Visoka škola za informacione i komunikacione tehnologije

Web programiranje 2

Sajt:

TechGenius

https://techgeniuswp2.netlify.com/index.html

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Internet tehnologije

Beograd, 27. mart 2020.

TECHGENIUS

Sadržaj:

Uvod:

Korišćeni jezici: HTML 5, CSS 3, JavaScript

Korišćene biblioteke: Bootstrap, jQuery

Korišćeno okruženje: Visual Studio Code

Dodatno: JSON, XML, AJAX, Local Storage, Regular Expressions
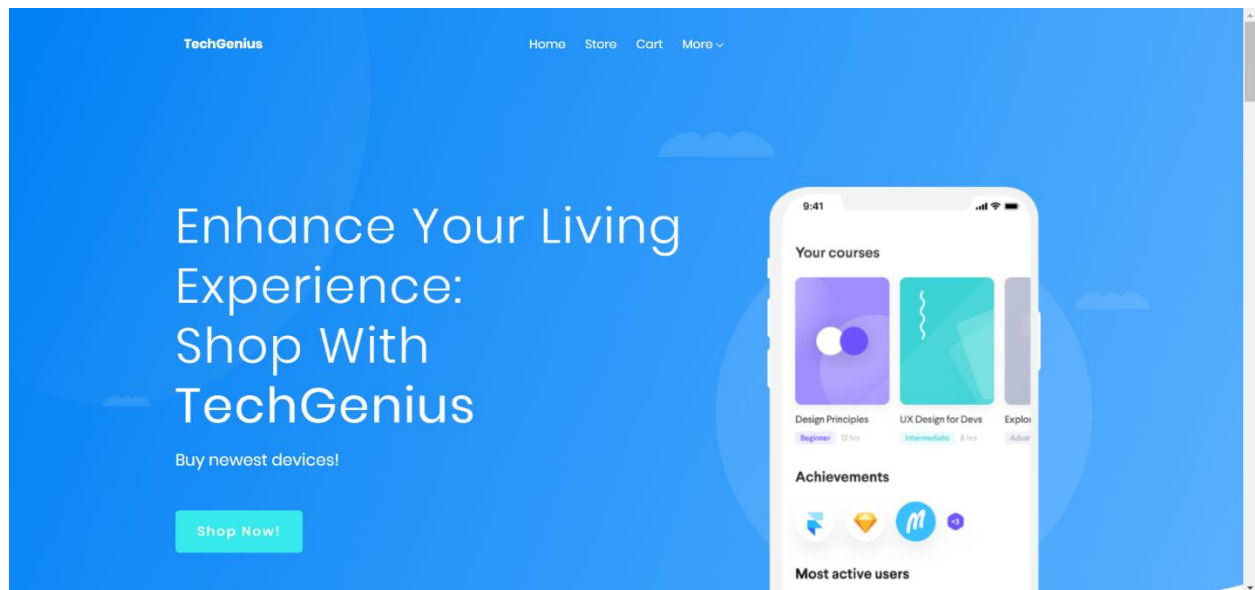
Opis funkcionalnosti:

Celokupna funkcionalnost simulira online prodavnicu mobilnih telefona.

Na početnoj stranici se dinamički ispisuju brendovi u ponudi korišćenjem AJAX-a za dohvatanje uredjaja iz eksternog JSON fajla. U footer-u se nalaze dva bloka sa linkovima koji su dinamički ispisani.

Na stranici Store Page se izlistavaju svi proizvodi u ponudi (koristi se AJAX), i korisnik ima mogućnost da izvrši pretragu po brendu ili modelu uređaja, sortira proizvode po ponuđenim opcijama i filtrira po opcijama koje su dinamički ispisane. Klikom na dugme Add to Cart korisnik izabrani proizvod ubacuje u korpu(Local Storage).

Na stranici Cart prethodno izabrani proizvodi se prikazuju u korpi dohvatanjem iz Local Storage-a i nude se opcije da se klikom na dugme Clear očisti cela korpa, klikom na dugme Remove form cart ukloni određeni proizvod i klikom na Buy dugme se, ukoliko korpa nije prazna, korisnik šalje na stranicu Buy na kojoj se nalazi forma za podatke neophodne za poručivanje, koji se nakon unosa proveravaju korišćenjem regularnih izraza i ukoliko je sve propisno uneto korisniku se prikazuje div koji preklapa formu i sadrži ukupnu cenu naplaćenu i vreme kada isporuka treba da se očekuje (2 dana nakon trenutnog datuma).

Template:

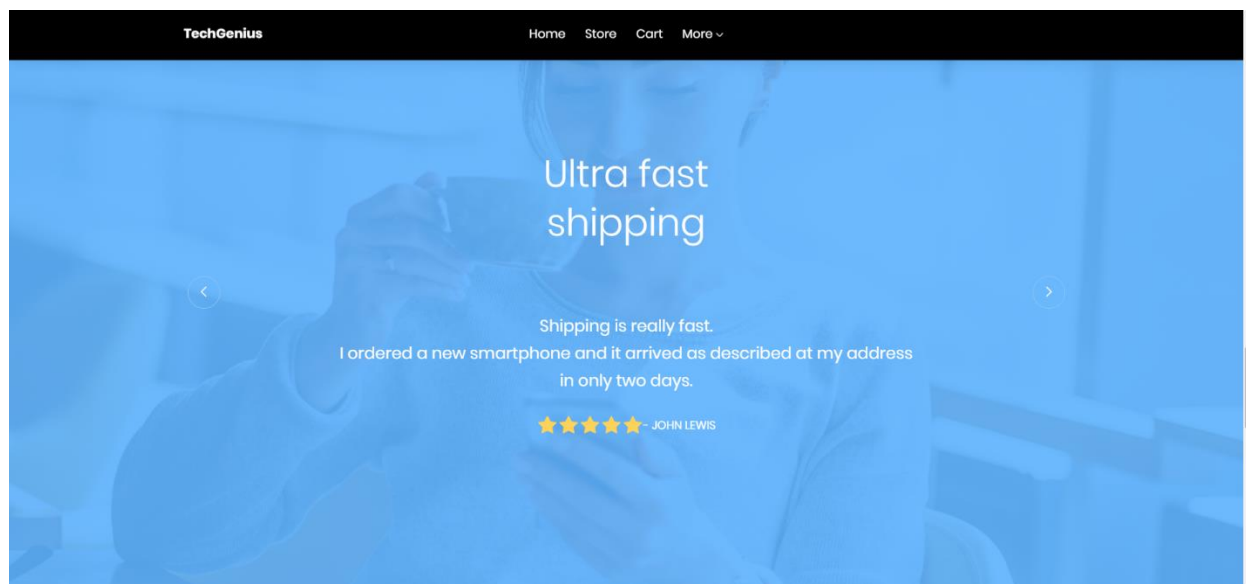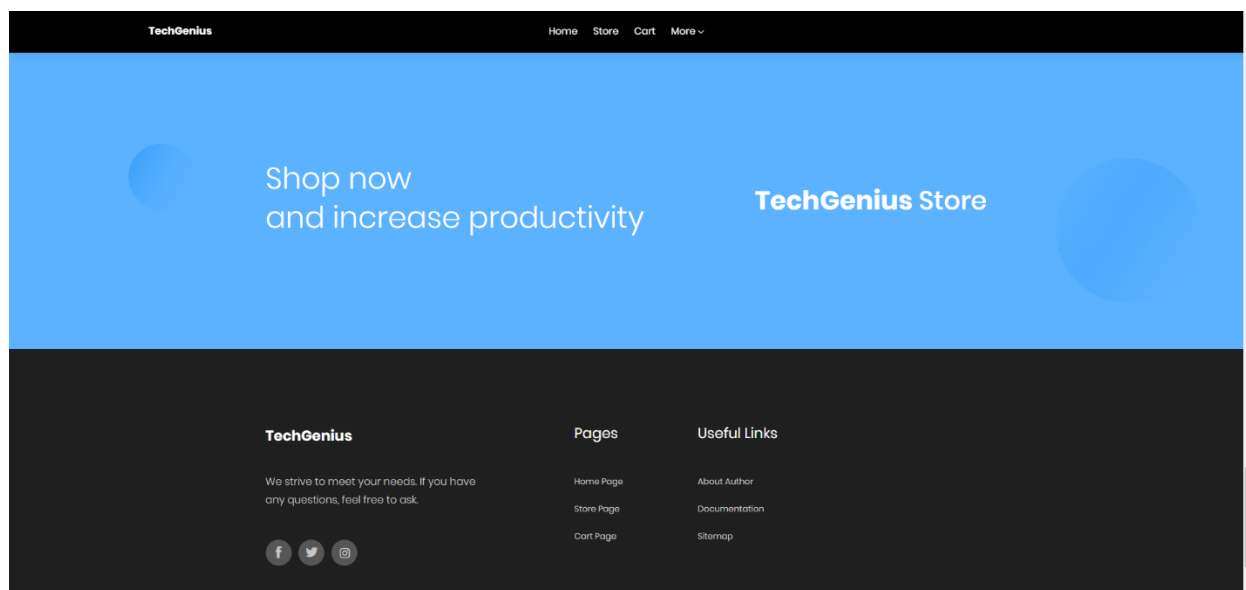Home Page Dizajn, razlikuje se od ostalih stranica po organizaciji
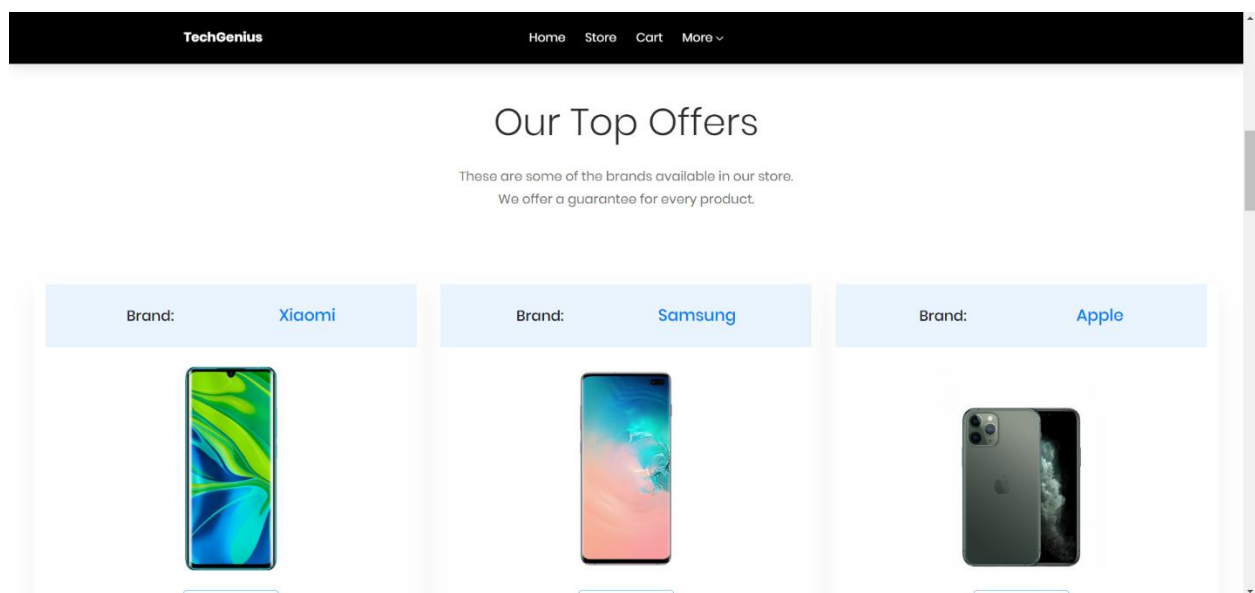
Dizajn dinamički ispisanih div-ova sa brendovima je dobijen uz template dok ispisivanje u JS nije.

Funkcionalnost i dizajn Slider-a su preuzeti iz template-a kao i Meni na vrhu strane.

Ovakva struktura se nalazi na dnu svake stranice.

4
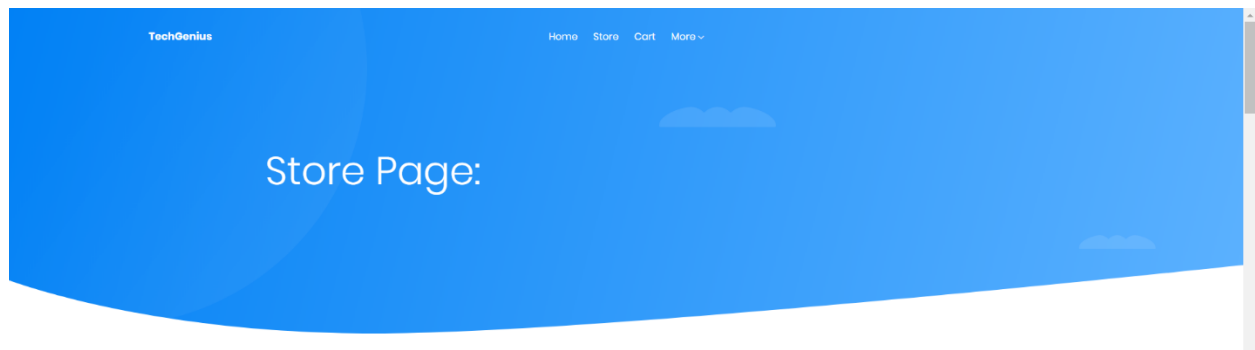
Svaka strana osim Home (index.html) počinje ovakvim dizajnom.

