A simple pet project for an electronics store using Spring Boot. This project is an example and simple implementation in Spring Boot.

Technologies used: Spring, Spring Data, Spring Security, Spring Boot, Postgre SQL.

The settings for connecting to the database are stored in a file application.properties

```
server.port=8080
spring.datasource.url=jdbc:postgresql://127.0.0.1:5432/StoreDB
spring.datasource.username=postgres
spring.datasource.password=user1234
```

These settings need to be changed according to your database. The port can be left unchanged. If an application launch error occurs due to a busy port, change this parameter to another (for example, 8081 and so on). To create a Postgre SQL database and tables, write the following queries in the console or pgAdmin4 program:

1. CREATE DATABASE "StoreDB"

   WITH

   OWNER = postgres

   ENCODING = 'UTF8'

   LC_COLLATE = 'Belarusian_Belarus.1251'

   LC_CTYPE = 'Belarusian_Belarus.1251'

   TABLESPACE = pg_default

   CONNECTION LIMIT = -1;

2. CREATE TABLE public.baskets

   (

   id integer NOT NULL GENERATED ALWAYS AS IDENTITY (INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1),

   CONSTRAINT baskets_pkey PRIMARY KEY (id)

)

   TABLESPACE pg_default;

   ALTER TABLE public.baskets

   OWNER to postgres;

3. CREATE TABLE public.categories

   (

   id integer NOT NULL GENERATED ALWAYS AS IDENTITY (INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1),

   name character varying(50) COLLATE pg_catalog."default" NOT NULL,

   CONSTRAINT categorys_pkey PRIMARY KEY (id)

)

   TABLESPACE pg_default;

   ALTER TABLE public.categories

```
    OWNER to postgres;
```

4.
```
CREATE TABLE public.delivery_types
(
    id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    type_name character varying(30) COLLATE pg_catalog."default" NOT NULL,
    CONSTRAINT delivery_types_pkey PRIMARY KEY (id)
)
TABLESPACE pg_default;
ALTER TABLE public.delivery_types
    OWNER to postgres;
```

5.
```
CREATE TABLE public.goods
(
    id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    price numeric(20,15) NOT NULL,
    number_of_available integer NOT NULL,
    description character varying(200) COLLATE pg_catalog."default",
    name character varying(100) COLLATE pg_catalog."default" NOT NULL,
    category integer,
    manufacturer integer,
    CONSTRAINT "Goods_pkey" PRIMARY KEY (id),
    CONSTRAINT fk_goods_categorys FOREIGN KEY (category)
        REFERENCES public.categories (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION,
    CONSTRAINT fk_gooods_manufacturers FOREIGN KEY (manufacturer)
        REFERENCES public.manufacturers (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION
)
TABLESPACE pg_default;
ALTER TABLE public.goods
    OWNER to postgres;
```

6.
```
CREATE TABLE public.goods_baskets
(
```

```
    good_id integer NOT NULL,
    basket_id integer NOT NULL,
    quantity integer NOT NULL,
    CONSTRAINT goods_baskets_pkey PRIMARY KEY (good_id, basket_id),
    CONSTRAINT fk_goods_baskets_basket FOREIGN KEY (basket_id)
        REFERENCES public.baskets (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION,
    CONSTRAINT fk_goods_baskets_good FOREIGN KEY (good_id)
        REFERENCES public.goods (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION
)
TABLESPACE pg_default;
ALTER TABLE public.goods_baskets
    OWNER to postgres;
```

7.
```
CREATE TABLE public.goods_orders
(
    good_id integer NOT NULL,
    order_id integer NOT NULL,
    quantity integer NOT NULL,
    price_for_one numeric(20,15) NOT NULL,
    CONSTRAINT goods_orders_pkey PRIMARY KEY (good_id, order_id),
    CONSTRAINT fk_goods_orders_good FOREIGN KEY (good_id)
        REFERENCES public.goods (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION,
    CONSTRAINT fk_goods_orders_order FOREIGN KEY (order_id)
        REFERENCES public.orders (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION
)
TABLESPACE pg_default;
ALTER TABLE public.goods_orders
    OWNER to postgres;
```

8. CREATE TABLE public.manufacturers

(

id integer NOT NULL GENERATED ALWAYS AS IDENTITY (INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1),

name character varying(30) COLLATE pg_catalog."default" NOT NULL,

CONSTRAINT manufacturers_pkey PRIMARY KEY (id)

