            $result = $exec->execute([$name, $price, $os, $brand, $active, $id]);
            return $result;
        } catch (PDOException $ex) {
            updateErrorLog($ex->getMessage());
            return false;
    }
```

models/admin/delete.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   require_once('../../config/connection.php');
   require_once('functions.php');
   if(isset($_GET['id']) && isset($_GET['ap'])) {
       $id = $_GET['id'];
       $adminPage = $_GET['ap'];
       $result = false;
       switch($adminPage) {
            case 'users':
                $result = deleteUser($id);
                $message = ["User was deleted successfully."];
                break;
            case 'phones':
                $result = deletePhone($id);
                $message = ["Phone was deleted successfully."];
                break;
            case 'brands':
                $result = deleteBrand($id);
                $message = ["Brand was deleted successfully."];
                break;
            case 'operating-systems':
                $result = deleteOS($id);
                $message = ["OS was deleted successfully."];
                break;
            case 'orders':
                $result = deleteOrder($id);
                $message = ["Order was deleted successfully."];
                break;
            case 'messages':
                $result = deleteMessage($id);
                $message = ["Message was deleted successfully."];
                break;
       if($result) {
           http_response_code(200);
```

```
$_SESSION['messages'] = $message;
} else {
    http_response_code(400);
    $_SESSION['errors'] = ["We encountered an error."];
}

header("Location: ../../index.php?p=admin&ap=$adminPage");
    exit();
} else {
    http_response_code(400);
}
```

models/admin/users/add-user.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnAddUser'])) {
        require_once('.../.../config/connection.php');
       require once('../functions.php');
       $username = $_POST['username'];
       $email = $_POST['email'];
       $password = $_POST['password'];
       $role = $_POST['role'];
       $errors = [];
       regExpUsername = "/^[a-zA-Z] \w{4,20}$/";
       pregExpEmail = "/^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/";
       property = "/^(?=.*[a-z])(?=.*[A-Z])(?=.*[0-z])
9])(?=.*[!@#\$%\^&\*])(?=.{8,})/";
       // validation
       if(!preg_match($regExpUsername, $username)) {
            array_push($errors, "Your username must: start with a letter; be between 5 and
20 characters long; not contain special characters other than '_';");
       if(!preg_match($regExpEmail, $email)) {
            array_push($errors, "Example email: examplename@example.com;");
       if(!preg_match($regExpPassword, $password)) {
            array_push($errors, "Your password must: contain 1 lowercase letter; contain 1
uppercase letter; contain 1 number; contain 1 special character; be 8 characters or longe
r;");
       $allRole = getAllRoles();
       $roleExists = false;
       foreach($allRole as $r) {
            if($r->role_id = $role) {
               $roleExists = true;
               break;
```

```
if(!$roleExists) {
        array_push($errors, "That role doesn't exist;");
   if(count($errors)) {
        http_response_code(400);
        $ SESSION['errors'] = $errors;
   } else {
        require_once('../../users/functions.php');
        if(getUser('username', $username)) {
            array_push($errors, "That username is taken;");
        if(getUser('email', $email)) {
            array_push($errors, "That email is taken;");
        if(count($errors)) {
           http_response_code(409);
           $_SESSION['errors'] = $errors;
        } else {
           $encPassword = md5($password);
            if(addUser($username, $email, $encPassword, $role)) {
                http_response_code(200);
                $_SESSION['messages'] = ["User '$username' was successfully created."]
            } else {
                http_response_code(500);
                $_SESSION['errors'] = ["We encountered an error."];
   header("Location: ../../index.php?p=admin&ap=add-user");
   exit();
} else {
   http_response_code(400);
```

models/admin/users/edit-user.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnEditUser'])) {
        require_once('.../.../config/connection.php');
       require once('../functions.php');
       $id = $ POST['id'];
       $username = $_POST['username'];
       $email = $_POST['email'];
       $role = $_POST['role'];
       $active = intval($_POST['active']);
       $password = '';
       var_dump($active);
       if(isset($_POST['chbChangePassword'])) {
            $password = $_POST['password'];
       $errors = [];
       regExpUsername = "/^[a-zA-Z]/w{4,20}$/";
       pregExpEmail = "/^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/";
       property = "/^(?=.*[a-z])(?=.*[A-Z])(?=.*[0-z])
9])(?=.*[!@#\$%\^&\*])(?=.{8,})/";
       // validation
       if(!preg_match($regExpUsername, $username)) {
            array_push($errors, "Your username must: start with a letter; be between 5 and
20 characters long; not contain special characters other than '_';");
       if(!preg_match($regExpEmail, $email)) {
            array_push($errors, "Example email: examplename@example.com;");
       if(isset($_POST['chbChangePassword']) && !preg_match($regExpPassword, $password))
            array_push($errors, "Your password must: contain 1 lowercase letter; contain 1
uppercase letter; contain 1 number; contain 1 special character; be 8 characters or longe
r;");
       $allRole = getAllRoles();
```

```
$roleExists = false;
        foreach($allRole as $r) {
            if($r->role id = $role) {
                $roleExists = true;
                break;
       if(!$roleExists) {
            array_push($errors, "That role doesn't exist;");
       $activeValues = [0, 1];
       if(!in array($active, $activeValues)) {
            array_push($errors, "Active value can either be 0 or 1;");
       // validation
       if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
       } else {
            require once('../../users/functions.php');
            $userExists = getUser('username', $username);
            if($userExists) {
                if($userExists->id != $id) {
                    array_push($errors, "That username is taken;");
            $userExists = getUser('email', $email);
            if($userExists) {
                if($userExists->id != $id) {
                    array_push($errors, "That email is taken;");
            }
            if(count($errors)) {
                http_response_code(409);
                $_SESSION['errors'] = $errors;
            } else {
                $encPassword = md5($password);
                if(isset($_POST['chbChangePassword'])) {
                    $result = editUserWithPassword($id, $username, $email, $encPassword, $
role, $active);
                } else {
                    $result = editUserWithoutPassword($id, $username, $email, $role, $acti
ve);
                if($result) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["User was edited successfully."];
                } else {
                    http_response_code(500);
```

```
$_SESSION['errors'] = ["We encountered an error."];
}

header("Location: ../../index.php?p=admin&ap=edit-user&id=$id");
exit();
} else {
   http_response_code(400);
}
?>
```