Organizacija:

Organizaciona šema:
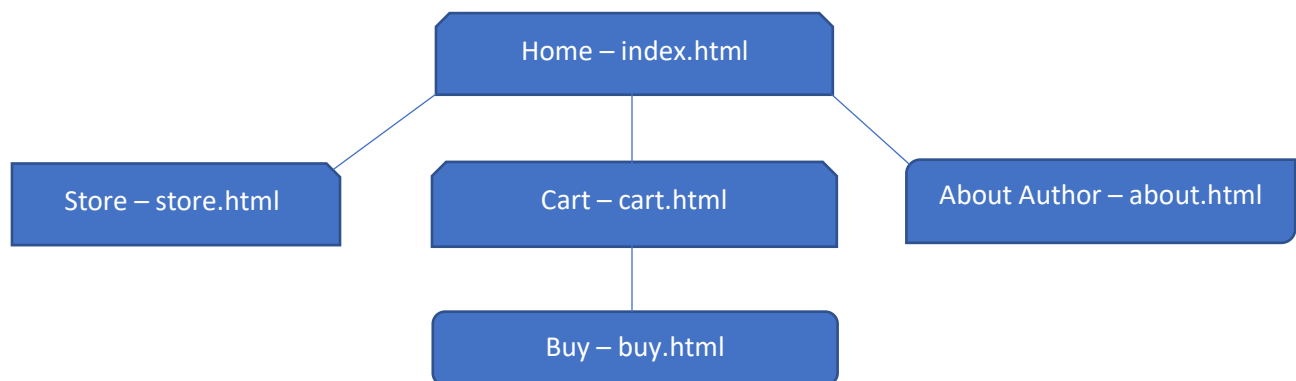
Sitemap:

```xml
<?xml version="1.0" encoding="utf-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
    <url>
        <loc>https://techgeniuswp2.netlify.com/</loc>
        <lastmod>2020-27-12</lastmod>
        <changefreq>daily</changefreq>
        <priority>1</priority>
    </url>
    <url>
        <loc>https://techgeniuswp2.netlify.com/store.html</loc>
        <lastmod>2020-27-12</lastmod>
        <changefreq>weekly</changefreq>
        <priority>0.9</priority>
    </url>
    <url>
        <loc>https://techgeniuswp2.netlify.com/cart.html</loc>
        <lastmod>2020-27-12</lastmod>
        <changefreq>monthly</changefreq>
        <priority>0.6</priority>
    </url>
    <url>
        <loc>https://techgeniuswp2.netlify.com/about.html</loc>
        <lastmod>2020-27-12</lastmod>
        <changefreq>monthly</changefreq>
        <priority>0.5</priority>
    </url>
    <url>
        <loc>https://techgeniuswp2.netlify.com/buy.html</loc>
        <lastmod>2020-27-12</lastmod>
        <changefreq>monthly</changefreq>
        <priority>0.6</priority>
    </url>
</urlset>
```

Slike stranica i opisi funkcionalnosti:

Home Page – index.html
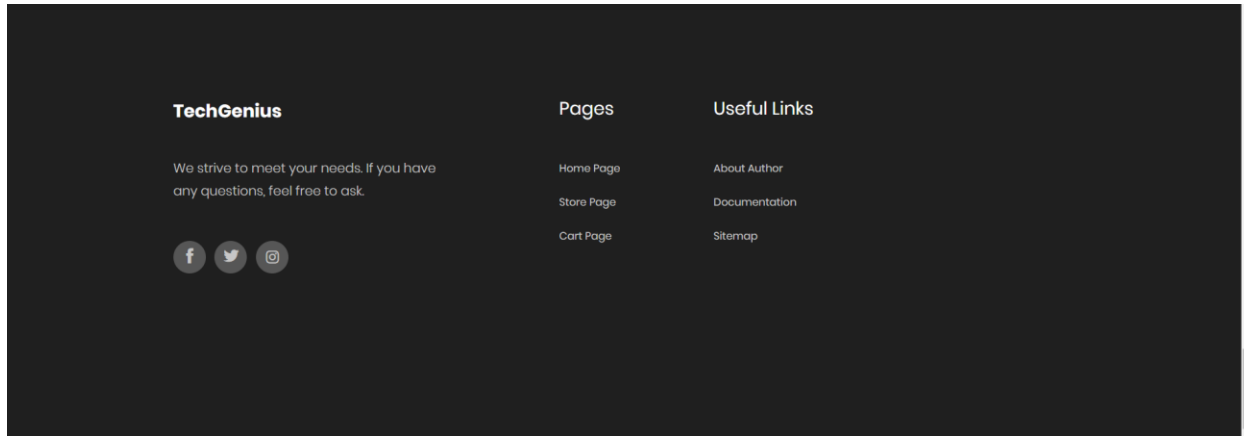
Pages i Useful Links sekcije footer-a sadrže listu dinamički ispisanih linkova dohvaćenih iz JS objekta.
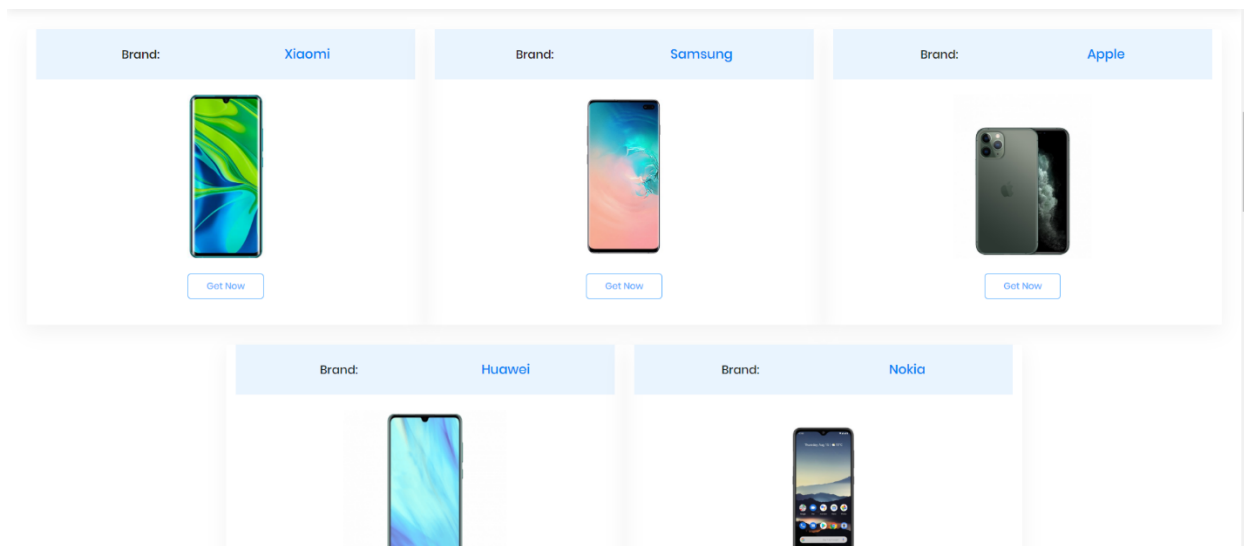
Blok za prikaz dostupnih brendova sadrži dinamički ispisan niz brendova. U JS-u se odvajaju svi brendovi iz niza objekata devices.json koji sadrži sve uređaje u poseban niz koji se prikazuje u ovom bloku.

Store Page – store.html
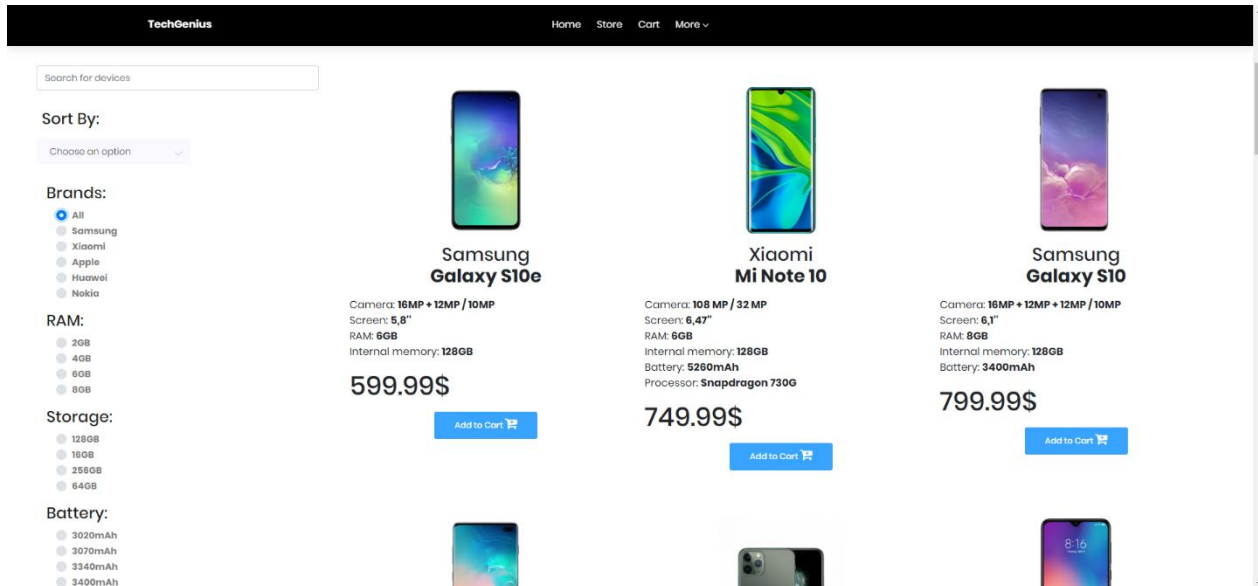
AJAX-om se poziva devices.json i ispisuju se svi proizvodi u desnoj sekciji koji imaju svoj niz karakteristika. Svaki proizvod ima dugme Add to Cart kojim se taj proizvod dodaje u korpu (cart.html) koristeći LocalStorage.

Sa leve strane se nalazi tekstualno polje Search for devices kojim se unosom teksta filtriraju proizvodi i prikazuju samo oni koji odgovaraju unetom tekstu, ispod pretrage je dropdown za sortiranje proizvoda po izabranom redosledu. Levo se nalazi i grupa selekcija za filtriranje i prikazivanje samo onih proizvoda koji odgovaraju selektovanom parametru.

Cart Page – cart.html
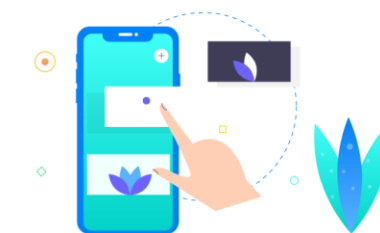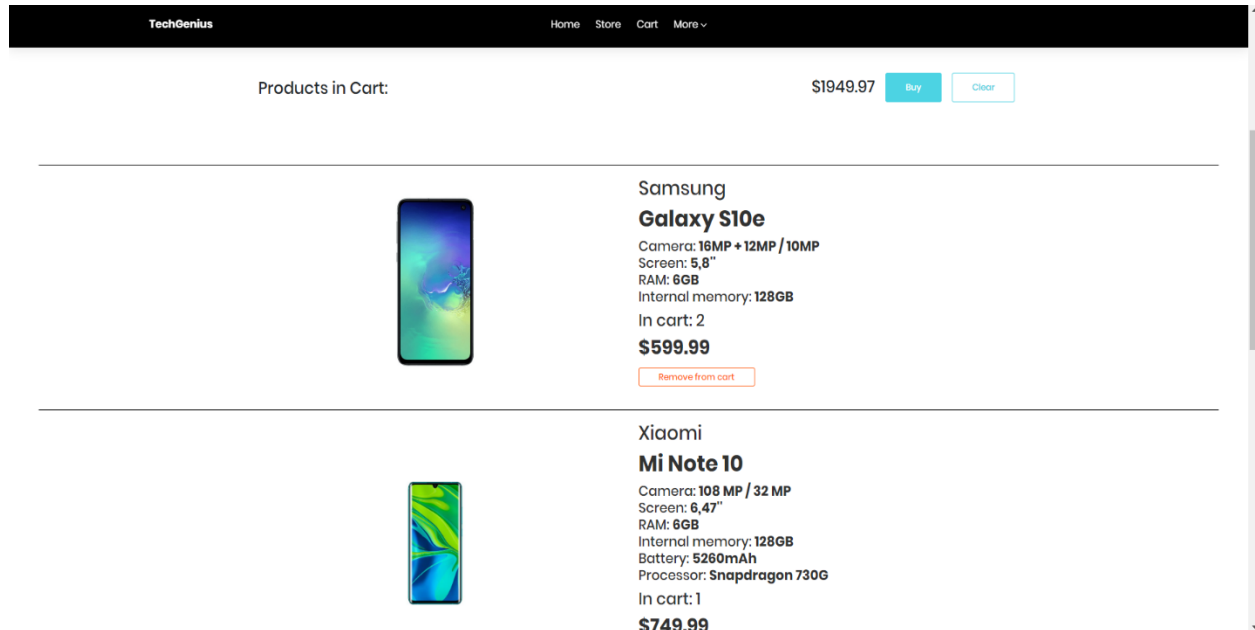
Cart stranica sadrži header sa prikazom sabrane ukupne cene svih proizvoda u korpi, dugme Buy kojim se korisniku prikaže Buy Stranica sa formom za kupovinu ukoliko u korpi ima proizvoda i dugme Clear koje uklanja sve proizvode iz korpe.