)

TABLESPACE pg_default;

ALTER TABLE public.manufacturers

OWNER to postgres;

9. CREATE TABLE public.orders

(

id integer NOT NULL GENERATED ALWAYS AS IDENTITY (INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1),

order_date_time timestamp with time zone NOT NULL,

user_id integer NOT NULL,

status integer NOT NULL,

type_of_delivery integer NOT NULL,

type_of_payment integer NOT NULL,

total_price numeric(20,15) NOT NULL,

CONSTRAINT orders_pkey PRIMARY KEY (id),

CONSTRAINT fk_order_delivery_type FOREIGN KEY (type_of_delivery)

REFERENCES public.delivery_types (id) MATCH SIMPLE

ON UPDATE NO ACTION

ON DELETE NO ACTION,

CONSTRAINT fk_order_payment_type FOREIGN KEY (type_of_payment)

REFERENCES public.payment_types (id) MATCH SIMPLE

ON UPDATE NO ACTION

ON DELETE NO ACTION,

CONSTRAINT fk_order_status FOREIGN KEY (status)

REFERENCES public.statuses (id) MATCH SIMPLE

ON UPDATE NO ACTION

ON DELETE NO ACTION,

CONSTRAINT fk_order_user FOREIGN KEY (user_id)

REFERENCES public.users (id) MATCH SIMPLE

ON UPDATE NO ACTION

```
        ON DELETE NO ACTION
)
TABLESPACE pg_default;
ALTER TABLE public.orders
    OWNER to postgres;
```

10.
```
CREATE TABLE public.payment_types
(
    id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    type_name character varying(20) COLLATE pg_catalog."default" NOT NULL,
    CONSTRAINT payment_types_pkey PRIMARY KEY (id)
)
TABLESPACE pg_default;
ALTER TABLE public.payment_types
    OWNER to postgres;
```

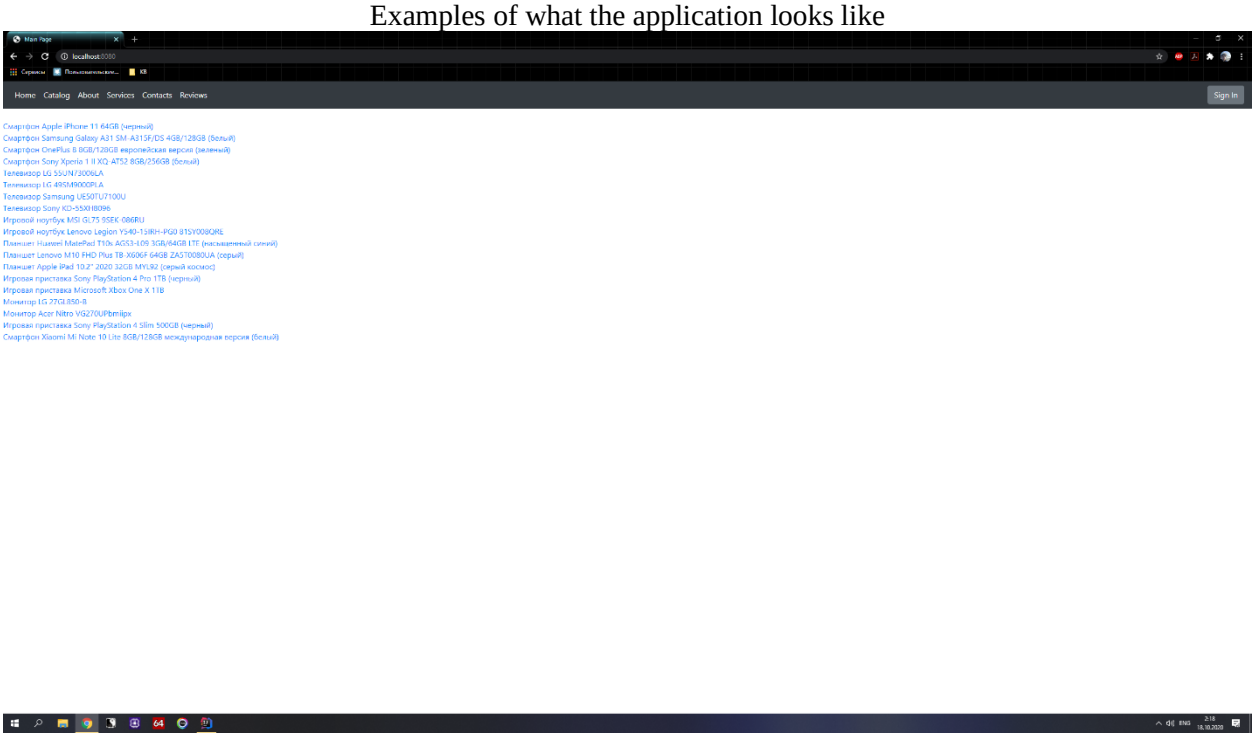
11.
```
CREATE TABLE public.roles
(
    roles_id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    user_role character varying(20) COLLATE pg_catalog."default" NOT NULL,
    CONSTRAINT roles_pkey PRIMARY KEY (roles_id)
)
TABLESPACE pg_default;
ALTER TABLE public.roles
    OWNER to postgres;
```