models/admin/users/export-to-excel.php

```
<?php
    require_once('../../config/connection.php');
    require_once('../functions.php');
   $excel = new COM("Excel.Application") or Die ("Konekcija sa Excel-
om nije bila uspešna!");
    $Workbook = $excel->Workbooks->Add();
   $Worksheet = $Workbook->Worksheets('Sheet1');
   $field = $Worksheet->Range("A1");
   $field->activate;
   $field->Value = "ID:";
   $field = $Worksheet->Range("B1");
   $field->activate;
   $field->Value = "Username:";
   $field = $Worksheet->Range("C1");
   $field->activate;
   $field->Value = "Email:";
   $field = $Worksheet->Range("D1");
   $field->activate;
   $field->Value = "Role:";
   $field = $Worksheet->Range("E1");
   $field->activate;
   $field->Value = "Active:";
   $users = getAllUsers();
    foreach($users as $key=>$u) {
        $rowNumber = $key + 2;
        $field = $Worksheet->Range("A$rowNumber");
        $field->activate;
        $field->Value = $u->id;
        $field = $Worksheet->Range("B$rowNumber");
        $field->activate;
        $field->Value = $u->username;
        $field = $Worksheet->Range("C$rowNumber");
        $field->activate;
        $field->Value = $u->email;
        $field = $Worksheet->Range("D$rowNumber");
        $field->activate;
        $field->Value = $u->role_name;
       $field = $Worksheet->Range("E$rowNumber");
```

```
$field->activate;
    $field->Value = $u->active;
$location = ABSOLUTE_PATH . "data/users.xls";
$location = str_replace("/", "\\", $location);
$Workbook->_SaveAs($location, -4143);
$Workbook->Save();
$Workbook->Saved = true;
$Workbook->Close;
unset($Workbook);
$excel->Workbooks->Close();
$excel->Quit();
unset($excel);
$file = file_get_contents($location);
header("Content-type: application/vnd.ms-excel");
header("Content-Disposition: attachment;filename=users.xls");
echo($file);
// delete
if(file_exists($location)) {
    unlink($location);
```

models/admin/phones/add-phone.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
       if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnAddPhone'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $name = $_POST['name'];
       $price = $_POST['price'];
       $os = $_POST['os'];
       $brand = $_POST['brand'];
       $image = $_FILES['image'];
       $errors = [];
       regExpPhoneName = "/^[A-Za-z0-9\/\-\s]+$/";
       price = "/^[0-9]+(\.[0-9]*)?$/";
       if(!preg_match($regExpPhoneName, $name)) {
            array_push($errors, "Phone name cannot contain special characters other than '
-' and '/';");
       if(!preg_match($regExpPrice, $price)) {
            array_push($errors, "You must enter a price;");
       } else {
            $price = floatval($price);
       $allowedTypes = ['image/jpeg', 'image/png', 'image/gif'];
       if(!in_array($image['type'], $allowedTypes)) {
            array_push($errors, "Uploaded file must be an image;");
       $allOS = getAllOS();
       $osExists = false;
       foreach($allOS as $o) {
           if($o->id == $os) $osExists = true;
       if(!$osExists) {
           array_push($errors, "That OS doesn't exist;");
```

```
$allBrands = getAllBrands();
        $brandExists = false;
        foreach($allBrands as $b) {
            if($b->id == $brand) $brandExists = true;
        if(!$brandExists) {
            array_push($errors, "That brand doesn't exist;");
        if(getPhone('name', $name)) {
            array push($errors, "Phone with that name already exists;");
        // validation
        if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
        } else {
            define('LOCATION', 'assets/img/phones/');
            $originalImageName = time() . '_' . $image['name'];
            $originalImageLocation = LOCATION . $originalImageName;
            $originalImageAbsoluteLocation = ABSOLUTE_PATH . $originalImageLocation;
            // original image
            if(move_uploaded_file($image['tmp_name'], $originalImageAbsoluteLocation)) {
                // small image
                list($width, $height) = getimagesize($originalImageAbsoluteLocation);
                $newWidth = 350;
                $newHeight = $height * ($newWidth / $width);
                $smallImage = imagecreatetruecolor($newWidth, $newHeight);
                $transparent = imagecolorallocatealpha($smallImage, 0, 0, 0, 127);
                imagefill($smallImage, 0, 0, $transparent);
                imagesavealpha($smallImage, true);
                switch($image['type']) {
                    case 'image/jpeg':
                        $originalImage = imagecreatefromjpeg($originalImageAbsoluteLocatio
n);
                        break;
                    case 'image/png':
                        $originalImage = imagecreatefrompng($originalImageAbsoluteLocation
);
                        break;
                    case 'image/gif':
                        $originalImage = imagecreatefromgif($originalImageAbsoluteLocation
);
                        break;
                imagecopyresampled($smallImage, $originalImage, 0, 0, 0, $newWidth, $ne
wHeight, $width, $height);
```