Svaki prikazani proizvod se dohvata iz Local Storage-a i ispisuje na stranici. Ukoliko korisnik ubaci više istih proizvoda u korpu količina se povećava i ispisuje se iznad cene. Na dnu se nalazi dugme koje uklanja samo izabrani proizvod.

Cart Page – cart.html

Buy stranica sadrži formu za unos podataka potrebnih za kupovinu. Regularnim izrazima se proverava svaki element forme koji prikazuje grešku i opis ukoliko korisnik ne popuni pravilno, u suprotnom prikazuje plavu borduru na elementu.

Kada je forma ispravno popunjena pritiskom na dugme Order now korisniku se prikazuje da je uspešno izvršio kupovinu i, ukupna naplaćena cena i datum dolaska paketa na adresu.
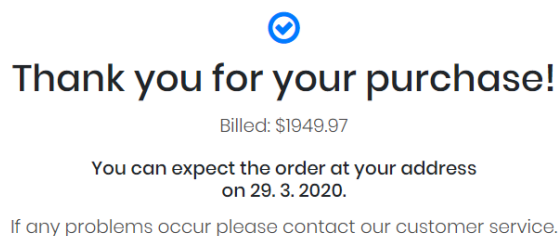
Kodovi:

JavaScript:

main.js

```javascript
//TEMPLATE JavaScript

(function ($) {…})(jQuery);

//MY JAVASCRIPT AND JQUERY

$(document).ready(function(){

    var logoText = $("#logoA");
    logoText.html(`<strong>TechGenius</strong>`);
    logoText.css("color", "white");

    //FOOTER LINKS
    const footerServicesDiv = $("#footerServices");
    const footerUsefulLinksDiv = $("#footerUsefulLinks");

    footerListPrint(footerServicesArray, footerServicesDiv);
    footerListPrint(footerUsefulLinks, footerUsefulLinksDiv);

});

function footerListPrint(object, location){
    let ispis = "";

    object.forEach(function(el){
        ispis += `<li><a href="${el.url}">${el.text}</a></li>`;
    });

    location.html(ispis);
}


//OBJECTS
```

```
footerServicesArray = [
    {
        url: "index.html",
        text: "Home Page"
    },
    {
        url: "store.html",
        text: "Store Page"
    },
    {
        url: "cart.html",
        text: "Cart Page"
    }
];

footerUsefulLinks = [
    {
        url: "about.html",
        text: "About Author"
    },
    {
        url: "",
        text: "Documentation"
    },
    {
        url: "sitemap.xml",
        text: "Sitemap"
    }
];
```

indexFunctionality.js

```javascript
window.onload = function(){
    $.ajax({
        url: "data/devices.json",
        success: function(data){
            var array = data.filter(function(device){
                if(device.rank == 1){
                    return true;
                }
            });

            let ispis = "";

            array.forEach(function(device){
                ispis += `
                    <div class="single_prising text-center wow fadeInUp col-lg-4 col-sm-
12" data-wow-duration=".7s" data-wow-delay=".8s">
                        <div class="prising_header d-flex justify-content-around col-12">
                            <h3>Brand:</h3>
                            <span>${device.brandName}</span>
                        </div>
                        <div class="col-12 d-flex align-items-center justify-content-center">
                            <img src="img/devices/${device.image.url}" alt="${device.brandName
}" class="text-center img-fluid m-4 brandImage"/>
                        </div>
                        <div class="prising_bottom">
                            <a href="store.html" class="get_now prising_btn">Get Now</a>
                        </div>
                    </div>
                `;
            });

            document.getElementById("brandsDisplay").innerHTML = ispis;
        },
        error: function(err){
            console.error(err);
        }
    });
}
```

storeFunctionality.js

```javascript
window.onload = function(){
    $.ajax({
        url: "data/devices.json",
        success: function(data){
            let devices = JSON.stringify(data);
            localStorage.setItem("devices", devices);

            let originalArray = JSON.stringify(data);
            localStorage.setItem("originalArray", originalArray);

            var allProducts = JSON.parse(localStorage.getItem("devices"));
        },
        error: function(err){
            console.log(err);
        }
    });

    document.getElementById("onCartPopUpOkButton").addEventListener("click", function(){
        event.preventDefault();

        document.getElementById("onCartPopUpBg").style.visibility = "hidden";
    });

}

$(document).ready(function(){

    displayAllProducts();
    selectProducts();

    let ramLocation = $("#filterRamOptions");
    selectByCharacteristicPrint("RAM", ramLocation);
    let storageLocation = $("#filterStorageOptions");
    selectByCharacteristicPrint("Internal memory", storageLocation);
    let batteryLocation = $("#filterBatteryOptions");
    selectByCharacteristicPrint("Battery", batteryLocation);

    $("#selectSorting").change(sortProducts);
    $("#searchBar").keyup(searchFilter);

});
```

```
//FUNCTIONS

function selectByCharacteristicPrint(filterData, location){
    let ispis = "";

    $.ajax({
        url: "data/devices.json",
        success: function(data){
            let array = [];
            let current;

            data.forEach(function(el){
                el.char.forEach(function(ch){
                    if(ch.name == filterData){
                        current = ch.value;
                        if(!array.includes(current)){
                            array.push(current);
                        }
                    }
                });
            });

            array.sort();

            for(let i = 0; i < array.length; i++){
                ispis += `
                <div class="custom-control custom-radio">
                    <input type="radio" id="${array[i]}" name="checkFilter" class="custom-
control-input ${array[i]}" data="${array[i]}"/>
                    <label class="custom-control-
label filterProducts" for="${array[i]}"><strong>${array[i]}</strong></label>
                </div>`;
            }

            location.html(ispis);

            // FILTERING FUNCTIONS
            $("#2GB").click(filterProductsByChar);
            $("#4GB").click(filterProductsByChar);
            $("#6GB").click(filterProductsByChar);
            $("#8GB").click(filterProductsByChar);

            $("#16GB").click(filterProductsByChar);
            $("#64GB").click(filterProductsByChar);
```

```javascript
            $("#128GB").click(filterProductsByChar);
            $("#256GB").click(filterProductsByChar);

            $("#3020mAh").click(filterProductsByChar);
            $("#3070mAh").click(filterProductsByChar);
            $("#3340mAh").click(filterProductsByChar);
            $("#3400mAh").click(filterProductsByChar);
            $("#3500mAh").click(filterProductsByChar);
            $("#3550mAh").click(filterProductsByChar);
            $("#4000mAh").click(filterProductsByChar);
            $("#4030mAh").click(filterProductsByChar);
            $("#4100mAh").click(filterProductsByChar);
            $("#4500mAh").click(filterProductsByChar);
            $("#5260mAh").click(filterProductsByChar);
        },
        error: function(err){
            console.error(err);
        }
    });

}

function filterProductsByChar(){
    let filterParameter = $(this).attr("data");
    let devices = JSON.parse(localStorage.getItem("originalArray"));

    devices.forEach(function(device){
        device.char.forEach(function(ch){
            if(ch.value == filterParameter){
                device.selectBy = true;
            }
        });
    });

    let filteredArray = devices.filter(function(device){
        if(device.selectBy == true){
            return device;
        }
    });

    productsDisplay(filteredArray);
    setLocalStorageArray(filteredArray);
}
```

```javascript
function selectProducts(){
    let ispis = `
    <div class="custom-control custom-radio">
        <input type="radio" id="All" name="checkFilter" class="custom-control-
input brandSelect" data="All" checked/>
        <label class="custom-control-
label filterProducts" for="All"><strong>All</strong></label>
    </div>`;

    $.ajax({
        url: "data/devices.json",
        success: function(data){
            let array = [];
            let current;

            data.forEach(function(device){
                current = device.brandName;
                if(!array.includes(current)){
                    array.push(current);
                }
            });

            for(let i = 0; i < array.length; i++){
                ispis += `
                <div class="custom-control custom-radio">
                    <input type="radio" id="${array[i]}" name="checkFilter" class="custom-
control-input brandSelect" data="${array[i]}"/>
                    <label class="custom-control-
label filterProducts" for="${array[i]}"><strong>${array[i]}</strong></label>
                </div>`;
            }

            // ispis += `</ul>`;

            $("#selectProducts").html(ispis);

            $(".brandSelect").click(filterProducts);
        },
        error: function(err){
            console.error(err);
        }
    });
}
```

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DOKUMENTACIJA

```javascript
function filterProducts(){
    let filterName = $(this).attr("data");
    let devices = JSON.parse(localStorage.getItem("originalArray"));

    if(filterName == "All"){
        displayAllProducts();
        $.ajax({
            url: "data/devices.json",
            success: function(data){
                setLocalStorageArray(data);
            },
            error: function(err){
                console.error(err);
            }
        });
    }
    else{
        let filteredArray = devices.filter(d => d.brandName == filterName);
        productsDisplay(filteredArray);
        setLocalStorageArray(filteredArray);
    }

    document.getElementById("selectProducts").selectedIndex = "choose";
}

function searchFilter(){
    let userInput = this.value;

    $.ajax({
        url: "data/devices.json",
        success: function(data){
            let returnArray = data.filter(function(el){
                if(el.model.toLowerCase().indexOf(userInput.trim().toLowerCase()) != -1){
                    return el;
                }
                if(el.brandName.toLowerCase().indexOf(userInput.trim().toLowerCase()) != -1){
                    return el;
                }
            });

            productsDisplay(returnArray);
        },
        error: function(err){
            console.error(err);
```

```javascript
        }
    })
}

function displayAllProducts(){
    $.ajax({
        url: "data/devices.json",
        success: function(data){
            productsDisplay(data);
        },
        error: function(err){
            console.error(err);
        }
    });
}

function productsDisplay(data){
    ispis = "";

    data.forEach(function(el){
        ispis += `
        <div class="product col-lg-4 col-md-6 col-sm-12 p-3 mt-3 mb-3">
        <div class="d-flex justify-content-center align-items-center" class="productImageDiv">
            <img src="img/devices/${el.image.url}" alt="${el.image.alt}" class="productImage img-fluid"/>
        </div>
        <div>
            <p class="h3 text-center mt-3 mb-3">${el.brandName}</br><strong>${el.model}</strong></p>
            <ul>`;

            el.char.forEach(function(ch){
                ispis += `<li>${ch.name}: <strong>${ch.value}</strong></li>`;
            });

            ispis +=
            `</ul>
            <p class="h1 mt-3">${el.price}$</p>
            <div class="col-12 mt-3 mb-2 text-center">
                <a href="#" class="genric-btn info radius addToCartButton" data-id=${el.id}>
                    Add to Cart <span class="h5"><i class="fa fa-cart-plus" aria-hidden="true"></i></span>
                </a>
            </div>
```

```
        </div>
    </div>`;
    });


    document.getElementById("productsDisplay").innerHTML = ispis;


    $(".addToCartButton").click(addDeviceToCart);
}

function addDeviceToCart(){
    event.preventDefault();
    document.getElementById("onCartPopUpBg").style.visibility = "visible";

    let deviceId = $(this).data("id");
    console.log(deviceId);

    let devicesInCart = JSON.parse(localStorage.getItem("cart"));

    if(devicesInCart){
        if(deviceAlreadyIn()){
            let devices = JSON.parse(localStorage.getItem("cart"));

            for(let device in devices){
                if(devices[device].id == deviceId){
                    devices[device].quantity++;
                }
            }

            localStorage.setItem("cart", JSON.stringify(devices));
        }
        else{
            let devices = JSON.parse(localStorage.getItem("cart"));

            devices.push({
                id: deviceId,
                quantity: 1
            });

            localStorage.setItem("cart", JSON.stringify(devices));
        }
    }
    else{
        let devices = [];
```

```javascript
        devices[0] = {
            id: deviceId,
            quantity: 1
        };

        localStorage.setItem("cart", JSON.stringify(devices))
    }

    function deviceAlreadyIn(){
        return devicesInCart.filter(d => d.id == deviceId).length;
    }
}

function sortProducts(){
    let vrednost = this.value;
    let devices = JSON.parse(localStorage.getItem("devices"));

    if(vrednost == "choose"){
        productsDisplay(devices);
    }
    else if(vrednost == "newest"){
        devices.sort(function(a, b){
            let dateA = new Date(a.date);
            let dateB = new Date(b.date);

            return Date.UTC(dateB.getFullYear(), dateB.getMonth(), dateB.getDate()) - Date.UTC
(dateA.getFullYear(), dateA.getMonth(), dateA.getDate());
        });
    }
    else if(vrednost == "oldest"){
        devices.sort(function(a, b){
            let dateA = new Date(a.date);
            let dateB = new Date(b.date);

            return Date.UTC(dateA.getFullYear(), dateA.getMonth(), dateA.getDate()) - Date.UTC
(dateB.getFullYear(), dateB.getMonth(), dateB.getDate());
        });
    }
    else if(vrednost == "lowToHigh"){
        devices.sort(function(a, b){
            if(a.price < b.price){
                return -1;
            }
            else if(a.price > b.price){
```

```javascript
                return 1;
            }
            else{
                return 0;
            }
        });
    }
    else if(vrednost == "highToLow"){
        devices.sort(function(a, b){
            if(a.price < b.price){
                return 1;
            }
            else if(a.price > b.price){
                return -1;
            }
            else{
                return 0;
            }
        });
    }

    setLocalStorageArray(devices);
    let array = getLocalStorageArray();
    productsDisplay(array);
}

function setLocalStorageArray(data){
    let toString = JSON.stringify(data);
    localStorage.setItem("devices", toString);
}
function getLocalStorageArray(){
    return JSON.parse(localStorage.getItem("devices"));
}
```