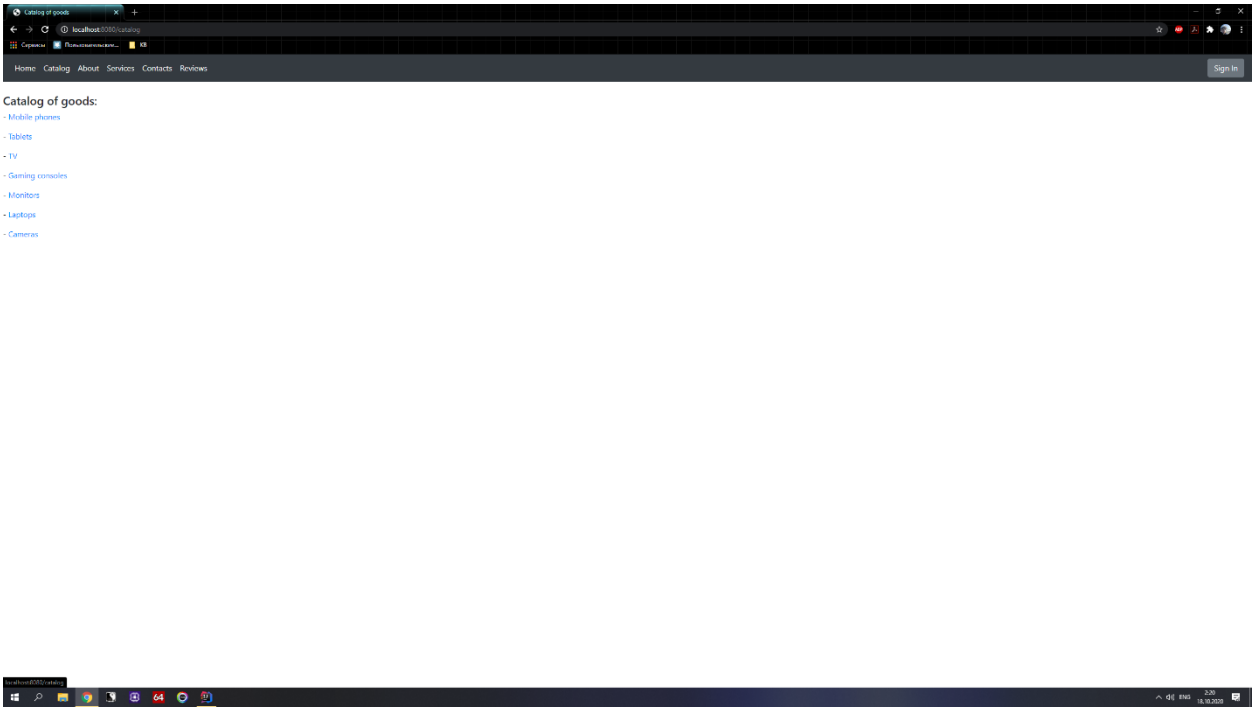
12.
```
CREATE TABLE public.statuses
(
    id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    status_name character varying(30) COLLATE pg_catalog."default" NOT NULL,
    CONSTRAINT statuses_pkey PRIMARY KEY (id)
)
TABLESPACE pg_default;
ALTER TABLE public.statuses
    OWNER to postgres;
```