```
$smallImageName = "small_" . $originalImageName;
                $smallImageLocation = LOCATION . $smallImageName;
                $smallImageAbsoluteLocation = ABSOLUTE_PATH . $smallImageLocation;
                switch($image['type']) {
                    case 'image/jpeg':
                        $result = imagejpeg($smallImage, $smallImageAbsoluteLocation);
                        break;
                    case 'image/png':
                        $result = imagepng($smallImage, $smallImageAbsoluteLocation);
                    case 'image/gif':
                        $result = imagegif($smallImage, $smallImageAbsoluteLocation);
                }
                // image upload
                if($result) {
                    if(addPhone($name, $price, $os, $brand, $originalImageName, $smallImag
eName)) {
                        http_response_code(200);
                        $_SESSION['messages'] = ["Phone '$name' was successfully added."];
                    } else {
                        http_response_code(500);
                        $_SESSION['errors'] = ["We encountered an error."];
            } else {
                http_response_code(500);
                $_SESSION['errors'] = ["We encountered an error."];
            }
        header("Location: ../../index.php?p=admin&ap=add-phone");
        exit();
    } else {
        http_response_code(400);
```

models/admin/phones/edit-phone.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnEditPhone'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $id = $ POST['id'];
       $name = $_POST['name'];
       $price = $_POST['price'];
       $os = $_POST['os'];
       $brand = $_POST['brand'];
       $active = $_POST['active'];
       if(isset($_POST['chbChangeImage'])) {
            $image = $_FILES['image'];
       $errors = [];
       regExpPhoneName = "/^[A-Za-z0-9\/\-\s]+$/";
       price = "/^[0-9]+(\.[0-9]*)?$/";
       // validation
       if(!preg_match($regExpPhoneName, $name)) {
            array_push($errors, "Phone name cannot contain special characters other than '
' and '/';");
       if(!preg_match($regExpPrice, $price)) {
            array_push($errors, "You must enter a price;");
       } else {
            $price = floatval($price);
       if(isset($ POST['chbChangeImage'])) {
           $allowedTypes = ['image/jpeg', 'image/png', 'image/gif'];
           if(!in_array($image['type'], $allowedTypes)) {
                array_push($errors, "Uploaded file must be an image;");
            }
       $allOS = getAllOS();
```

```
$osExists = false;
       foreach($allOS as $o) {
           if($o->id == $os) $osExists = true;
      if(!$osExists) {
           array_push($errors, "That OS doesn't exist;");
      $allBrands = getAllBrands();
      $brandExists = false;
      foreach($allBrands as $b) {
           if($b->id == $brand) $brandExists = true;
      if(!$brandExists) {
           array_push($errors, "That brand doesn't exist;");
      $phoneExists = getPhone('name', $name);
      if($phoneExists) {
           if($phoneExists->id != $id) {
               array_push($errors, "Phone with that name already exists;");
      $activeValues = [0, 1];
      if(!in_array($active, $activeValues)) {
           array_push($errors, "Active value can either be 0 or 1;");
      // validation
      if(count($errors)) {
           http_response_code(400);
           $_SESSION['errors'] = $errors;
      } else {
           $continue = true;
           if(isset($_POST['chbChangeImage'])) {
               $continue = false;
               // image upload
               // original image
               define('LOCATION', 'assets/img/phones/');
               $originalImageName = time() . '_' . $image['name'];
               $originalImageLocation = LOCATION . $originalImageName;
               $originalImageAbsoluteLocation = ABSOLUTE_PATH . $originalImageLocation;
               // original image
               if(move_uploaded_file($image['tmp_name'], $originalImageAbsoluteLocation))
{
                   // small image
                   list($width, $height) = getimagesize($originalImageAbsoluteLocation);
                   newWidth = 350;
                   $newHeight = $height * ($newWidth / $width);
                   $smallImage = imagecreatetruecolor($newWidth, $newHeight);
                   $transparent = imagecolorallocatealpha($smallImage, 0, 0, 0, 127);
```

```
imagefill($smallImage, 0, 0, $transparent);
                    imagesavealpha($smallImage, true);
                    switch($image['type']) {
                        case 'image/jpeg':
                            $originalImage = imagecreatefromjpeg($originalImageAbsoluteLoc
ation);
                            break;
                        case 'image/png':
                            $originalImage = imagecreatefrompng($originalImageAbsoluteLoca
tion);
                            break;
                        case 'image/gif':
                            $originalImage = imagecreatefromgif($originalImageAbsoluteLoca
tion);
                            break;
                    imagecopyresampled($smallImage, $originalImage, 0, 0, 0, $newWidth,
 $newHeight, $width, $height);
                    $smallImageName = "small_" . $originalImageName;
                    $smallImageLocation = LOCATION . $smallImageName;
                    $smallImageAbsoluteLocation = ABSOLUTE_PATH . $smallImageLocation;
                    switch($image['type']) {
                        case 'image/jpeg':
                            $result = imagejpeg($smallImage, $smallImageAbsoluteLocation);
                            break;
                        case 'image/png':
                            $result = imagepng($smallImage, $smallImageAbsoluteLocation);
                            break;
                        case 'image/gif':
                            $result = imagegif($smallImage, $smallImageAbsoluteLocation);
                            break;
                    // small image
                    // image upload
                    $continue = $result;
            if($continue) {
                if(isset($ POST['chbChangeImage'])) {
                    $result = editPhoneWithImage($id, $name, $price, $os, $brand, $active,
 $originalImageName, $smallImageName);
                } else {
                    $result = editPhoneWithoutImage($id, $name, $price, $os, $brand, $acti
ve);
                if($result) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["Phone was successfully edited."];
                } else {
                    http_response_code(500);
                    $_SESSION['errors'] = ["We encountered an error."];
```

```
} else {
         http_response_code(500);
         $_SESSION['errors'] = ["We encountered an error."];
     }
}
header("Location: ../../.index.php?p=admin&ap=edit-phone&id=$id");
     exit();
} else {
     http_response_code(400);
}
```

models/admin/os/add-os.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnAddOS'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $name = $_POST['name'];
       $errors = [];
       $regExpOSName = "/^[A-Za-z\s]+$/";
       if(!preg_match($regExpOSName, $name)) {
            array_push($errors, "OS name cannot contain special characters or numbers;");
       if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
       } else {
            if(getOS('name', $name)) {
               http_response_code(409);
               $_SESSION['errors'] = ["That OS already exists."];
            } else {
               if(addOS($name)) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["OS '$name' was added successfully."];
                } else {
                    http_response_code(500);
                    $_SESSION['errors'] = ["We encountered an error."];
                }
            }
       header("Location: ../../index.php?p=admin&ap=add-os");
    } else {
       http_response_code(400);
```

models/admin/os/edit-os.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnEditOS'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $id = $ POST['id'];
       $name = $_POST['name'];
       $errors = [];
       $regExpOSName = "/^[A-Za-z\s]+$/";
       if(!preg_match($regExpOSName, $name)) {
            array_push($errors, "OS name cannot contain special characters or numbers;");
       if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
       } else {
            $exists = false;
            $osExists = getOS('name', $name);
            if($osExists) {
                if($osExists->id != $id) $exists = true;
           if($exists) {
               http_response_code(409);
               $_SESSION['errors'] = ['That OS already exists.'];
            } else {
               if(editOS($id, $name)) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["OS was edited successfully."];
                } else {
                    http_response_code(500);
                    $_SESSION['errors'] = ["We encountered an error."];
```

```
header("Location: ../../index.php?p=admin&ap=edit-os&id=$id");
} else {
    http_response_code(400);
}
```

models/admin/orders/edit-order.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnEditOrder'])) {
        require_once('.../.../config/connection.php');
       require once('../functions.php');
       $id = $ POST['id'];
       $name = $_POST['name'];
       $address = $_POST['address'];
       $errors = [];
       regExpName = "/^[A-Za-z\s]+$/";
       $regExpAddress = "/^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽa-zšđčćž][a-
zšđčćž]{2,})*\s\d+[A-Z]?(\/\d+)*$/";
       if(!preg_match($regExpName, $name)) {
            array_push($errors, "A name cannot have less than 3 characters; Has to be at 1
east 2 words; Each word must be capitalized");
       if(!preg_match($regExpAddress, $address)) {
            array_push($errors, "Address example: [Street Name] [Home Number]/[Apartment N
umber];");
        }
       if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
       } else {
            if(editOrder($id, $name, $address)) {
               http_response_code(200);
                $_SESSION['messages'] = ["Order was edited successfully."];
               http_response_code(500);
               $_SESSION['errors'] = ["We encountered an error."];
            }
       header("Location: ../../index.php?p=admin&ap=edit-order&id=$id");
    } else {
```