cartFunctionality.js

```javascript
var cart = JSON.parse(localStorage.getItem("cart"));

window.onload = function(){
    document.getElementById("buyButton").addEventListener("click", function(){
        event.preventDefault();

        if(!cart || !cart.length){
            document.getElementById("cannotBuy").style.display = "block";
        }
        else{
            document.getElementById("cannotBuy").style.display = "none";

            localStorage.removeItem("cart");
            displayCartIsEmpty();

            window.open("buy.html");
        }
    });

    document.getElementById("clearCart").addEventListener("click", function(){
        event.preventDefault();

        localStorage.removeItem("cart");
        displayCartIsEmpty();
    });

    if(!cart || !cart.length){
        displayCartIsEmpty();
    }
    else{
        displayFullCart();
    }

}

function removeFromCart(id){
    let devices = cart;
    let returnArray = devices.filter(device => device.id != id);

    localStorage.setItem("cart", JSON.stringify(returnArray));

    if(cart == []){
```

```javascript
            localStorage.removeItem("cart");
    }

    event.preventDefault();
    location.reload();
    displayFullCart();
}

function displayFullCart(){
    let devices = cart;
    let toShow = [];

    $.ajax({
        url: "data/devices.json",
        success: function(data){
            toShow = data.filter(device => {
                for(let deviceInCart of devices){
                    if(device.id == deviceInCart.id){
                        device.quantity = deviceInCart.quantity;
                        return true;
                    }
                }
                return false;
            });

            displayDevicesInCart(toShow);
        },
        error: function(err){
            console.error(err);
        }
    });
}

function displayCartIsEmpty(){
    let ispis = "";

    ispis += `
        <p class="text-center h2">Your cart is empty,</p>
        <p class="text-
center h3">visit the <a href="store.html" alt="Store" class="underline">STORE</a> page to fill
 it up.</p>
    `;

    ispis += `
```

```
        <div class="col-12 mt-5">
            <div class="about_draw wow fadeInUp text-center" data-wow-duration=".7s" data-wow-
delay=".5s">
                <img src="img/ilstrator_img/draw.png" alt="Cart" class="img-fluid">
            </div>
        </div>
    `;

    document.getElementById("cartProducts").innerHTML = ispis;
    document.getElementById("totalPrice").innerHTML = "0.00";
}

function displayDevicesInCart(devices){
    let display = "";
    let price = 0;

    devices.forEach(function(device){
        display += `
            <div class="cartProduct col-12 d-flex align-items-center justify-content-
center flex-wrap pb-4 mt-2">
                <div class="cartProductImage text-center col-lg-4 col-md-4 col-sm-12 mb-2 mt-
4 d-flex justify-content-center align-items-center">
                    <img src="img/devices/${device.image.url}" alt="${device.image.alt}" class
="img-fluid cartProductsImg"/>
                </div>
                <div class="cartProductText col-lg-4 col-md-4 col-sm-12 mt-3">
                    <p class="h3">${device.brandName}</p>
                    <p class="h2"><strong>${device.model}</strong></p>
                    <ul class="h5">`;

        device.char.forEach(function(ch){
            display += `<li>${ch.name}: <strong>${ch.value}</strong></li>`;
        });

        display += `</ul>
                    <p class="h4">In cart: <span class="numberInCart">${device.quantity}</span
></p>
                    <p class="h3"><strong>$${device.price}</strong></p>
                    <a href="#" class="genric-btn primary-border small mt-
1 removeItemFromCartBtn" onClick="removeFromCart(${device.id})">Remove from cart</a>
                </div>
            </div>
        `;
```

25

```javascript
        timesInCart = device.quantity;

        price += device.price * timesInCart;
        document.getElementById("cartProducts").innerHTML = display;
    });

    localStorage.setItem("price", JSON.stringify(price));
    document.getElementById("totalPrice").innerHTML = price.toFixed(2);
}
```

buyFunctionality.js

```javascript
window.onload = function(){

    //SHOW PRICE
    var price = JSON.parse(localStorage.getItem("price"));
    document.getElementById("price").innerHTML = price.toFixed(2);

    //HIDE
    document.getElementById("emailHelpRed").style.display = "none";
    document.getElementById("nameHelpRed").style.display = "none";
    document.getElementById("addressHelpRed").style.display = "none";
    document.getElementById("cityHelpRed").style.display = "none";
    document.getElementById("stateHelpRed").style.display = "none";
    document.getElementById("zipHelpRed").style.display = "none";
    document.getElementById("visaPaymentRed").style.display = "none";
    document.getElementById("paypalHelpRed").style.display = "none";
    document.getElementById("underButtonPopup").style.display = "none";

    //RADIO BUTTONS - PAYMENT METHOD SWITCH
    document.getElementById("visaPaymentWin").style.display = "none";
    document.getElementById("paypalPaymentWin").style.display = "none";

    document.addEventListener("click", paypal);
    document.addEventListener("click", visa);

    function paypal(){
        if(document.getElementById("radio1").checked == true){
            document.getElementById("paypalPaymentWin").style.display = "block";
            document.getElementById("visaPaymentWin").style.display = "none";
        }
    }
    function visa(){
        if(document.getElementById("radio2").checked == true){
            document.getElementById("visaPaymentWin").style.display = "block";
            document.getElementById("paypalPaymentWin").style.display = "none";
        }
    }

    //VALIDATIONS
    let switchName = 0;
    let switchEmail = 1;
    let switchAddress = 2;
    let switchCity = 3;
```

```javascript
let switchState = 4;
let switchZip = 5;
let switchPaypal = 6;
let switchVisa = 7;

var switchArray = [];

let regexName = /^[a-zA-Z]+ [a-zA-Z]+$/;
let elementAddressName = document.getElementById("nameLastname");
let problemName = document.getElementById("nameHelpRed");
document.getElementById("nameLastname").addEventListener("blur", function(){
    regexCheck(regexName, elementAddressName, problemName, switchName);
});

let regexEmail = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
let elementAddressEmail = document.getElementById("email");
let problemEmail = document.getElementById("emailHelpRed");
document.getElementById("email").addEventListener("blur", function(){
    regexCheck(regexEmail, elementAddressEmail, problemEmail, switchEmail);
});

let regexAddress = /^[A-Z][a-z]{1,50}\s([A-Z][a-z]{1,50}\s)*[0-9]{1,4}$/;
let elementAddressAddress = document.getElementById("address");
let problemAddress = document.getElementById("addressHelpRed");
document.getElementById("address").addEventListener("blur", function(){
    regexCheck(regexAddress, elementAddressAddress, problemAddress, switchAddress);
});

let regexCity = /^[a-zA-Z]+(?:[\s-][a-zA-Z]+)*$/;
let elementAddressCity = document.getElementById("city");
let problemCity = document.getElementById("cityHelpRed");
document.getElementById("city").addEventListener("blur", function(){
    regexCheck(regexCity, elementAddressCity, problemCity, switchCity);
});

let elementAddressState = document.getElementById("state");
let problemState = document.getElementById("stateHelpRed");
document.getElementById("state").addEventListener("blur", function(){
    regexCheck(regexCity, elementAddressState, problemState, switchState);
});

let regexZip = /^[0-9]{5}$/;
let elementAddressZip = document.getElementById("zip");
let problemZip = document.getElementById("zipHelpRed");
```

```javascript
        document.getElementById("zip").addEventListener("blur", function(){
            regexCheck(regexZip, elementAddressZip, problemZip, switchZip);
        });


        let elementAddressPaypal = document.getElementById("paypalPayment");
        let problemPaypal = document.getElementById("paypalHelpRed");
        document.getElementById("paypalPayment").addEventListener("blur", function(){
            regexCheck(regexEmail, elementAddressPaypal, problemPaypal, switchPaypal);
        });


        let regexVisa = /^[0-9]{16}$/;
        let elementAddressVisa = document.getElementById("visaPayment");
        let problemVisa = document.getElementById("visaPaymentRed");
        document.getElementById("visaPayment").addEventListener("blur", function(){
            regexCheck(regexVisa, elementAddressVisa, problemVisa, switchVisa);
        });


        function regexCheck(regex, address, problem, switchNum){
            addressValue = address.value;

            if(regex.test(addressValue)){
                address.style.border = "1px solid blue";
                problem.style.display = "none";
                switchArray[switchNum] = true;
            }
            else{
                address.style.border = "1px solid red";
                problem.style.display = "block";
                switchArray[switchNum] = false;
            }
        }


        document.getElementById("btnSubmit").addEventListener("click", function(){
            event.preventDefault();

            if(switchArray[0] == true && switchArray[1] == true && switchArray[2] == true && switchArray[3] == true && switchArray[4] == true && switchArray[5] == true){
                if(switchArray[6] == true || switchArray[7] == true){
                    let date = new Date();
                    const addDays = 2;
                    date.setDate(date.getDate() + addDays);
                    let day = date.getDate();
                    let month = date.getMonth() + 1;
                    let year = date.getFullYear();
```

```
            document.getElementById("formDisplay").innerHTML = `
            <div class="text-center m-5 pt-5 pb-5" id="purchaseFinished">
                <p class="h2">
                    <i class="fa fa-check-circle-o h1 text-primary" aria-
hidden="true"></i></br>
                    Thank you for your purchase!
                </p>
                <p class="h7">Billed: $${JSON.parse(localStorage.getItem("price")).toFixed
(2)}</p>
                <p class="h6">
                    You can expect the order at your address</br>
                    on ${day + ". " + month + ". " + year}.
                </p>
                <p class="h7">If any problems occur please contact our customer service.</
p>
            </div>`;

            location.href = "#pageNameBig";
        }
        else{
            document.getElementById("underButtonPopup").style.display = "block";
        }
    }
    else{
        document.getElementById("underButtonPopup").style.display = "block";
    }
});

}
```