13.
```
CREATE TABLE public.users
```

```
(
    login character varying(20) COLLATE pg_catalog."default" NOT NULL,
    email character varying(100) COLLATE pg_catalog."default" NOT NULL,
    password character varying(60) COLLATE pg_catalog."default" NOT NULL,
    name character varying(20) COLLATE pg_catalog."default",
    surname character varying(20) COLLATE pg_catalog."default",
    tel character varying(13) COLLATE pg_catalog."default",
    is_active boolean NOT NULL,
    role integer NOT NULL,
    id integer NOT NULL GENERATED ALWAYS AS IDENTITY ( INCREMENT 1 START 1 MINVALUE 1 MAXVALUE 2147483647 CACHE 1 ),
    basket integer NOT NULL,
    CONSTRAINT users_pkey PRIMARY KEY (id),
    CONSTRAINT fk_roles_users FOREIGN KEY (role)
        REFERENCES public.roles (roles_id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION,
    CONSTRAINT fk_user_basket FOREIGN KEY (basket)
        REFERENCES public.baskets (id) MATCH SIMPLE
        ON UPDATE NO ACTION
        ON DELETE NO ACTION
        NOT VALID
)
TABLESPACE pg_default;
ALTER TABLE public.users
    OWNER to postgres;
```

Examples of what the application looks like





Catalog of mobile phones

Смартфон Xiaomi Mi Note 10 Lite 8GB/128GB международная версия (белый)
Смартфон Sony Xperia 1 II XQ-AT52 8GB/256GB (белый)
Смартфон OnePlus 8 8GB/128GB европейская версии (зеленый)
Смартфон Samsung Galaxy A31 SM-A315F/DS 4GB/128GB (белый)
Смартфон Apple iPhone 11 64GB (черный)

Catalog of tv`s

Телевизор Sony KD-55XH8096
Телевизор Samsung UE50TU7100U
Телевизор LG 49SM9000PLA
Телевизор LG 55UN73006LA

Catalog of cameras

There are no products in this category yet

Смартфон OnePlus 8 8GB/128GB европейская версия (зеленый)

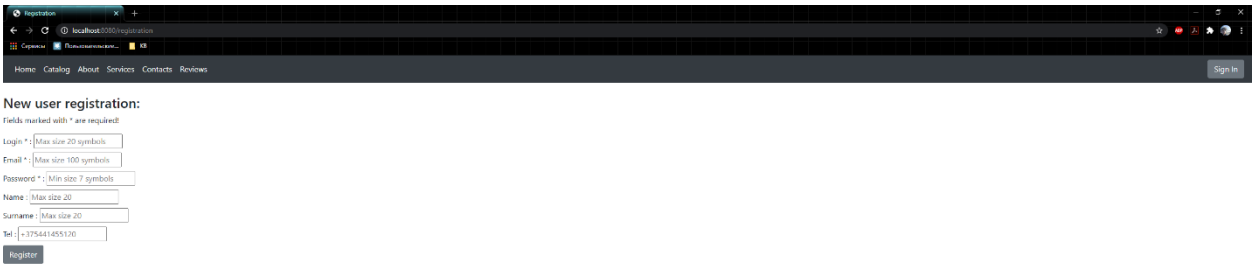
Android, экран 6.55" AMOLED (1080x2400), Qualcomm Snapdragon 865, ОЗУ 8 ГБ, флэш-память 128 ГБ, камера 48 Мп, аккумулятор 4300 мАч, 2 SIM