```
http_response_code(400);
}
?>
```

models/admin/brands/add-brand.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnAddBrand'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $name = $_POST['name'];
       $errors = [];
       $regExpBrandName = "/^[A-Za-z\s]+$/";
       if(!preg_match($regExpBrandName, $name)) {
            array_push($errors, "Brand name cannot contain special characters or numbers;"
);
       if(count($errors)) {
           http_response_code(400);
           $_SESSION['errors'] = $errors;
       } else {
            if(getBrand('name', $name)) {
               http response code(409);
                $_SESSION['errors'] = ['That brand already exists.'];
            } else {
                if(addBrand($name)) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["Brand '$name' was added successfully."];
                } else {
                    http_response_code(500);
                    $_SESSION['errors'] = ["We encountered an error."];
       header("Location: ../../index.php?p=admin&ap=add-brand");
    } else {
       http_response_code(400);
```

models/admin/brands/edit-brand.php

```
<?php
    session_start();
   if(isset($ SESSION['user'])) {
        if($_SESSION['user']->role_name != 'admin') {
           http response code(404);
            exit();
    } else {
       http_response_code(404);
       exit();
   if(isset($_POST['btnEditBrand'])) {
       require_once('../../config/connection.php');
       require_once('../functions.php');
       $id = $ POST['id'];
       $name = $_POST['name'];
       $errors = [];
       $regExpBrandName = "/^[A-Za-z\s]+$/";
       if(!preg_match($regExpBrandName, $name)) {
            array_push($errors, "Brand name cannot contain special characters or numbers;"
);
       if(count($errors)) {
            http_response_code(400);
            $_SESSION['errors'] = $errors;
        } else {
            $exists = false;
           $brandExists = getBrand('name', $name);
            if($brandExists) {
                if($brandExists->id != $id) $exists = true;
            if($exists) {
                http_response_code(409);
                $_SESSION['errors'] = ['That brand already exists.'];
            } else {
                if(editBrand($id, $name)) {
                    http_response_code(200);
                    $_SESSION['messages'] = ["Brand was edited successfully."];
                } else {
                    http response code(500);
                    $_SESSION['errors'] = ["We encountered an error."];
```

```
header("Location: ../../index.php?p=admin&ap=edit-brand&id=$id");
} else {
   http_response_code(400);
}
```

config/.env

SERVER=localhost DATABASE=mobishoptpo USERNAME=root PASSWORD=

config/config.php

```
<?php
   define('ABSOLUTE_PATH', $_SERVER['DOCUMENT_ROOT'] . "/mobishoptpo/");
   // files
   define('ENV FILE', ABSOLUTE PATH . 'config/.env');
   define('LOG_FILE', ABSOLUTE_PATH . 'data/log.txt');
   define('ERROR_LOG', ABSOLUTE_PATH . 'data/error_log.txt');
   define('LOGIN_LOG', ABSOLUTE_PATH . 'data/login_log.txt');
   define('SEPARATOR', "\t");
   define('SERVER', env('SERVER'));
   define('DATABASE', env('DATABASE'));
   define('USERNAME', env('USERNAME'));
   define('PASSWORD', env('PASSWORD'));
    function env($keyword) {
        $file = file(ENV_FILE);
        foreach($file as $line) {
            $line = trim($line);
           $lineContent = explode('=', $line);
           if($lineContent[0] == $keyword) {
                return $lineContent[1];
            }
```

config/connection.php

```
require_once('config.php');
    try {
        $conn = new PDO("mysql:host=".SERVER.";dbname=".DATABASE.";charset=utf8", USERNAME
 PASSWORD);
        $conn->setAttribute(PDO::ATTR ERRMODE, PDO::ERRMODE EXCEPTION);
        $conn->setAttribute(PDO::ATTR_DEFAULT_FETCH_MODE, PDO::FETCH_OBJ);
   } catch (PDOException $ex) {
        echo("Connection error: " . $ex->getMessage());
   function executeQuery($query) {
        global $conn;
        return $conn->query($query)->fetchAll();
    function getDateAndTime() {
        return date("d-m-Y H:i:s");
   updateLog();
    function updateLog() {
        $file = fopen(LOG_FILE, "a");
        if($file) {
            isset($_SESSION['user']) ? $userId = $_SESSION['user']->id : $userId = NULL;
            $page = $_SERVER['PHP_SELF'];
            $subPage = '';
            if(isset($_GET['p'])) $subPage = $_GET['p'];
            else if(strpos($page, '/index.php') !== false) $subPage = 'home';
            $ipAddress = $_SERVER['REMOTE_ADDR'];
            $text = $userId . SEPARATOR . $page . SEPARATOR . $subPage . SEPARATOR . $ipAd
dress . SEPARATOR . getDateAndTime() . "\n";
            fwrite($file, $text);
            fclose($file);
   function updateErrorLog($message) {
        $file = fopen(ERROR_LOG, "a");
        if($file) {
            $page = $_SERVER['PHP_SELF'];
            if(isset($_GET['p'])) {
                $page .= "?p=" . $_GET['p'];
                if(isset($_GET['ap'])) {
                    $page .= "&ap=" . $_GET['ap'];
            $ipAddress = $_SERVER['REMOTE_ADDR'];
            $text = $page . SEPARATOR . $ipAddress . SEPARATOR . getDateAndTime() . SEPARA
TOR . $message . "\n";
```

```
fwrite($file, $text);
    fclose($file);
}

function getTime($fullDate) {
    $dateAndTime = explode(" ", $fullDate);

    $date = explode("-", $dateAndTime[0]);
    $time = explode(":", $dateAndTime[1]);

    $hour = intval($time[0]);
    $minute = intval($time[1]);
    $second = intval($time[2]);

    $day = intval($date[0]);
    $month = intval($date[0]);
    $year = intval($date[2]);

    return mktime($hour, $minute, $second, $month, $day, $year);
}

}
```