HTML:

index.html

```html
<!doctype html>
<html class="no-js" lang="zxx">

<head>
    <meta charset="utf-8">
    <meta http-equiv="x-ua-compatible" content="ie=edge">
    <title>TechGenius</title>

    <meta name="description" content="Buy newest devices in TechGenius! Online mobile phone shop."/>
    <meta name="keywords" content="Device, device, TechGenius, Shop, shop, Brand"/>
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="shortcut icon" href="img/icon.ico"/>

    <!-- <link rel="manifest" href="site.webmanifest"> -->
    <!-- Place favicon.ico in the root directory -->

    <!-- CSS here -->
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/owl.carousel.min.css">
    <link rel="stylesheet" href="css/magnific-popup.css">
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/themify-icons.css">
    <link rel="stylesheet" href="css/nice-select.css">
    <link rel="stylesheet" href="css/flaticon.css">
    <link rel="stylesheet" href="css/gijgo.css">
    <link rel="stylesheet" href="css/animate.min.css">
    <link rel="stylesheet" href="css/slick.css">
    <link rel="stylesheet" href="css/slicknav.css">
    <link rel="stylesheet" href="css/style.css">
    <link rel="stylesheet" href="css/myStyle.css">
    <!-- <link rel="stylesheet" href="css/responsive.css"> -->
</head>

<body>
```

```html
<!--[if lte IE 9]>
        <p class="browserupgrade">You are using an <strong>outdated</strong> browser. Please <a href="
https://browsehappy.com/">upgrade your browser</a> to improve your experience and security.</p>
    <![endif]-->


<!-- header-start -->
<header>
    <div class="header-area ">
        <div id="sticky-header" class="main-header-area">
            <div class="container-fluid">
                <div class="row align-items-center">
                    <div class="col-xl-3 col-lg-2">
                        <div class="logo">
                            <a href="index.html" id="logoA">
                                <!-- LOGO TEXT -->
                            </a>
                        </div>
                    </div>
                    <div class="col-xl-6 col-lg-7">
                        <div class="main-menu  d-none d-lg-block">
                            <nav>
                                <ul id="navigation">
                                    <li><a class="active" href="index.html">home</a></li>
                                    <li><a href="store.html">Store</a></li>
                                    <li><a href="cart.html">Cart</a></li>
                                    <li><a href="#">More <i class="ti-angle-down"></i></a>
                                        <ul class="submenu">
                                            <li><a href="about.html">About Author</a></li>
                                            <li><a href="#">Documentation</a></li>
                                            <li><a href="sitemap.xml">Sitemap</a></li>
                                        </ul>
                                    </li>
                                </ul>
                            </nav>
                        </div>
                    </div>
                    <div class="col-12">
                        <div class="mobile_menu d-block d-lg-none"></div>
                    </div>
                </div>

            </div>
        </div>
    </div>
```

```html
    </header>
    <!-- header-end -->


    <!-- slider_area_start -->
    <div class="slider_area">
        <div class="single_slider  d-flex align-items-center slider_bg_1">
            <div class="container">
                <div class="row align-items-center">
                    <div class="col-xl-7 col-md-6">
                        <div class="slider_text ">
                            <h3 class="wow fadeInDown" data-wow-duration="1s" data-wow-
delay=".1s" >Enhance Your Living Experience:<br>
                                Shop With <strong>TechGenius</strong></h3>
                            <p class="wow fadeInLeft" data-wow-duration="1s" data-wow-
delay=".1s">Buy newest devices!</p>
                            <div class="video_service_btn wow fadeInLeft" data-wow-duration="1s" data-wow-
delay=".1s">

                                <a href="store.html" class="boxed-btn3">Shop Now!</a>
                            </div>
                        </div>
                    </div>
                    <div class="col-xl-5 col-md-6">
                        <div class="phone_thumb wow fadeInDown" data-wow-duration="1.1s" data-wow-
delay=".2s">

                            <img src="img/ilstrator/phone.png" alt="Phone">
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!-- slider_area_end -->


    <!-- prising_area  -->
    <div class="prising_area col-12">
        <div class="container col-12">
            <div class="row">
                <div class="col-xl-12">
                    <div class="section_title text-center wow fadeInUp" data-wow-duration=".5s" data-wow-
delay=".5s">

                        <h3>Our Top Offers</h3>
                        <p>These are some of the brands available in our store.</p>
                        <p>We offer a guarantee for every product.</p>
                    </div>
```

```html
                </div>
            </div>
            <div class="d-flex flex-wrap justify-content-center" id="brandsDisplay">


                <!-- BRANDS DISPLAY AREA -->


            </div>
        </div>
    </div>
    <!--/ prising_area  -->


    <!-- service_area  -->
    <div class="service_area pt-1">
        <div class="container">
            <div class="row">
                <div class="col-xl-12">
                    <div class="section_title text-center  wow fadeInUp" data-wow-duration=".5s" data-wow-
delay=".3s">
                        <h3>Save your time and money<br>
                            shopping in TechGenius</h3>
                    </div>
                </div>
            </div>
            <div class="row">
                <div class="col-lg-4 col-md-4">
                    <div class="single_service text-center wow fadeInUp" data-wow-duration=".6s" data-wow-
delay=".4s">

                        <div class="thumb">
                            <img src="img/icon/2.svg" alt="">
                        </div>
                        <h3>Fast home delivery<br>
                            with a few clicks</h3>
                    </div>
                </div>
                <div class="col-lg-4 col-md-4">
                    <div class="single_service text-center wow fadeInUp" data-wow-duration=".7s" data-
wow-delay=".5s">

                        <div class="thumb">
                            <img src="img/icon/1.svg" alt="">
                        </div>
                        <h3>Donate to charity <br>
                            with every purchase</h3>
                    </div>
                </div>
```

```html
            <div class="col-lg-4 col-md-4">

                    <div class="single_service text-center wow fadeInUp " data-wow-
duration=".8s" data-wow-delay=".6s">
                            <div class="thumb">
                                    <img src="img/icon/3.svg" alt="">
                            </div>
                            <h3>Non-stop customer </br>
                                    service 24/7</h3>
                    </div>
            </div>
        </div>
    </div>
</div>
<!--/ service_area  -->


<!-- testmonial_area  -->
<div class="testmonial_area">
    <div class="container">
        <div class="col-xl-12">
            <div class="testmonial_active owl-carousel" id="userRatings">
                <div class="single_testmonial text-center wow fadeInUp" data-wow-duration=".5s" data-
wow-delay=".3s">
                    <div class="section_title">
                        <h3>Ultra fast <br>
                                shipping</h3>
                    </div>
                    <p class="">
                            Shipping is really fast. <br>
                            I ordered a new smartphone and it arrived as described at my address <br>
                            in only two days.
                    </p>
                    <div class="rating_author">
                        <i class="fa fa-star"></i>
                        <i class="fa fa-star"></i>
                        <i class="fa fa-star"></i>
                        <i class="fa fa-star"></i>
                        <i class="fa fa-star"></i>
                        <span>
                                - John Lewis
                        </span>
                    </div>
                </div>
```

```html
                    <div class="single_testmonial text-center wow fadeInUp" data-wow-duration=".5s" data-
wow-delay=".3s">
                        <div class="section_title">
                            <h3>Great customer <br>service</h3>
                        </div>
                        <p>
                            The phone I ordered was damaged in the <br>proccess of shipping and TechGenius
 <br>resolved the problem in just a few days.
                        </p>
                        <div class="rating_author">
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <span>
                                    - Margaret Williams
                            </span>
                        </div>
                    </div>
                    <div class="single_testmonial text-center wow fadeInUp" data-wow-duration=".5s" data-
wow-delay=".3s">
                        <div class="section_title">
                            <h3>I love that TechGenius <br>donates to charity</h3>
                        </div>
                        <p>
                            One of the main reasons <br>I buy here is because a percentage of the product
<br>price is donated.
                        </p>
                        <div class="rating_author">
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <i class="fa fa-star"></i>
                            <span>
                                    - Marcus Craig
                            </span>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
```

```html
    <!--/ testmonial_area  -->


    <!-- service_area_2  -->
    <div class="service_area_2">
        <div class="container">
            <div class="service_content_wrap">
                <div class="row">
                    <div class="col-lg-4 col-md-4">
                        <div class="single_service  wow fadeInUp" data-wow-duration=".5s" data-wow-
delay=".3s">
                            <span>01</span>
                            <h3>Browse our store</h3>
                            <p>We offer products from all major tech producers, like Apple, Samsung, Huawe
i, Xiaomi and others...</p>
                        </div>
                    </div>
                    <div class="col-lg-4 col-md-4">
                        <div class="single_service  wow fadeInUp" data-wow-duration=".6s" data-wow-
delay=".4s">
                            <span>02</span>
                            <h3>Order online</h3>
                            <p>Get your orders in front of your door in just two days with our express del
ivery. Free of charge.</p>
                        </div>
                    </div>
                    <div class="col-lg-4 col-md-4  wow fadeInUp" data-wow-duration=".7s" data-wow-
delay=".5s">
                        <div class="single_service">
                            <span>03</span>
                            <h3>Enjoy the product</h3>
                            <p>We believe that good technology makes our lives better, so don't wait, purc
hase your piece of tech now!</p>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!--/ service_area_2  -->


    <!-- productivity_area  -->
    <div class="productivity_area">
        <div class="container">
            <div class="row align-items-center">
```

```html
            <div class="col-xl-7 col-md-12 col-lg-6">
                <h3 class="wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">Shop now <br>
                    and increase productivity</h3>
            </div>
            <div class="col-xl-5 col-md-12 col-lg-6">
                <div class="app_download wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">
                    <a href="" class="text-white h1">
                        <strong>TechGenius</strong> Store
                    </a>
                </div>
            </div>
        </div>
    </div>
</div>
<!--/ productivity_area  -->

<!-- footer start -->
<footer class="footer">
    <div class="footer_top">
        <div class="container">
            <div class="row">
                <div class="col-xl-4 col-md-6 col-lg-4">
                    <div class="footer_widget">
                        <div class="footer_logo">
                            <a href="index.html">
                                <strong class="text-white">TechGenius</strong>
                            </a>
                        </div>
                        <p>
                            We strive to meet your needs. If you have any questions, feel free to ask.
                        </p>
                        <div class="socail_links">
                            <ul>
                                <li>
                                    <a href="https://www.facebook.com/">
                                        <i class="ti-facebook"></i>
                                    </a>
                                </li>
                                <li>
                                    <a href="https://twitter.com/">
                                        <i class="ti-twitter-alt"></i>
                                    </a>
                                </li>
                                <li>
```

```html
                                        <a href="https://www.instagram.com/">
                                            <i class="fa fa-instagram"></i>
                                        </a>
                                    </li>
                                </ul>
                            </div>

                        </div>
                    </div>
                    <div class="col-xl-2 offset-xl-1 col-md-6 col-lg-3">
                        <div class="footer_widget">
                            <h3 class="footer_title">
                                    Pages
                            </h3>
                            <ul id="footerServices">

                            </ul>

                        </div>
                    </div>
                    <div class="col-xl-2 col-md-6 col-lg-2">
                        <div class="footer_widget">
                            <h3 class="footer_title">
                                    Useful Links
                            </h3>
                            <ul id="footerUsefulLinks">

                            </ul>
                        </div>
                    </div>
                </div>
            </div>
        </div>
</footer>
<!--/ footer end  -->

<!-- JS here -->
<script src="js/vendor/modernizr-3.5.0.min.js"></script>
<script src="js/vendor/jquery-1.12.4.min.js"></script>
<script src="js/popper.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/owl.carousel.min.js"></script>
<script src="js/isotope.pkgd.min.js"></script>
<script src="js/ajax-form.js"></script>
```

```html
    <script src="js/waypoints.min.js"></script>
    <script src="js/jquery.counterup.min.js"></script>
    <script src="js/imagesloaded.pkgd.min.js"></script>
    <script src="js/scrollIt.js"></script>
    <script src="js/jquery.scrollUp.min.js"></script>
    <script src="js/wow.min.js"></script>
    <script src="js/nice-select.min.js"></script>
    <script src="js/jquery.slicknav.min.js"></script>
    <script src="js/jquery.magnific-popup.min.js"></script>
    <script src="js/plugins.js"></script>
    <script src="js/gijgo.min.js"></script>

    <!--contact js-->
    <script src="js/contact.js"></script>
    <script src="js/jquery.ajaxchimp.min.js"></script>
    <script src="js/jquery.form.js"></script>
    <script src="js/jquery.validate.min.js"></script>
    <script src="js/mail-script.js"></script>

    <script src="js/main.js"></script>
    <script src="js/indexFunctionality.js"></script>
</body>

</html>
```