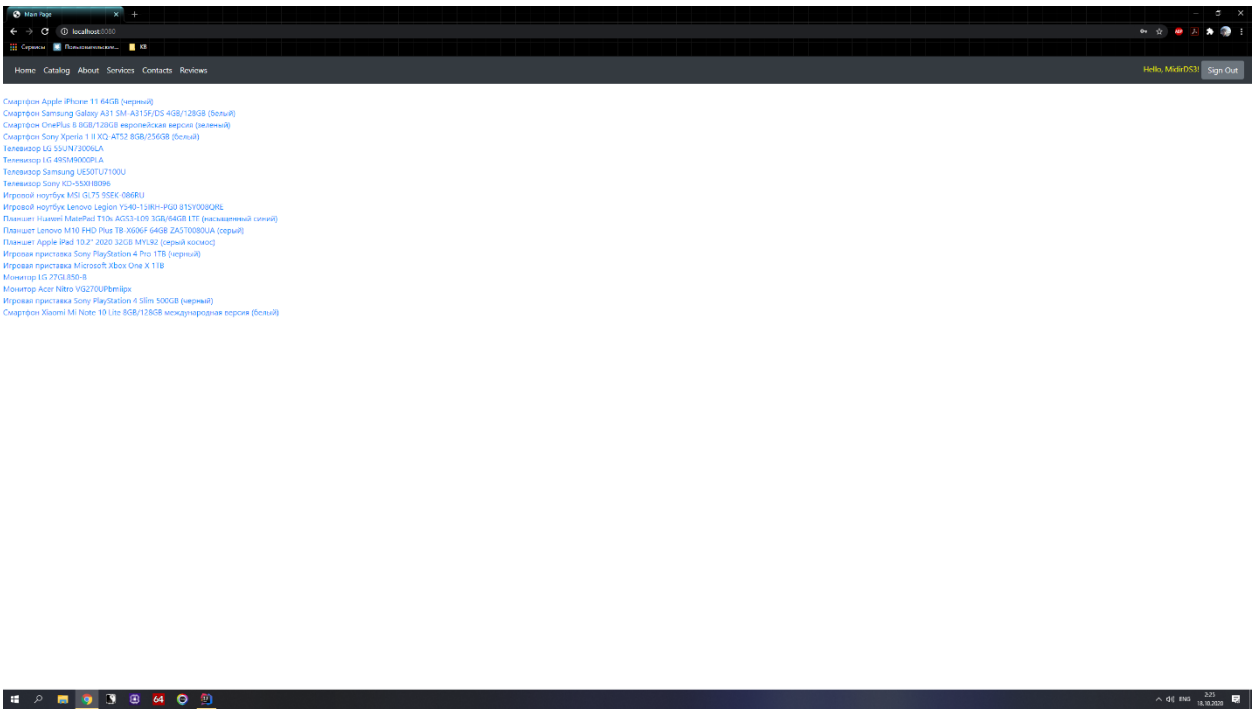
Available for order: 5

Price: 790 USD

To add a product to the cart, please log in.


Entry
localhost:8080/entry
Home Catalog About Services Contacts Reviews
Sign In
Entry:
Login : MidirDS3
Password :
Sign In
New user registration