style.css

```
@font-face {
  src: url("../fonts/Roboto-Regular.ttf");
  font-family: "Roboto";
@font-face {
  src: url("../fonts/PermanentMarker-Regular.ttf");
  font-family: "PermanentMarker";
  margin: 0;
  padding: 0;
  -webkit-box-sizing: border-box;
          box-sizing: border-box;
  color: #16425b;
  font-family: "Roboto";
ul {
  list-style: none;
  text-decoration: none;
  color: #16425b;
body {
  background-color: #fff6ed;
.font-xs {
  font-size: 12px;
.font-small {
  font-size: 16px;
.font-medium {
  font-size: 19px;
.font-large {
  font-size: 30px;
```

```
.font-x1 {
  font-size: 40px;
.font-xx1 {
  font-size: 60px;
.cover {
 width: 100%;
 height: 100%;
 background-color: rgba(0, 0, 0, 0.6);
.cover-white {
 width: 100%;
 height: 100%;
 background-color: rgba(255, 255, 255, 0.6);
.underline {
 display: block;
 width: 60px;
 margin-left: auto;
 margin-right: auto;
 height: 2px;
  background-color: #16425b;
.btn-primary {
 border: none;
  -webkit-box-shadow: none;
          box-shadow: none;
 background-color: #16425b !important;
 color: #fff6ed !important;
  -webkit-transition: background-color .1s;
  transition: background-color .1s;
.btn-primary i {
  color: #fff6ed !important;
.btn-primary:hover {
 background-color: #2f6690 !important;
.btn-primary:focus {
  -webkit-box-shadow: none;
          box-shadow: none;
```

```
.btn-primary:active:focus {
  -webkit-box-shadow: none;
          box-shadow: none;
#toTop {
  right: 30px;
 bottom: 30px;
 background-color: #5bc0eb;
  display: block;
#toTopArrow {
  width: 10px;
  height: 10px;
  border-left: 2px solid #16425b;
  border-top: 2px solid #16425b;
  -webkit-transform: rotate(45deg);
          transform: rotate(45deg);
  top: 3px;
#loginbar {
  background-color: #fff6ed;
#loginbar a {
  color: #16425b;
.right-border {
  border-right: 1px solid #16425b;
#navbar {
  background-color: #2f6690;
#navbar a, #navbar i {
  color: #fff6ed;
#logo a {
  font-family: PermanentMarker;
#nav a {
  position: relative;
#nav a:after {
 content: '';
```

```
position: absolute;
  bottom: -2px;
  right: 0;
  width: 0;
  height: 1px;
  background-color: #fff6ed;
  -webkit-transition: width .2s;
  transition: width .2s;
#nav a:hover:after {
  left: 0;
  width: 100%;
#cartQuantity {
  color: #fff6ed;
  background-color: #826251;
 right: 0;
  bottom: 6px;
  width: 17px;
  height: 17px;
#sidenav {
  position: fixed;
  top: 0;
  left: 0;
#sidenavContent {
  width: 250px;
 height: 100%;
  background-color: #2f6690;
#sidenavContent a {
  color: #fff6ed;
  -webkit-transition: background-color .1s, color .1s;
  transition: background-color .1s, color .1s;
#sidenavContent a:hover {
  color: #16425b;
  background-color: #fff6ed;
.slider-image {
  background-position: center;
  background-size: cover;
  background-repeat: no-repeat;
```

```
#sliderText {
  top: 0;
  left: 0;
#sliderText p, #sliderText h2 {
  color: #fff6ed;
#sliderText a {
  background-color: #fff6ed;
  color: #16425b;
  -webkit-transition: background-color .1s, color .1s;
  transition: background-color .1s, color .1s;
#sliderText a:hover {
  background-color: #16425b;
  color: #fff6ed;
#about h3 {
  color: #826251;
#aboutUsImage {
  width: 300px;
.phoneDiv {
  overflow: hidden;
.phoneDiv:hover .phoneOverlay {
  max-height: 100%;
.phoneOverlay {
  top: 0;
  left: 0;
  max-height: 0px;
  -webkit-transition: max-height .3s;
  transition: max-height .3s;
  display: -webkit-box;
  display: -ms-flexbox;
  display: flex;
  overflow: hidden;
.btn-white {
  background-color: #fff6ed;
```

```
-webkit-transition: .1s;
  transition: .1s;
.btn-white:hover {
  background-color: #5bc0eb;
  color: #fff6ed;
.btn-white:hover i {
  color: #fff6ed;
.activePage {
  background-color: #2f6690 !important;
.cartSuccessModal {
  pointer-events: none;
.cartSuccessModalContent {
  display: none;
.border-correct {
  border: 1px solid #5bc0eb;
.error-message {
  display: block;
#authorImage:hover #authorSocials {
  max-height: 100%;
#authorSocials {
  width: 100%;
  max-height: 0px;
  top: 0;
  left: 0;
  overflow: hidden;
  display: -webkit-box;
  display: -ms-flexbox;
  display: flex;
  -webkit-transition: max-height .3s;
  transition: max-height .3s;
#authorSocials ul {
  display: -webkit-box;
```

```
display: -ms-flexbox;
  display: flex;
#portfolioLink {
  background-color: #2f6690;
  color: #fff6ed;
.table {
  min-width: 600px !important;
.btnQuantity {
 width: 20px;
  height: 20px;
.table-responsive {
  max-height: 500px !important;
.colActions {
  min-width: 130px;
.messagesDiv {
  max-height: 700px;
#footer {
  background-color: #16425b;
  color: #fff6ed !important;
#footer a, #footer i, #footer span {
  color: #fff6ed !important;
.footerSeparator {
 width: 20px;
 height: 2px;
  background-color: #fff6ed;
@media screen and (max-width: 767px) {
  .font-xs {
    font-size: 10px;
  .font-small {
    font-size: 14px;
```

```
.font-medium {
   font-size: 17px;
}
.font-large {
   font-size: 25px;
}
.font-xl {
   font-size: 30px;
}
.font-xxl {
   font-size: 40px;
}
```

3.3 JavaScript/jQuery

main.js

```
$(document).ready(function() {
    // SIDENAV
    $('#sidenav, #sidenavContent').hide();
    $('#hamburgerMenu').click(function(e) {
        e.preventDefault();
        openSidenav();
    });
    $('#sidenav').click(function() {
        closeSidenav();
    });
    $('#sidenavContent').click(function(e) {
        e.stopPropagation();
    });
    const toTopHeight = 200;
    const toTopFadeDuration = 200;
    if($(window).scrollTop() <= toTopHeight) {</pre>
        $('#toTop').hide();
    $('#toTop').click(function(e) {
        e.preventDefault();
        $(window).scrollTop(0);
    });
    $(window).scroll(function() {
        if($(window).scrollTop() > toTopHeight) {
            $('#toTop').fadeIn(toTopFadeDuration);
        } else {
            $('#toTop').fadeOut(toTopFadeDuration);
    });
    // cart quantity
    printCartQuantity();
});
// ajax
function ajaxCallback(url, method, func, data = {}) {
    $.ajax({
        url: url,
        method: method,
        data: data,
```

```
dataType: 'json',
        success: func,
        error: function(xhr) {
            console.error(xhr.responseText);
    });
const sidenavAnimationDuration = 200;
function openSidenav() {
   $('#sidenav').fadeIn(sidenavAnimationDuration, function() {
        $('#sidenavContent').animate({width: 'toggle'}, sidenavAnimationDuration);
    });
}
function closeSidenav() {
   $('#sidenavContent').animate({width: 'toggle'}, sidenavAnimationDuration, function() {
        $('#sidenav').fadeOut(sidenavAnimationDuration);
    });
}
function printCartQuantity() {
    ajaxCallback('models/cart/get-cart-quantity.php', 'GET', function(data) {
        $('#cartQuantity').html(data);
    });
```

form-validation.js

```
$(document).ready(function() {
    $('.error-message').hide();
});
let noErrors;
function validateField(field, regExp) {
    if(field.val().match(regExp)) fieldCorrect(field);
    else fieldIncorrect(field);
function fieldCorrect(field) {
    $(field).addClass('border-correct');
    $(field).removeClass('border-danger');
    $(field).siblings('.error-message').slideUp();
function fieldIncorrect(field) {
    $(field).addClass('border-danger');
    $(field).removeClass('border-correct');
    $(field).siblings('.error-message').slideDown();
    noErrors = false;
function fieldNeutral(field) {
    $(field).removeClass('border-danger');
    $(field).removeClass('border-correct');
    $(field).siblings('.error-message').slideUp();
function submitForm(checkFunctions, form = false) {
    noErrors = true;
    for(var f of checkFunctions) {
        f();
    if(noErrors) {
        if(form) clearForm(form);
        return true;
    return false;
```