store.html

```html
<!doctype html>
<html class="no-js" lang="zxx">

<head>
    <meta charset="utf-8">
    <meta http-equiv="x-ua-compatible" content="ie=edge">
    <title>TechGenius Store</title>

    <meta name="description" content="This is the store page of TechGenius online shop. We wish you happy
shopping!"/>
    <meta name="keywords" content="Device, device, TechGenius, Shop, shop, Brand, Store, Samsung, Xiaomi,
Huawei, Cart"/>
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="shortcut icon" href="img/icon.ico"/>

    <!-- <link rel="manifest" href="site.webmanifest"> -->
    <!-- Place favicon.ico in the root directory -->

    <!-- CSS here -->
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/owl.carousel.min.css">
    <link rel="stylesheet" href="css/magnific-popup.css">
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/themify-icons.css">
    <link rel="stylesheet" href="css/nice-select.css">
    <link rel="stylesheet" href="css/flaticon.css">
    <link rel="stylesheet" href="css/gijgo.css">
    <link rel="stylesheet" href="css/animate.min.css">
    <link rel="stylesheet" href="css/slick.css">
    <link rel="stylesheet" href="css/slicknav.css">
    <link rel="stylesheet" href="css/style.css">
    <link rel="stylesheet" href="css/myStyle.css">

    <script src="https://code.jquery.com/jquery-3.4.1.min.js" integrity="sha256-
CSXorXvZcTkaix6Yvo6HppcZGetbYMGWSFlBw8HfCJo=" crossorigin="anonymous"></script>
    <!-- <link rel="stylesheet" href="css/responsive.css"> -->
</head>

<body>
```

```
<!--[if lte IE 9]>
        <p class="browserupgrade">You are using an <strong>outdated</strong> browser. Please <a href="
https://browsehappy.com/">upgrade your browser</a> to improve your experience and security.</p>
    <![endif]-->


<!-- ADD TO CART POPUP-->
<div id="onCartPopUpBg" class="d-flex align-items-center justify-content-center">
    <div id="onCartPopUp" class="p-5">
        <div class="onCartPopUpInner d-flex align-items-center justify-content-center">
            <p class="h3">Item Added to Cart</p>
        </div>
        <div class="onCartPopUpInner d-flex justify-content-center align-items-center">
            <a href="#" class="genric-btn info radius m-2" id="onCartPopUpOkButton">
                Ok
            </a>
            <a href="cart.html" class="genric-btn info radius m-2">
                Cart <span class="h5"><i class="fa fa-cart-plus" aria-hidden="true"></i></span>
            </a>
        </div>
    </div>
</div>
<!-- /ADD TO CART POPUP-->

<!-- header-start -->
<header>
<div class="header-area ">
    <div id="sticky-header" class="main-header-area">
        <div class="container-fluid">
            <div class="row align-items-center">
                <div class="col-xl-3 col-lg-2">
                    <div class="logo">
                        <a href="index.html" id="logoA">
                            <!-- LOGO TEXT -->
                        </a>
                    </div>
                </div>
                <div class="col-xl-6 col-lg-7">
                    <div class="main-menu  d-none d-lg-block">
                        <nav>
                            <ul id="navigation">
                                <li><a class="active" href="index.html">home</a></li>
                                <li><a href="store.html">Store</a></li>
                                <li><a href="cart.html">Cart</a></li>
```

```html
                                    <li><a href="#">More <i class="ti-angle-down"></i></a>
                                        <ul class="submenu">
                                            <li><a href="about.html">About Author</a></li>
                                            <li><a href="#">Documentation</a></li>
                                            <li><a href="sitemap.xml">Sitemap</a></li>
                                        </ul>
                                    </li>
                                </ul>
                            </nav>
                        </div>
                    </div>
                    <div class="col-12">
                        <div class="mobile_menu d-block d-lg-none"></div>
                    </div>
                </div>

            </div>
        </div>
</div>
</header>
<!-- header-end -->


<!-- bradcam_area  -->
<div class="bradcam_area bradcam_bg_1">
    <div class="container">
        <div class="row">
            <div class="col-xl-12">
                <div class="bradcam_text">
                    <h3>Store Page:</h3>
                </div>
            </div>
        </div>
    </div>
</div>
<!-- /bradcam_area  -->


<!-- STORE DISPLAY AREA -->
<div class="col-12 mt-5 mb-5 d-flex align-items-center">
    <div class="col-lg-12 col-md-12 col-sm-12 d-flex flex-wrap">
        <div class="col-lg-3 col-md-3 col-sm-12">
            <div class="">
                <div class="form-row">
                    <div class="col">
```

```html
                    <input type="text" class="form-
control" placeholder="Search for devices" id="searchBar"/>
                </div>
            </div>
        </div>
        <div class="single-element-widget mt-30 mb-3">
            <h3 class="mb-3 pl-2">Sort By:</h3>
            <div class="default-select" id="default-select">
                <select id="selectSorting">
                    <option value="choose">Choose an option</option>
                    <option value="newest">Newest</option>
                    <option value="oldest">Oldest</option>
                    <option value="lowToHigh">Price - Low to High</option>
                    <option value="highToLow">Price - High to Low</option>
                </select>
            </div>
        </div>
        <div class="single-element-widget mt-30 col-lg-6 col-sm-12">
            <h3 class="mb-2">Brands:</h3>
            <div class="col-12" id="selectProducts">
                <!-- SELECT PRODUCTS AREA -->
            </div>
            <h3 class="mb-2 mt-3">RAM:</h3>
            <div class="col-12" id="filterRamOptions">
                <!-- SELECT RAM AREA -->
            </div>
            <h3 class="mb-2 mt-3">Storage:</h3>
            <div class="col-12" id="filterStorageOptions">
                <!-- SELECT STORAGE AREA -->
            </div>
            <h3 class="mb-2 mt-3">Battery:</h3>
            <div class="col-12" id="filterBatteryOptions">
                <!-- SELECT BATTERY AREA -->
            </div>
        </div>
    </div>

    <div class="col-lg-9 col-md-9 col-sm-12 d-flex flex-wrap" id="productsDisplay">

        <!-- PRODUCTS DISPLAY AREA -->

    </div>
    </div>
</div>
```

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```html
<!-- / STORE DISPLAY AREA -->

<!-- productivity_area  -->
<div class="productivity_area">
    <div class="container">
        <div class="row align-items-center">
            <div class="col-xl-7 col-md-12 col-lg-6">
                <h3 class="wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">Shop now <br>
                    and increase productivity</h3>
            </div>
            <div class="col-xl-5 col-md-12 col-lg-6">
                <div class="app_download wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">
                    <a href="index.html" class="text-white h1">
                        <strong>TechGenius</strong> Store
                    </a>
                </div>
            </div>
        </div>
    </div>
</div>
<!--/ productivity_area  -->

<!-- footer start -->
<footer class="footer">
    <div class="footer_top">
        <div class="container">
            <div class="row">
                <div class="col-xl-4 col-md-6 col-lg-4">
                    <div class="footer_widget">
                        <div class="footer_logo">
                            <a href="index.html">
                                <strong class="text-white">TechGenius</strong>
                            </a>
                        </div>
                        <p>
                            We strive to meet your needs. If you have any questions, feel free to ask.
                        </p>
                        <div class="socail_links">
                            <ul>
                                <li>
                                    <a href="https://www.facebook.com/">
                                        <i class="ti-facebook"></i>
                                    </a>
                                </li>
```

```html
                                <li>
                                    <a href="https://twitter.com/">
                                        <i class="ti-twitter-alt"></i>
                                    </a>
                                </li>
                                <li>
                                    <a href="https://www.instagram.com/">
                                        <i class="fa fa-instagram"></i>
                                    </a>
                                </li>
                            </ul>
                        </div>

                    </div>
                </div>
                <div class="col-xl-2 offset-xl-1 col-md-6 col-lg-3">
                    <div class="footer_widget">
                        <h3 class="footer_title">
                            Pages
                        </h3>
                        <ul id="footerServices">

                        </ul>

                    </div>
                </div>
                <div class="col-xl-2 col-md-6 col-lg-2">
                    <div class="footer_widget">
                        <h3 class="footer_title">
                                Useful Links
                        </h3>
                        <ul id="footerUsefulLinks">

                        </ul>
                    </div>
                </div>
            </div>
        </div>
    </div>
</footer>
<!--/ footer end  -->

<!-- JS here -->
<script src="js/vendor/modernizr-3.5.0.min.js"></script>
```

```html
    <script src="js/vendor/jquery-1.12.4.min.js"></script>
    <script src="js/popper.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <script src="js/owl.carousel.min.js"></script>
    <script src="js/isotope.pkgd.min.js"></script>
    <script src="js/ajax-form.js"></script>
    <script src="js/waypoints.min.js"></script>
    <script src="js/jquery.counterup.min.js"></script>
    <script src="js/imagesloaded.pkgd.min.js"></script>
    <script src="js/scrollIt.js"></script>
    <script src="js/jquery.scrollUp.min.js"></script>
    <script src="js/wow.min.js"></script>
    <script src="js/nice-select.min.js"></script>
    <script src="js/jquery.slicknav.min.js"></script>
    <script src="js/jquery.magnific-popup.min.js"></script>
    <script src="js/plugins.js"></script>
    <script src="js/gijgo.min.js"></script>

    <!--contact js-->
    <script src="js/contact.js"></script>
    <script src="js/jquery.ajaxchimp.min.js"></script>
    <script src="js/jquery.form.js"></script>
    <script src="js/jquery.validate.min.js"></script>
    <script src="js/mail-script.js"></script>

    <script src="js/main.js"></script>
    <script src="js/storeFunctionality.js"></script>
</body>

</html>
```

cart.html

```html
<!doctype html>
<html class="no-js" lang="zxx">

<head>
    <meta charset="utf-8">
    <meta http-equiv="x-ua-compatible" content="ie=edge">
    <title>TechGenius Cart</title>

    <meta name="description" content="Buy newest devices in TechGenius! TechGenius store cart."/>
    <meta name="keywords" content="Device, device, TechGenius, Brand, Cart, Buy, Products, cart"/>
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="shortcut icon" href="img/icon.ico"/>

    <!-- <link rel="manifest" href="site.webmanifest"> -->
    <!-- Place favicon.ico in the root directory -->

    <!-- CSS here -->
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/owl.carousel.min.css">
    <link rel="stylesheet" href="css/magnific-popup.css">
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/themify-icons.css">
    <link rel="stylesheet" href="css/nice-select.css">
    <link rel="stylesheet" href="css/flaticon.css">
    <link rel="stylesheet" href="css/gijgo.css">
    <link rel="stylesheet" href="css/animate.min.css">
    <link rel="stylesheet" href="css/slick.css">
    <link rel="stylesheet" href="css/slicknav.css">
    <link rel="stylesheet" href="css/style.css">
    <link rel="stylesheet" href="css/myStyle.css">

    <script src="https://code.jquery.com/jquery-3.4.1.min.js" integrity="sha256-
CSXorXvZcTkaix6Yvo6HppcZGetbYMGWSFlBw8HfCJo=" crossorigin="anonymous"></script>
    <!-- <link rel="stylesheet" href="css/responsive.css"> -->
</head>

<body>
    <!--[if lte IE 9]>
            <p class="browserupgrade">You are using an <strong>outdated</strong> browser. Please <a href="
https://browsehappy.com/">upgrade your browser</a> to improve your experience and security.</p>
        <![endif]-->
```

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```html
<!-- header-start -->
<header>
<div class="header-area ">
    <div id="sticky-header" class="main-header-area">
        <div class="container-fluid">
            <div class="row align-items-center">
                <div class="col-xl-3 col-lg-2">
                    <div class="logo">
                        <a href="index.html" id="logoA">
                            <!-- LOGO TEXT -->
                        </a>
                    </div>
                </div>
                <div class="col-xl-6 col-lg-7">
                    <div class="main-menu  d-none d-lg-block">
                        <nav>
                            <ul id="navigation">
                                <li><a class="active" href="index.html">home</a></li>
                                <li><a href="store.html">Store</a></li>
                                <li><a href="cart.html">Cart</a></li>
                                <li><a href="#">More <i class="ti-angle-down"></i></a>
                                    <ul class="submenu">
                                        <li><a href="about.html">About Author</a></li>
                                        <li><a href="#">Documentation</a></li>
                                        <li><a href="sitemap.xml">Sitemap</a></li>
                                    </ul>
                                </li>
                            </ul>
                        </nav>
                    </div>
                </div>
                <div class="col-12">
                    <div class="mobile_menu d-block d-lg-none"></div>
                </div>
            </div>

        </div>
    </div>
</div>
</header>
<!-- header-end -->

<!-- bradcam_area  -->
```

TECHGENIUS

```html
    <div class="bradcam_area bradcam_bg_1">
        <div class="container">
            <div class="row">
                <div class="col-xl-12">
                    <div class="bradcam_text">
                        <h3>Your Cart:</h3>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!-- /bradcam_area  -->


    <!-- CART DISPLAY AREA -->
    <div class="col-12 mt-5 mb-5 d-flex align-items-center justify-content-center">
        <div class="col-lg-12 col-sm-12">
            <div class="col-12 m-3 d-flex justify-content-around flex-wrap">
                <div class="d-flex justify-content-end">
                    <p class="h4 pt-3">Products in Cart:</p>
                </div>
                <div class="d-flex align-items-end">
                    <div class="m-2">
                        <p class="h4" id="sumPriceDisplay">$<span id="totalPrice">0.00</span></p>
                    </div>
                    <div class="m-2">
                        <a href="#" class="genric-btn success radius" id="buyButton">Buy</a>
                    </div>
                    <div class="m-2">
                        <a href="#" class="genric-btn success-border radius" id="clearCart">Clear</a>
                    </div>
                </div>
            </div>
            <div class="d-flex col-12">
                <p class="h7 col-12 text-center" id="cannotBuy">Cannot buy, cart is empty.</p>
            </div>
            <div class="col-12 mt-5 pt-2" id="cartProducts">

                <!-- DISPLAY PRODUCTS IN CART -->

                <p class="text-center h2">Your cart is empty,</p>
                <p class="text-
center h3">visit the <a href="store.html" alt="Store" class="underline">STORE</a> page to fill it up.</p>
                <div class="col-12 mt-5">
```

```html
                    <div class="about_draw wow fadeInUp text-center" data-wow-duration=".7s" data-wow-
delay=".5s">
                        <img src="img/ilstrator_img/draw.png" alt="Cart" class="img-fluid">
                    </div>
                </div>

            </div>
        </div>
    </div>
    <!-- / CART DISPLAY AREA -->


    <!-- productivity_area  -->
    <div class="productivity_area">
        <div class="container">
            <div class="row align-items-center">
                <div class="col-xl-7 col-md-12 col-lg-6">
                    <h3 class="wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">Shop now <br>
                        and increase productivity</h3>
                </div>
                <div class="col-xl-5 col-md-12 col-lg-6">
                    <div class="app_download wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">
                        <a href="index.html" class="text-white h1">
                            <strong>TechGenius</strong> Store
                        </a>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!--/ productivity_area  -->


    <!-- footer start -->
    <footer class="footer">
        <div class="footer_top">
            <div class="container">
                <div class="row">
                    <div class="col-xl-4 col-md-6 col-lg-4">
                        <div class="footer_widget">
                            <div class="footer_logo">
                                <a href="index.html">
                                    <strong class="text-white">TechGenius</strong>
                                </a>
                            </div>
                            <p>
```

```html
                    We strive to meet your needs. If you have any questions, feel free to ask.
                </p>
                <div class="socail_links">
                    <ul>
                        <li>
                            <a href="https://www.facebook.com/">
                                <i class="ti-facebook"></i>
                            </a>
                        </li>
                        <li>
                            <a href="https://twitter.com/">
                                <i class="ti-twitter-alt"></i>
                            </a>
                        </li>
                        <li>
                            <a href="https://www.instagram.com/">
                                <i class="fa fa-instagram"></i>
                            </a>
                        </li>
                    </ul>
                </div>

            </div>
        </div>
        <div class="col-xl-2 offset-xl-1 col-md-6 col-lg-3">
            <div class="footer_widget">
                <h3 class="footer_title">
                    Pages
                </h3>
                <ul id="footerServices">

                </ul>

            </div>
        </div>
        <div class="col-xl-2 col-md-6 col-lg-2">
            <div class="footer_widget">
                <h3 class="footer_title">
                        Useful Links
                </h3>
                <ul id="footerUsefulLinks">

                </ul>
            </div>
```

```html
                </div>
            </div>
        </div>
    </div>
</footer>
<!--/ footer end  -->

<!-- JS here -->
<script src="js/vendor/modernizr-3.5.0.min.js"></script>
<script src="js/vendor/jquery-1.12.4.min.js"></script>
<script src="js/popper.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/owl.carousel.min.js"></script>
<script src="js/isotope.pkgd.min.js"></script>
<script src="js/ajax-form.js"></script>
<script src="js/waypoints.min.js"></script>
<script src="js/jquery.counterup.min.js"></script>
<script src="js/imagesloaded.pkgd.min.js"></script>
<script src="js/scrollIt.js"></script>
<script src="js/jquery.scrollUp.min.js"></script>
<script src="js/wow.min.js"></script>
<script src="js/nice-select.min.js"></script>
<script src="js/jquery.slicknav.min.js"></script>
<script src="js/jquery.magnific-popup.min.js"></script>
<script src="js/plugins.js"></script>
<script src="js/gijgo.min.js"></script>

<!--contact js-->
<script src="js/contact.js"></script>
<script src="js/jquery.ajaxchimp.min.js"></script>
<script src="js/jquery.form.js"></script>
<script src="js/jquery.validate.min.js"></script>
<script src="js/mail-script.js"></script>
<script src="js/main.js"></script>
<script src="js/cartFunctionality.js"></script>

<!-- <script src="js/main.js"></script> -->
</body>

</html>
```