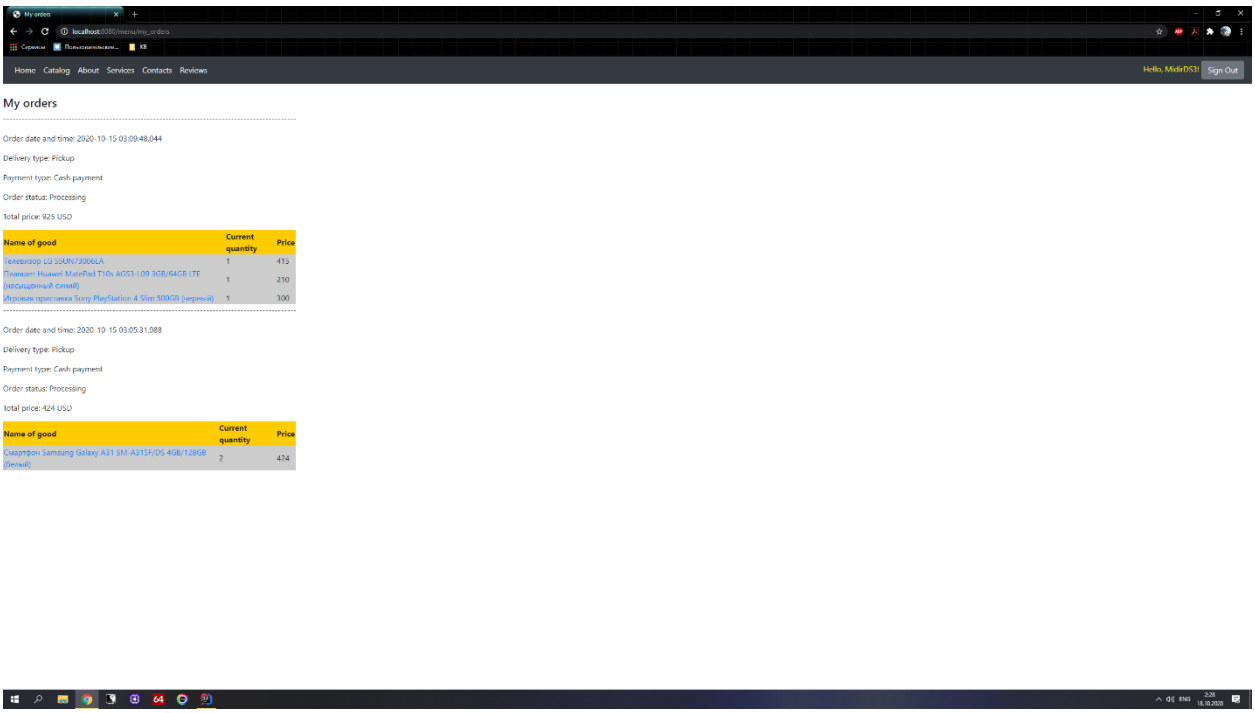

Registration
localhost:8080/registration
Home Catalog About Services Contacts Reviews
Sign In
New user registration:
Fields marked with * are required!
Login * : Max size 20 symbols
Email * : Max size 100 symbols
Password * : Min size 7 symbols
Name : Max size 20
Surname : Max size 20
Tel : +375441455120
Register