phones.js

```
let page = 1;
let phonesPerPage = 6;
$(document).ready(function() {
    $('.chbBrand, .chbOS, #ddlSortOrder').change(function() {
        getPhones(true);
    });
    $('#tbSearch, #tbMaxPrice').on('input', function() {
        getPhones(true);
    });
    getPhones();
    function getPhones(resetPage = false) {
        if(resetPage) page = 1;
        // brands
        let filteredBrands = [];
        for(let el of $('.chbBrand:checked')) {
            filteredBrands.push(el.value);
        let filteredOS = [];
        for(let el of $('.chbOS:checked')) {
            filteredOS.push(el.value);
        let maxPrice = $('#tbMaxPrice').val();
        // search
        let search = $('#tbSearch').val();
        // sort order
        let sortOrder = $('#ddlSortOrder').val();
        ajaxCallback('models/phones/get-phones.php', 'GET', function(data) {
            printPhones(data);
        }, {
            brand: filteredBrands,
            os: filteredOS,
            maxPrice: maxPrice,
            search: search,
            order: sortOrder,
            page: page,
            phonesPerPage: phonesPerPage
        });
```

```
function printPhones(data) {
       let phones = data.phones;
       let html = '';
       if(phones.length > 0) {
            for(let p of phones) {
                html += `<div class="mx-auto mx-sm-0 col-9 col-sm-6 col-lg-4 text-</pre>
center mb-3">
                <div class="phoneDiv position-relative rounded">
                <div class="phoneImage">
                    <img src="assets/img/phones/${p.image_small}" alt="${p.name}" class="i</pre>
mg-fluid"/>
                </div>
                <label class="phoneName font-medium">${p.name}</label>
                <label class="phonePrice font-medium fw-bold">${p.price}&euro;</label>
                <div class="phoneOverlay position-absolute cover align-items-</pre>
center justify-content-center">
                    <div class="phoneButtons d-flex flex-column">
                        <a href="index.php?p=details&id=${p.id}" class="btn-white py-1 px-</pre>
2 rounded mb-2 d-block font-small">Details</a>
                        <a href="#" data-id="${p.id}" class="btn-white btnAddToCart py-</pre>
1 px-2 rounded d-block font-small"><i class="fas fa-cart-plus"></i></a>
                    </div>
                </div>
                </div>
            </div>`;
        } else {
           html = "<div class='col-12'>
medium'>Oops, seems like there are no phones that match your search criteria.</div>";
       $('#phones .row').html(html);
       // pagination
       let numberOfPhones = data.numberOfPhones;
       let paginationHtml = '';
       if(numberOfPhones > 0) {
            paginationHtml += `<a href='#' id='btnPrev' class="font-small btn-primary px-</pre>
3 py-1 rounded-start"><</a>`;
            for(let i = 0; i < numberOfPhones / phonesPerPage; i++) {</pre>
                paginationHtml += `<a href='#' data-page='${i + 1}' class="font-small btn-</pre>
primary px-2 py-1 btnPage">${i + 1}</a>`;
            paginationHtml += `<a href='#' id='btnNext' class="font-small btn-primary px-</pre>
3 py-1 rounded-end">></a>`;
       $('#pagination').html(paginationHtml);
       enablePagination();
       enableAddToCart();
```

```
function enablePagination() {
    $('#btnPrev').click(function(e) {
        e.preventDefault();
        if(page > 1) {
            page--;
            getPhones();
        }
    });
    $('#btnNext').click(function(e) {
        e.preventDefault();
        if(page < $('.btnPage').length) {</pre>
            page++;
            getPhones();
    });
    $('.btnPage').click(function(e) {
        e.preventDefault();
        page = $(this).data('page');
        getPhones();
    });
    for(let el of $('.btnPage')) {
        if($(e1).data('page') == page) {
            $(el).addClass('activePage');
            break;
        }
function enableAddToCart() {
    $('.btnAddToCart').click(function(e) {
        e.preventDefault();
        let id = $(this).data('id');
        addToCart(id);
    });
$('#btnAddToCart').click(function(e) {
    e.preventDefault();
    let id = $(this).data('id');
    let quantity = parseInt($('#tbAddToCart').val());
    addToCart(id, quantity);
});
function addToCart(phoneId, quantity = 1) {
    let user;
    ajaxCallback('models/users/get-current-user.php', 'GET', function(data) {
        user = data;
        if(user) {
            ajaxCallback('models/cart/add-to-cart.php', 'POST', function(data) {
```

```
openCartSuccessModal(data);
                    printCartQuantity();
                }, {
                    userId: user.id,
                    phoneId: phoneId,
                    quantity: quantity
                });
            } else {
                location.href = "index.php?p=login";
        }, {
            message: "You need to be logged in in order to add items to your cart."
        });
    }
   const modalDuration = 3;
    let timer;
    function openCartSuccessModal(message) {
        if($('.cartSuccessModal').length > 0) {
            $('.cartSuccessModalContent').html(message);
            clearTimeout(timer);
            timer = setModalCloseTimeout(modalDuration);
        } else {
            let html = `<div class="cartSuccessModal w-100 h-100 position-fixed fixed-</pre>
top pt-5">
            <div class="row mt-5">
                <div class="cartSuccessModalContent mx-auto col-8 col-md-3 alert alert-</pre>
info text-center">${message}</div>
            </div>
        </div>`;
            $('body').append(html);
            $('.cartSuccessModalContent').fadeIn('fast');
            timer = setModalCloseTimeout(modalDuration);
   function setModalCloseTimeout(duration) {
        return setTimeout(closeCartSuccessModal, duration * 1000);
    function closeCartSuccessModal() {
        $('.cartSuccessModalContent').fadeOut('fast', function() {
            $('.cartSuccessModal').remove();
        });
```

contact.js

```
$(document).ready(function() {
    // FORM VALIDATION
    // NAME
    let regExpName = /^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽ][a-zšđčćž]{2,})*$/;
    let $tbName = $('#tbName');
    $tbName.blur(checkName);
    function checkName() {
        validateField($tbName, regExpName);
    // EMAIL
    let regExpEmail = /^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/;
    let $tbEmail = $('#tbEmail');
    $tbEmail.blur(checkEmail);
    function checkEmail() {
        validateField($tbEmail, regExpEmail);
    // MESSAGE
    let $tbMessage = $('#tbMessage');
    function checkMessage() {
        let numberOfSpaces = tbMessage.value.replace(/[^\s]/mg, "").length;
        if(tbMessage.value.length - numberOfSpaces < 20 || tbMessage.value.length > 500) {
            fieldIncorrect($tbMessage);
        } else {
            fieldCorrect($tbMessage);
    $tbMessage.blur(checkMessage);
    // FORM SUBMITION
    let checkFunctions = [checkName, checkEmail, checkMessage];
    $('#btnSend').click(function() {
        return submitForm(checkFunctions);
    });
```