buy.html

```html
<!doctype html>
<html class="no-js" lang="zxx">

<head>
    <meta charset="utf-8">
    <meta http-equiv="x-ua-compatible" content="ie=edge">
    <title>TechGenius</title>

    <meta name="description" content="Checkout page."/>
    <meta name="keywords" content="price, cost, Checkout, Orther, TechGenius, Purchase"/>
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="shortcut icon" href="img/icon.ico"/>

    <!-- <link rel="manifest" href="site.webmanifest"> -->
    <!-- Place favicon.ico in the root directory -->

    <!-- CSS here -->
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/owl.carousel.min.css">
    <link rel="stylesheet" href="css/magnific-popup.css">
    <link rel="stylesheet" href="css/font-awesome.min.css">
    <link rel="stylesheet" href="css/themify-icons.css">
    <link rel="stylesheet" href="css/nice-select.css">
    <link rel="stylesheet" href="css/flaticon.css">
    <link rel="stylesheet" href="css/gijgo.css">
    <link rel="stylesheet" href="css/animate.min.css">
    <link rel="stylesheet" href="css/slick.css">
    <link rel="stylesheet" href="css/slicknav.css">
    <link rel="stylesheet" href="css/style.css">
    <link rel="stylesheet" href="css/myStyle.css">

    <script src="https://code.jquery.com/jquery-3.4.1.min.js" integrity="sha256-
CSXorXvZcTkaix6Yvo6HppcZGetbYMGWSFlBw8HfCJo=" crossorigin="anonymous"></script>
    <!-- <link rel="stylesheet" href="css/responsive.css"> -->
</head>

<body>
    <!--[if lte IE 9]>
            <p class="browserupgrade">You are using an <strong>outdated</strong> browser. Please <a href="
https://browsehappy.com/">upgrade your browser</a> to improve your experience and security.</p>
        <![endif]-->
```

```html
<!-- header-start -->
<header>
<div class="header-area ">
    <div id="sticky-header" class="main-header-area">
        <div class="container-fluid">
            <div class="row align-items-center">
                <div class="col-xl-3 col-lg-2">
                    <div class="logo">
                        <a href="index.html" id="logoA">
                            <!-- LOGO TEXT -->
                        </a>
                    </div>
                </div>
                <div class="col-xl-6 col-lg-7">
                    <div class="main-menu  d-none d-lg-block">
                        <nav>
                            <ul id="navigation">
                                <li><a class="active" href="index.html">home</a></li>
                                <li><a href="store.html">Store</a></li>
                                <li><a href="cart.html">Cart</a></li>
                                <li><a href="#">More <i class="ti-angle-down"></i></a>
                                    <ul class="submenu">
                                        <li><a href="about.html">About Author</a></li>
                                        <li><a href="#">Documentation</a></li>
                                        <li><a href="sitemap.xml">Sitemap</a></li>
                                    </ul>
                                </li>
                            </ul>
                        </nav>
                    </div>
                </div>
                <div class="col-12">
                    <div class="mobile_menu d-block d-lg-none"></div>
                </div>
            </div>

        </div>
    </div>
</div>
</header>
<!-- header-end -->

<!-- bradcam_area  -->
```

```html
    <div class="bradcam_area bradcam_bg_1">
        <div class="container">
            <div class="row">
                <div class="col-xl-12">
                    <div class="bradcam_text">
                        <h3 id="pageNameBig">Purchase now:</h3>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!-- /bradcam_area  -->

    <!-- BUY FORM AREA -->
    <div class="col-12 mt-5 mb-5 d-flex justify-content-center">
        <div class="col-lg-5 col-sm-11" id="formDisplay">
            <p class="h6 mb-3 text-secondary">Checkout:</p>
            <p class="h4">Total price:</p>
            <p class="h1">$<span id="price">0.00</span></p>

            <form action="#" method="GET" class="col-12 mt-3 mb-3">
                <p class="mt-5">Enter your information:</p>
                <div class="form-group">
                    <label for="nameLastname">Name and Last Name:</label>
                    <input class="form-
control" type="text" placeholder="Enter Your Full Name" id="nameLastname">
                    <small id="nameHelpRed" class="form-text text-
muted redText">Enter your name in format: First Last</small>
                </div>
                <div class="form-group">
                    <label for="exampleInputEmail1">Email address:</label>
                    <input type="email" class="form-control" id="email" aria-
describedby="emailHelp" placeholder="Enter email">
                    <small id="emailHelp" class="form-text text-
muted">We'll never share your email with anyone else.</small>
                    <small id="emailHelpRed" class="form-text text-
muted redText">Please enter an email in a valid format.</small>
                </div>
                <p class="mt-5">Shipping address:</p>
                <div class="form-group">
                    <label for="address">Shipping address:</label>
                    <input class="form-control" type="text" placeholder="Address" id="address">
                    <small id="addressHelpRed" class="form-text text-
muted redText">Enter address in a valid format(example: Street Name 58).</small>
```

```
                </div>
                <div class="d-flex flex-wrap">
                    <div class="col-lg-6 col-sm-12 mb-2">
                        <input type="text" class="form-control" placeholder="City" id="city"/>
                    </div>
                    <div class="col-lg-3 col-sm-6 mb-2">
                        <input type="text" class="form-control" placeholder="State" id="state"/>
                    </div>
                    <div class="col-lg-3 col-sm-6">
                        <input type="text" class="form-control" placeholder="Postal code" id="zip">
                    </div>
                    <div class="col-12">
                        <small id="cityHelpRed" class="form-text text-
muted redText">Enter city in a valid format.</small>
                        <small id="stateHelpRed" class="form-text text-
muted redText">Enter state in a valid format.</small>
                        <small id="zipHelpRed" class="form-text text-
muted redText">Enter postal code in a valid format (5 digits).</small>
                    </div>
                </div>
                <p class="mt-5">Payment Method:</p>
                <div class="col-12 mb-5">
                    <div class="form-check">
                        <input class="form-check-
input" type="radio" name="radio" id="radio1" value="PayPalPaymentRadio">
                        <label class="form-check-label" for="radio1">
                            PayPal
                        </label>
                    </div>
                    <div class="form-check">
                        <input class="form-check-
input" type="radio" name="radio" id="radio2" value="VisaPaymentRadio">
                        <label class="form-check-label" for="radio2">
                            Visa Credit Card
                        </label>
                    </div>
                    <div class="form-group mt-4" id="paypalPaymentWin">
                        <label for="paypalPayment">PayPal Email Adress:</label>
                        <input type="email" class="form-control" id="paypalPayment" aria-
describedby="emailHelp" placeholder="Enter Your PayPal Email">
                        <small id="PaypalEmailHelp" class="form-text text-
muted">Insert your PayPal email adress.</small>
                        <small id="paypalHelpRed" class="form-text text-
muted redText">Please enter an email in a valid format.</small>
```

```html
                    </div>
                    <div class="form-group mt-4" id="visaPaymentWin">
                        <label for="visaPayment">Visa Card Number:</label>
                        <input type="text" class="form-control" id="visaPayment" aria-
describedby="emailHelp" placeholder="Enter Your Card Number">
                        <small id="visaPaymentHelp" class="form-text text-
muted">Insert your card number.</small>
                        <small id="visaPaymentRed" class="form-text text-
muted">This number contains 16 digits.</small>
                    </div>
                </div>
                <a href="#" class="genric-btn success radius" id="btnSubmit">Order Now</a>
                <p class="h6 mt-2 text-
danger" id="underButtonPopup">Fill in the form correctly to proceed.</p>
            </form>
        </div>
    </div>
    <!-- / BUY FORM AREA -->


    <!-- productivity_area  -->
    <div class="productivity_area">
        <div class="container">
            <div class="row align-items-center">
                <div class="col-xl-7 col-md-12 col-lg-6">
                    <h3 class="wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">Shop now <br>
                        and increase productivity</h3>
                </div>
                <div class="col-xl-5 col-md-12 col-lg-6">
                    <div class="app_download wow fadeInDown" data-wow-duration="1s" data-wow-delay=".1s">
                        <a href="index.html" class="text-white h1">
                            <strong>TechGenius</strong> Store
                        </a>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!--/ productivity_area  -->


    <!-- footer start -->
    <footer class="footer">
        <div class="footer_top">
            <div class="container">
                <div class="row">
```

```html
<div class="col-xl-4 col-md-6 col-lg-4">
    <div class="footer_widget">
        <div class="footer_logo">
            <a href="index.html">
                <strong class="text-white">TechGenius</strong>
            </a>
        </div>
        <p>
            We strive to meet your needs. If you have any questions, feel free to ask.
        </p>
        <div class="socail_links">
            <ul>
                <li>
                    <a href="https://www.facebook.com/">
                        <i class="ti-facebook"></i>
                    </a>
                </li>
                <li>
                    <a href="https://twitter.com/">
                        <i class="ti-twitter-alt"></i>
                    </a>
                </li>
                <li>
                    <a href="https://www.instagram.com/">
                        <i class="fa fa-instagram"></i>
                    </a>
                </li>
            </ul>
        </div>

    </div>
</div>
<div class="col-xl-2 offset-xl-1 col-md-6 col-lg-3">
    <div class="footer_widget">
        <h3 class="footer_title">
            Pages
        </h3>
        <ul id="footerServices">

        </ul>

    </div>
</div>
<div class="col-xl-2 col-md-6 col-lg-2">
```

```html
                    <div class="footer_widget">
                        <h3 class="footer_title">
                                Useful Links
                        </h3>
                        <ul id="footerUsefulLinks">

                        </ul>
                    </div>
                </div>
            </div>
        </div>
</footer>
<!--/ footer end  -->

<!-- JS here -->
<script src="js/vendor/modernizr-3.5.0.min.js"></script>
<script src="js/vendor/jquery-1.12.4.min.js"></script>
<script src="js/popper.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/owl.carousel.min.js"></script>
<script src="js/isotope.pkgd.min.js"></script>
<script src="js/ajax-form.js"></script>
<script src="js/waypoints.min.js"></script>
<script src="js/jquery.counterup.min.js"></script>
<script src="js/imagesloaded.pkgd.min.js"></script>
<script src="js/scrollIt.js"></script>
<script src="js/jquery.scrollUp.min.js"></script>
<script src="js/wow.min.js"></script>
<script src="js/nice-select.min.js"></script>
<script src="js/jquery.slicknav.min.js"></script>
<script src="js/jquery.magnific-popup.min.js"></script>
<script src="js/plugins.js"></script>
<script src="js/gijgo.min.js"></script>

<!--contact js-->
<script src="js/contact.js"></script>
<script src="js/jquery.ajaxchimp.min.js"></script>
<script src="js/jquery.form.js"></script>
<script src="js/jquery.validate.min.js"></script>
<script src="js/mail-script.js"></script>

<script src="js/main.js"></script>
<script src="js/buyFunctionality.js"></script>
```

```
</body>


</html>
```