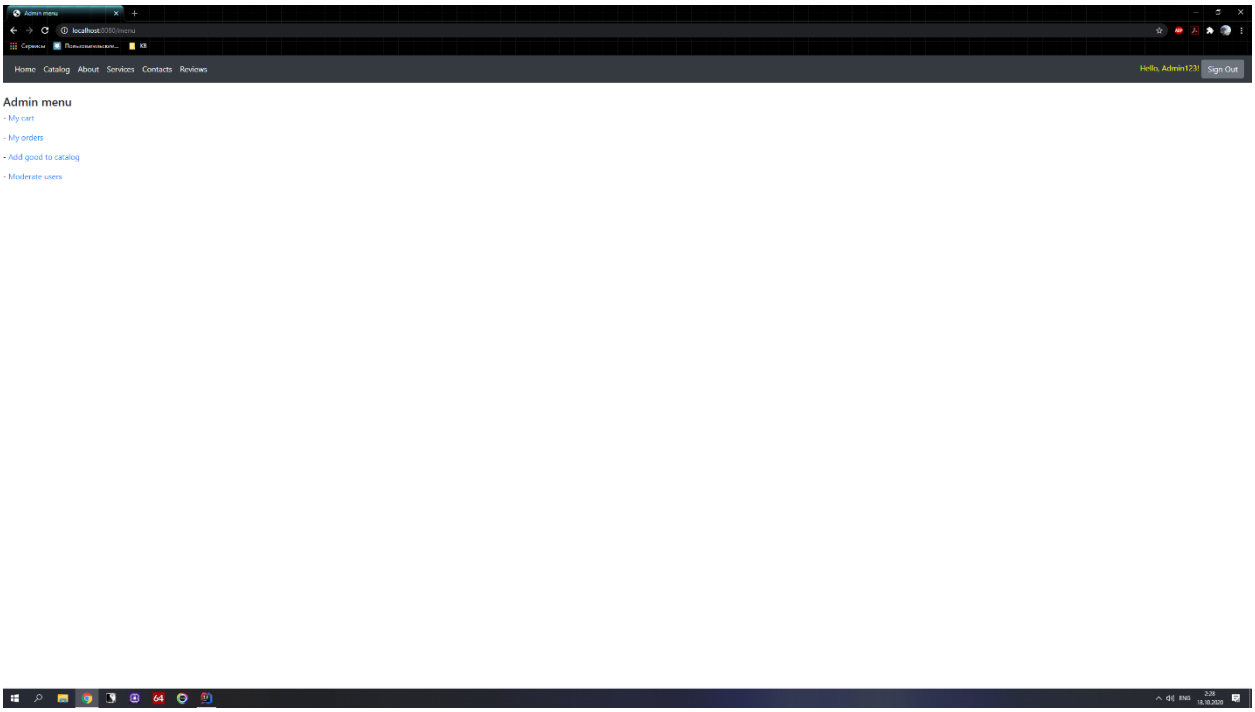

Main Page
localhost:8080
Home Catalog About Services Contacts Reviews
Hello, MidirD53!
Sign Out
Смартфон Apple iPhone 11 64GB (черный)
Смартфон Samsung Galaxy A31 SM-A315F/DS 4GB/128GB (белый)
Смартфон OnePlus 8 8GB/128GB европейская версия (зеленый)
Смартфон Sony Xperia 1 II XQ-AT52 8GB/256GB (белый)
Телевизор LG 55UM7300PLA
Телевизор LG 49SM8000PLA
Телевизор Samsung UE50TU7100U
Телевизор Sony KD-55XH8096
Игровой ноутбук MSI GL75 9SEK-086RU
Игровой ноутбук Lenovo Legion Y540-15IRH-PG0 81SY008QRE
Планшет Huawei MatePad T10s AGS3-L09 3GB/64GB LTE (насыщенный синий)
Планшет Lenovo M10 FHD Plus TB-X606F 64GB ZA5T0080UA (серый)
Планшет Apple iPad 10.2" 2020 32GB MYL92 (серый космос)
Игровая приставка Sony PlayStation 4 Pro 1TB (черный)
Игровая приставка Microsoft Xbox One X 1TB
Монитор LG 27GL850-B
Монитор Acer Nitro VG270UPbmiipx
Игровая приставка Sony PlayStation 4 Slim 500GB (черный)
Смартфон Xiaomi Mi Note 10 Lite 8GB/128GB международная версия (белый)

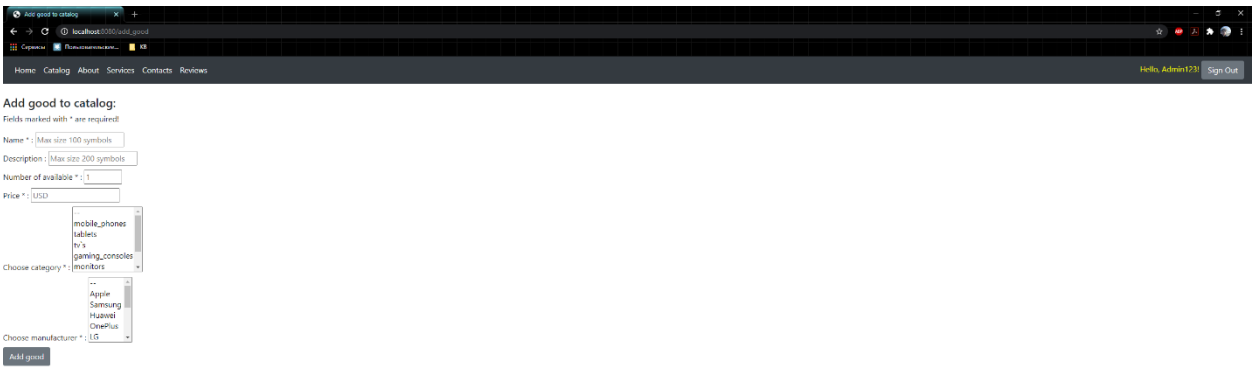

Смартфон OnePlus 8 8GB/128G
localhost:8080/catalog/mobile_phones/0
Home Catalog About Services Contacts Reviews
Hello, MidirD53!
Sign Out
Смартфон OnePlus 8 8GB/128GB европейская версия (зеленый)
Android, экран 6.55" AMOLED (1080x2400), Qualcomm Snapdragon 865, ОЗУ 8 ГБ, флэш-память 128 ГБ, камера 48 Мп, аккумулятор 4300 мАч, 2 SIM
Available for order: 5
Price: 790 USD
Quantity : 1
Add to cart


My cart
localhost:8080/cart
Сервисы
Пользовательские...
KB
Home
Catalog
About
Services
Contacts
Reviews
Hello, MidirD53!
Sign Out
My cart
Name of good
Available quantity
Current quantity
Price
Игровой ноутбук Lenovo Legion Y540-15IRH-PG0 81SY00BQRE
2
1
1420
Common price:1420.000 USD
Clear cart
Choose delivery type :
Courier delivery
Choose payment type :
Cash payment
Order now