cart.js

```
$(document).ready(function() {
    // FORM VALIDATION
    // NAME
   let regExpName = /^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽ][a-zšđčćž]{2,})+$/;
   let $tbName = $('#tbName');
   $tbName.blur(checkName);
   function checkName() {
       validateField($tbName, regExpName);
   // ADDRESS
   let regExpAddress = /^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽa-zšđčćž][a-
z \tilde{d} \tilde{c} \tilde{z} \{2,\}) * \s d+[A-Z]?(\d+) * \fi
    let $tbAddress = $('#tbAddress');
   $tbAddress.blur(checkAddress);
   function checkAddress() {
       validateField($tbAddress, regExpAddress);
   }
   // FORM SUBMITION
   let checkFunctions = [checkName, checkAddress];
   $('#btnCheckout').click(function() {
       return submitForm(checkFunctions);
   });
   // cart table
   getCart();
   function getCart() {
       ajaxCallback('models/cart/get-cart.php', 'GET', function(data) {
           printCart(data);
           printCartQuantity();
       });
    }
   function printCart(data) {
       let totalPrice = 0;
       let html = '';
       for(let el of data) {
           html += `
           ${el.name}
           ${el.price}€
           <td class="colQuantity d-flex align-items-center justify-content-
center"><a href='#' data-id="${el.id}" data-change='decrease' class="btnQuantity btn-
primary rounded d-flex align-items-center justify-content-center">-</a><span class='mx-</pre>
2'>${el.quantity}</span><a href='#' data-id="${el.id}" data-
change='increase' class="btnQuantity btn-primary rounded d-flex align-items-
center justify-content-center">+</a>
           <a href='#' data-
id='${el.id}' class='btnRemove'><i class="fas fa-minus text-danger"></i>
       `;
```

```
totalPrice += el.quantity * el.price;
    $('#cartTable tbody').html(html);
    $('#totalPrice').html(totalPrice);
    enableQuantityChange();
    enableRemoveItem();
function enableQuantityChange() {
    $('.btnQuantity').click(function(e) {
        e.preventDefault();
        let id = $(this).data('id');
        let change = $(this).data('change');
        changeQuantity(id, change);
    });
function changeQuantity(id, change) {
    ajaxCallback('models/cart/change-quantity.php', 'POST', function() {
        getCart();
    }, {
        id: id,
        change: change
    });
function enableRemoveItem() {
    $('.btnRemove').click(function(e) {
        e.preventDefault();
        let id = $(this).data('id');
        removeItem(id);
    });
function removeItem(id) {
    ajaxCallback('models/cart/remove-item.php', "POST", function() {
        getCart();
    }, {
        id: id
    });
```

login.js

```
$(document).ready(function() {
    // FORM VALIDATION
    // EMAIL
    let regExpEmail = /^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/;
    let $tbEmail = $('#tbEmail');
    $tbEmail.blur(checkEmail);
    function checkEmail() {
        validateField($tbEmail, regExpEmail);
    let regExpPassword = /^(?=.*[a-z])(?=.*[A-z])(?=.*[0-9])(?=.*[!@#\$%\^&\*])(?=.{8,})/;
    let $tbPassword = $('#tbPassword');
    $tbPassword.blur(checkPassword);
    function checkPassword() {
        validateField($tbPassword, regExpPassword);
   // FORM SUBMITION
    let checkFunctions = [checkEmail, checkPassword];
    $('#btnLogIn').click(function() {
        return submitForm(checkFunctions);
    });
```

register.js

```
$(document).ready(function() {
    // FORM VALIDATION
    // USERNAME
    let regExpUsername = /^[a-zA-Z]\w{4,20}$/;
    let $tbUsername = $('#tbUsername');
    $tbUsername.blur(checkUsername);
    function checkUsername() {
        validateField($tbUsername, regExpUsername);
    // EMAIL
    let regExpEmail = /^[a-z][a-z0-9-_\.]{2,}@([a-z0-9-_]{2,}\.)+[a-z]{2,}$/;
    let $tbEmail = $('#tbEmail');
    $tbEmail.blur(checkEmail);
    function checkEmail() {
        validateField($tbEmail, regExpEmail);
    let regExpPassword = /^(?=.*[a-z])(?=.*[A-Z])(?=.*[0-9])(?=.*[!@#\$%\^&\*])(?=.{8,})/;
    let $tbPassword = $('#tbPassword');
    $tbPassword.blur(function() {
        checkPassword();
        if($($tbRepeatPassword).val() != '') {
            checkRepeatPassword();
    });
    function checkPassword() {
        validateField($tbPassword, regExpPassword);
    //REPEAT PASSWORD
    let $tbRepeatPassword = $('#tbRepeatPassword');
    $tbRepeatPassword.blur(checkRepeatPassword);
    function checkRepeatPassword() {
        if($($tbPassword).hasClass('border-
correct') && $($tbRepeatPassword).val() == $($tbPassword).val()) {
            fieldCorrect($tbRepeatPassword);
        } else {
            fieldIncorrect($tbRepeatPassword);
        }
    // FORM SUBMITION
    let checkFunctions = [checkUsername, checkEmail, checkPassword, checkRepeatPassword];
    $('#btnRegister').click(function() {
        return submitForm(checkFunctions);
    });
```