CSS:

myStyle.css

```css
html {
    scroll-behavior: smooth;
}
.productImage{
    max-width: auto;
    max-height: 225px;
}
.product{
    border: 1px solid #fff;
    border-radius: 4px;
}
.product:hover{
    border: 1px solid #000;
}
.single_testmonial p{
    text-decoration: none;
    font-size: 20px;
}
.cartProduct{
    border: 1px solid #fff;
    border-top: 1px solid #000;
    color: rgb(49, 49, 49);
}
.cartProduct:hover{
    color: #000;
}
.cartProductsImg{
    max-height: 250px;
    max-width: 250px;
}
.removeItemFromCartBtn{
    border-radius: 3px;
}
#onCartPopUpBg{
    position: fixed;
    z-index: 10000;
    width: 100%;
    height: 100%;
    background-color: rgba(0, 0, 0, 0.80);
    visibility: hidden;
```

```css
}
#onCartPopUp{
    min-height: 100px;
    min-width: 320px;
    background-color: #fff;
    border-radius: 5px;
}
.onCartPopUpInner{
    width: 100%;
}
.underline{
    text-decoration: underline;
}
#cannotBuy{
    color: red;
    font-weight: 600;
    display: none;
}
.redText{
    color: red;
}
#authorImg{
    width: 250px;
    border-radius: 5px;
}
.brandImage{
    max-width: 340px;
    height: 250px;
}
```

JSON:

devices.json

```json
[
    {
        "id": 1,
        "image": {
            "url": "galaxyS10e.jpg",
            "alt": "Samsung Galaxy S10e"
        },
        "brandName": "Samsung",
        "model": "Galaxy S10e",
        "date": "2020/02/25",
        "rank": 0,
        "price": 599.99,
        "char": [
            {
                "name": "Camera",
                "value": "16MP + 12MP / 10MP"
            },
            {
                "name": "Screen",
                "value": "5,8''"
            },
            {
                "name": "RAM",
                "value": "6GB"
            },
            {
                "name": "Internal memory",
                "value": "128GB"
            }
        ]
    },
    {
        "id": 12,
        "image": {
            "url": "MiNote10.jpg",
            "alt": "Xiaomi Mi Note 10"
        },
        "brandName": "Xiaomi",
```

```json
            "model": "Mi Note 10",
            "date": "2020/2/26",
            "rank": 1,
            "price": 749.99,
            "char": [
                {
                    "name": "Camera",
                    "value": "108 MP / 32 MP"
                },
                {
                    "name": "Screen",
                    "value": "6,47''"
                },
                {
                    "name": "RAM",
                    "value": "6GB"
                },
                {
                    "name": "Internal memory",
                    "value": "128GB"
                },
                {
                    "name": "Battery",
                    "value": "5260mAh"
                },
                {
                    "name": "Processor",
                    "value": "Snapdragon 730G"
                }
            ]
        },
        {
            "id": 2,
            "image": {
                "url": "galaxyS10.png",
                "alt": "Samsung Galaxy S10"
            },
            "brandName": "Samsung",
            "model": "Galaxy S10",
            "date": "2020/01/20",
            "rank": 0,
            "price": 799.99,
            "char": [
                {
```

```
                    "name": "Camera",
                    "value": "16MP + 12MP + 12MP / 10MP"
                },
                {
                    "name": "Screen",
                    "value": "6,1''"
                },
                {
                    "name": "RAM",
                    "value": "8GB"
                },
                {
                    "name": "Internal memory",
                    "value": "128GB"
                },
                {
                    "name": "Battery",
                    "value": "3400mAh"
                }
            ]
        },
        {
            "id": 3,
            "image": {
                "url": "galaxyS10+.jpg",
                "alt": "Samsung Galaxy S10+"
            },
            "brandName": "Samsung",
            "model": "Galaxy S10+",
            "date": "2020/03/01",
            "rank": 1,
            "price": 999.99,
            "char": [
                {
                    "name": "Camera",
                    "value": "16MP + 12MP + 12MP / 10MP + 8MP"
                },
                {
                    "name": "Screen",
                    "value": "6,4''"
                },
                {
                    "name": "RAM",
                    "value": "8GB"
```

```
        },
        {
            "name": "Internal memory",
            "value": "128GB"
        },
        {

            "name": "Battery",
            "value": "4100mAh"
        }
    ]
},
{

    "id": 15,
    "image": {
        "url": "Iphone11Pro.jpg",
        "alt": "Iphone 11 Pro"
    },
    "brandName": "Apple",
    "model": "Iphone 11 Pro",
    "date": "2020/03/01",
    "rank": 1,
    "price": 1799.99,
    "char": [
        {
            "name": "Camera",
            "value": "12 MP + 12 MP + 12 MP / 12 MP"
        },
        {

            "name": "Screen",
            "value": "5,8''"
        },
        {

            "name": "Operation System",
            "value": "iOS 13"
        },
        {

            "name": "Internal memory",
            "value": "256GB"
        },
        {

            "name": "Resolution",
            "value": "2436 x 1125 px"
        }
    ]
```

```
    },
    {
        "id": 4,
        "image": {
            "url": "xiaomiMI9.jpg",
            "alt": "Mi 9 SE"
        },
        "brandName": "Xiaomi",
        "model": "Mi 9 SE",
        "date": "2020/01/11",
        "rank": 0,
        "price": 349.99,
        "char": [
            {
                "name": "Camera",
                "value": "48MP + 8MP + 13MP / 20MP"
            },
            {
                "name": "Screen",
                "value": "5,97''"
            },
            {
                "name": "RAM",
                "value": "6GB"
            },
            {
                "name": "Internal memory",
                "value": "64GB"
            },
            {
                "name": "Battery",
                "value": "3070mAh"
            }
        ]
    },
    {
        "id": 5,
        "image": {
            "url": "galaxyA70.jpg",
            "alt": "Galaxy A70"
        },
        "brandName": "Samsung",
        "model": "Galaxy A70",
        "date": "2020/02/20",
```

```
        "rank": 0,
        "price": 449.99,
        "char": [
            {
                "name": "Camera",
                "value": "32MP + 5MP + 8MP / 32MP"
            },
            {
                "name": "Screen",
                "value": "6,7''"
            },
            {
                "name": "RAM",
                "value": "6GB"
            },
            {
                "name": "Internal memory",
                "value": "128GB"
            },
            {
                "name": "Battery",
                "value": "4500mAh"
            }
        ]
    },
    {
        "id": 6,
        "image": {
            "url": "20lite.jpg",
            "alt": "Huawei 20 lite"
        },
        "brandName": "Huawei",
        "model": "20 lite",
        "date": "2019/09/23",
        "rank": 0,
        "price": 229.99,
        "char": [
            {
                "name": "Camera",
                "value": "24MP + 8MP + 2MP / 38MP"
            },
            {
                "name": "Screen",
                "value": "6,21''"
```

```json
        },
        {
            "name": "RAM",
            "value": "4GB"
        },
        {
            "name": "Internal memory",
            "value": "128GB"
        },
        {
            "name": "Battery",
            "value": "3400mAh"
        }
    ]
},
{
    "id": 7,
    "image": {
        "url": "P30.png",
        "alt": "Huawei P30"
    },
    "brandName": "Huawei",
    "model": "P30",
    "date": "2020/02/20",
    "rank": 1,
    "price": 799.99,
    "char": [
        {
            "name": "Camera",
            "value": "40MP + 16MP + 8MP / 32MP"
        },
        {
            "name": "Screen",
            "value": "6,1''"
        },
        {
            "name": "RAM",
            "value": "6GB"
        },
        {
            "name": "Internal memory",
            "value": "128GB"
        },
        {
```

```
            "name": "Battery",
            "value": "3550mAh"
        },
        {
            "name": "Processor",
            "value": "Kirin 980 CPU Octa-core"
        }
    ]
},
{
    "id": 8,
    "image": {
        "url": "honor7S.jpg",
        "alt": "Huawei Honor 7S"
    },
    "brandName": "Huawei",
    "model": "Honor 7S",
    "date": "2019/06/14",
    "rank": 0,
    "price": 99.99,
    "char": [
        {
            "name": "Camera",
            "value": "13 MP / 5 MP"
        },
        {
            "name": "Screen",
            "value": "5,45''"
        },
        {
            "name": "RAM",
            "value": "2GB"
        },
        {
            "name": "Internal memory",
            "value": "16GB"
        },
        {
            "name": "Battery",
            "value": "3020mAh"
        },
        {
            "name": "Processor",
            "value": "Quad-Core 1.5 GHz"
```

```
        }
    ]
},
{
    "id": 9,
    "image": {
        "url": "P30lite.jpg",
        "alt": "Huawei P30 lite"
    },
    "brandName": "Huawei",
    "model": "P30 lite",
    "date": "2019/10/17",
    "rank": 0,
    "price": 329.99,
    "char": [
        {
            "name": "Camera",
            "value": "13 MP / 5 MP"
        },
        {
            "name": "Screen",
            "value": "6,15''"
        },
        {
            "name": "RAM",
            "value": "4GB"
        },
        {
            "name": "Internal memory",
            "value": "128GB"
        },
        {
            "name": "Battery",
            "value": "3340mAh"
        }
    ]
},
{
    "id": 10,
    "image": {
        "url": "MiA3.jpg",
        "alt": "Xiaomi Mi A3"
    },
    "brandName": "Xiaomi",
```

```json
        "model": "Mi A3",
        "date": "2019/12/11",
        "rank": 0,
        "price": 279.99,
        "char": [
            {
                "name": "Camera",
                "value": "13 MP / 5 MP"
            },
            {
                "name": "Screen",
                "value": "6,1''"
            },
            {
                "name": "RAM",
                "value": "4GB"
            },
            {
                "name": "Internal memory",
                "value": "64GB"
            },
            {
                "name": "Battery",
                "value": "4030mAh"
            },
            {
                "name": "Processor",
                "value": "Snapdragon 665"
            }
        ]
    },
    {
        "id": 11,
        "image": {
            "url": "GalaxyA30s.jpg",
            "alt": "Samsung A30s"
        },
        "brandName": "Samsung",
        "model": "A30s",
        "date": "2019/9/23",
        "rank": 0,
        "price": 289.99,
        "char": [
            {
```

```json
            "name": "Camera",
            "value": "25 MP + 8 MP + 5 MP / 16 MP"
        },
        {

            "name": "Screen",
            "value": "6,4'"
        },
        {

            "name": "RAM",
            "value": "4GB"
        },
        {

            "name": "Internal memory",
            "value": "64GB"
        },
        {

            "name": "Battery",
            "value": "4000mAh"
        }
    ]
},
{
    "id": 15,
    "image": {
        "url": "Mi9TPro.jpg",
        "alt": "Xiaomi Mi 9T Pro"
    },
    "brandName": "Xiaomi",
    "model": "Mi 9T Pro",
    "date": "2020/01/30",
    "rank": 0,
    "price": 639.99,
    "char": [
        {
            "name": "Camera",
            "value": "48 MP + 8 MP + 13 MP / 20 MP"
        },
        {

            "name": "Screen",
            "value": "6,39'"
        },
        {

            "name": "RAM",
            "value": "6GB"
```

```
            },
            {
                "name": "Internal memory",
                "value": "128GB"
            },
            {

                "name": "Battery",
                "value": "4000mAh"
            }
        ]
    },
    {

        "id": 13,
        "image": {
            "url": "Nokia7_2.jpg",
            "alt": "Nokia 7.2"
        },
        "brandName": "Nokia",
        "model": "7.2''",
        "date": "2019/08/04",
        "rank": 1,
        "price": 449.99,
        "char": [
            {

                "name": "Camera",
                "value": "48 MP + 5 MP + 8 MP / 20 MP"
            },
            {

                "name": "Screen",
                "value": "6,3''"
            },
            {

                "name": "RAM",
                "value": "6GB"
            },
            {

                "name": "Internal memory",
                "value": "128GB"
            },
            {

                "name": "Battery",
                "value": "3500mAh"
            }
        ]
```

```json
    },
    {
        "id": 14,
        "image": {
            "url": "Nokia6_2.jpg",
            "alt": "Nokia 6.2"
        },
        "brandName": "Nokia",
        "model": "6.2",
        "date": "2019/05/09",
        "rank": 0,
        "price": 299.99,
        "char": [
            {
                "name": "Camera",
                "value": "16 MP + 5 MP + 8 MP / 8 MP"
            },
            {
                "name": "Screen",
                "value": "6,3''"
            },
            {
                "name": "RAM",
                "value": "4GB"
            },
            {
                "name": "Internal memory",
                "value": "64GB"
            },
            {
                "name": "Battery",
                "value": "3500mAh"
            }
        ]
    }
]
```