admin.js

```
$(document).ready(function() {
    // FORM VALIDATION
    // NAME
    let regExpBrandName = /^[A-Za-z\s]+$/;
    let $tbAddBrandName = $('#tbAddBrandName');
    $tbAddBrandName.blur(checkAddBrandName);
    function checkAddBrandName() {
        validateField($tbAddBrandName, regExpBrandName);
    let $tbEditBrandName = $('#tbEditBrandName');
    $tbEditBrandName.blur(checkEditBrandName);
    function checkEditBrandName() {
        validateField($tbEditBrandName, regExpBrandName);
    // FORM SUBMITION
    let checkFunctionsAddBrand = [checkAddBrandName];
    $('#btnAddBrand').click(function() {
        return submitForm(checkFunctionsAddBrand);
    });
    let checkFunctionsEditBrand = [checkEditBrandName];
    $('#btnEditBrand').click(function() {
        return submitForm(checkFunctionsEditBrand);
    });
    // FORM VALIDATION
    // NAME
    let regExpOSName = /^[A-Za-z\s]+$/;
    let $tbAddOSName = $('#tbAddOSName');
    $tbAddOSName.blur(checkAddOSName);
    function checkAddOSName() {
        validateField($tbAddOSName, regExpOSName);
    let $tbEditOSName = $('#tbEditOSName');
    $tbEditOSName.blur(checkEditOSName);
    function checkEditOSName() {
        validateField($tbEditOSName, regExpOSName);
    // FORM SUBMITION
    let checkFunctionsAddOS = [checkAddOSName];
    $('#btnAddOS').click(function() {
        return submitForm(checkFunctionsAddOS);
    });
```

```
let checkFunctionsEditOS = [checkEditOSName];
   $('#btnEditOS').click(function() {
        return submitForm(checkFunctionsEditOS);
   });
   // === orders ===
   // FORM VALIDATION
   // NAME
   let regExpOrderName = /^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽ][a-zšđčćž]{2,})+$/;
   let $tbEditOrderName = $('#tbEditOrderName');
   $tbEditOrderName.blur(checkEditOrderName);
   function checkEditOrderName() {
       validateField($tbEditOrderName, regExpOrderName);
    }
   // ADDRESS
   let regExpOrderAddress = /^[A-ZŠĐČĆŽ][a-zšđčćž]{2,}(\s[A-ZŠĐČĆŽa-zšđčćž][a-
z \tilde{c} \tilde{c} (1/d+) * \frac{1}{2} 
   let $tbEditOrderAddress = $('#tbEditOrderAddress');
   $tbEditOrderAddress.blur(checkEditOrderAddress);
   function checkEditOrderAddress() {
       validateField($tbEditOrderAddress, regExpOrderAddress);
   // FORM SUBMITION
   let checkFunctionsEditOrder = [checkEditOrderAddress];
   $('#btnEditOrder').click(function() {
       return submitForm(checkFunctionsEditOrder);
   });
   // === users ===
   // FORM VALIDATION
   // USERNAME
   let regExpUsername = /^[a-zA-Z] \w{4,20}$/;
   let $tbAddUserUsername = $('#tbAddUserUsername');
   $tbAddUserUsername.blur(checkAddUserUsername);
   function checkAddUserUsername() {
       validateField($tbAddUserUsername, regExpUsername);
   let $tbEditUserUsername = $('#tbEditUserUsername');
   $tbEditUserUsername.blur(checkEditUserUsername);
   function checkEditUserUsername() {
       validateField($tbEditUserUsername, regExpUsername);
   // EMAIL
   let regExpEmail = /^[a-z][a-z0-9-..]{2,}@([a-z0-9-..]{2,}..)+[a-z]{2,}$/;
   let $tbAddUserEmail = $('#tbAddUserEmail');
   $tbAddUserEmail.blur(checkAddUserEmail);
   function checkAddUserEmail() {
       validateField($tbAddUserEmail, regExpEmail);
```

```
let $tbEditUserEmail = $('#tbEditUserEmail');
   $tbEditUserEmail.blur(checkEditUserEmail);
   function checkEditUserEmail() {
       validateField($tbEditUserEmail, regExpEmail);
   let regExpPassword = /^(?=.*[a-z])(?=.*[A-Z])(?=.*[0-9])(?=.*[!@#\$%\^&\*])(?=.{8,})/;
   let $tbAddUserPassword = $('#tbAddUserPassword');
   $tbAddUserPassword.blur(checkAddUserPassword);
   function checkAddUserPassword() {
       validateField($tbAddUserPassword, regExpPassword);
   }
   let $tbEditUserPassword = $('#tbEditUserPassword');
   $tbEditUserPassword.blur(checkEditUserPassword);
    function checkEditUserPassword() {
        if(!$('#tbEditUserPassword').prop('disabled')) {
            validateField($tbEditUserPassword, regExpPassword);
    // FORM SUBMITION
   let checkFunctionsAddUser = [checkAddUserUsername, checkAddUserEmail, checkAddUserPass
word];
   $('#btnAddUser').click(function() {
       return submitForm(checkFunctionsAddUser);
   });
   let checkFunctionsEditUser = [checkEditUserEmail, checkEditUserPassword, checkEditUser
Username];
   $('#btnEditUser').click(function() {
       return submitForm(checkFunctionsEditUser);
   });
   if($('#chbChangePassword').prop('checked')) {
       $('#tbEditUserPassword').prop('disabled', false);
       $('#tbEditUserPassword').prop('disabled', true);
   $('#chbChangePassword').change(function() {
       if(this.checked) {
            $('#tbEditUserPassword').prop('disabled', false);
        } else {
            $('#tbEditUserPassword').prop('disabled', true);
            fieldNeutral($tbEditUserPassword);
    });
    // === phones ===
```

```
// FORM VALIDATION
// NAME
let regExpPhoneName = /^[A-Za-z0-9]/-\s]+$/;
let $tbAddPhoneName = $('#tbAddPhoneName');
$tbAddPhoneName.blur(checkAddPhoneName);
function checkAddPhoneName() {
    validateField($tbAddPhoneName, regExpPhoneName);
let $tbEditPhoneName = $('#tbEditPhoneName');
$tbEditPhoneName.blur(checkEditPhoneName);
function checkEditPhoneName() {
    validateField($tbEditPhoneName, regExpPhoneName);
}
// PRICE
let $tbAddPhonePrice = $('#tbAddPhonePrice');
$tbAddPhonePrice.blur(checkAddPhonePrice);
function checkAddPhonePrice() {
    if($('#tbAddPhonePrice').val() == '') {
        noErrors = false;
        fieldIncorrect($tbAddPhonePrice);
    } else {
        fieldCorrect($tbAddPhonePrice);
let $tbEditPhonePrice = $('#tbEditPhonePrice');
$tbEditPhonePrice.blur(checkEditPhonePrice);
function checkEditPhonePrice() {
    if($('#tbEditPhonePrice').val() == '') {
        noErrors = false;
        fieldIncorrect($tbEditPhonePrice);
    } else {
        fieldCorrect($tbEditPhonePrice);
// IMAGE
let $fileAddPhoneImage = $('#fileAddPhoneImage');
$fileAddPhoneImage.on('input', checkAddPhoneImage);
function checkAddPhoneImage() {
    if($('#fileAddPhoneImage').val() == '') {
        noErrors = false;
        fieldIncorrect($fileAddPhoneImage);
    } else {
        fieldCorrect($fileAddPhoneImage);
let $fileEditPhoneImage = $('#fileEditPhoneImage');
$fileEditPhoneImage.on('input', checkEditPhoneImage);
```

```
function checkEditPhoneImage() {
        if(!$('#fileEditPhoneImage').prop('disabled')) {
            if($('#fileEditPhoneImage').val() == '') {
                noErrors = false;
                fieldIncorrect($fileEditPhoneImage);
            } else {
                fieldCorrect($fileEditPhoneImage);
            }
    }
   if($('#chbChangeImage').prop('checked')) {
        $('#fileEditPhoneImage').prop('disabled', false);
    } else {
        $('#fileEditPhoneImage').prop('disabled', true);
   $('#chbChangeImage').change(function() {
        if(this.checked) {
            $('#fileEditPhoneImage').prop('disabled', false);
        } else {
            $('#fileEditPhoneImage').prop('disabled', true);
            fieldNeutral($fileEditPhoneImage);
    });
   // FORM SUBMITION
    let checkFunctionsAddPhone = [checkAddPhoneName, checkAddPhonePrice, checkAddPhoneImag
e];
   $('#btnAddPhone').click(function() {
        return submitForm(checkFunctionsAddPhone);
    });
   let checkFunctionsEditPhone = [checkEditPhoneName, checkEditPhonePrice, checkEditPhone
Image];
   $('#btnEditPhone').click(function() {
        return submitForm(checkFunctionsEditPhone);
    });
```