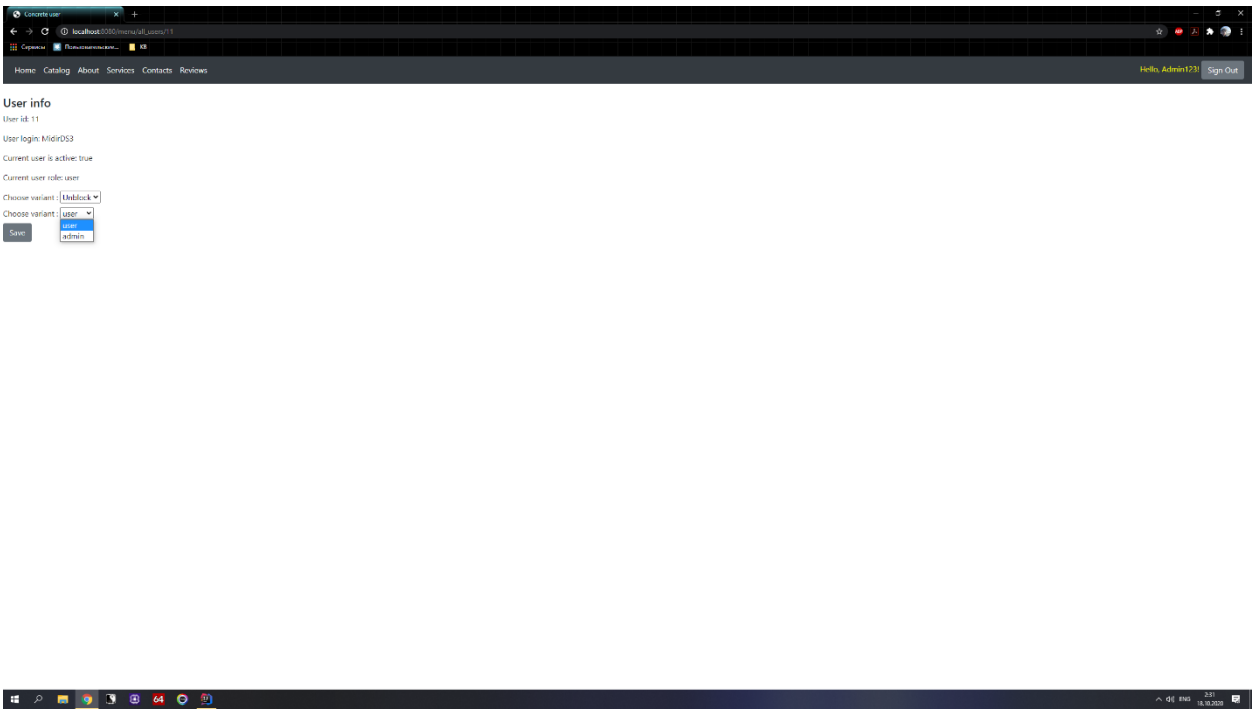

User menu
localhost:8080/menu
Сервисы
Пользовательские...
KB
Home
Catalog
About
Services
Contacts
Reviews
Hello, MidirD53!
Sign Out
User menu
- My cart
- My orders


My orders
localhost:8080/menu/my_orders
Home Catalog About Services Contacts Reviews
Hello, MidirD53!
Sign Out
My orders
Order date and time: 2020-10-15 03:09:48.044
Delivery type: Pickup
Payment type: Cash payment
Order status: Processing
Total price: 925 USD
Name of good
Current quantity
Price
Телевизор LG 55UN73006LA
Планшет Huawei MatePad T10s AGS3-L09 3GB/64GB LTE (насыщенный синий)
Игровая приставка Sony PlayStation 4 Slim 500GB (черный)
1
1
1
415
210
300
Order date and time: 2020-10-15 03:05:31.988
Delivery type: Pickup
Payment type: Cash payment
Order status: Processing
Total price: 424 USD
Name of good
Current quantity
Price
Смартфон Samsung Galaxy A31 SM-A315F/DS 4GB/128GB (белый)
2
424


Admin menu
localhost:8080/menu
Home Catalog About Services Contacts Reviews
Hello, Admin123!
Sign Out
Admin menu
- My cart
- My orders
- Add good to catalog
- Moderate users


Add good to catalog
localhost:8080/add_good
Home Catalog About Services Contacts Reviews
Hello, Admin123!
Sign Out
Add good to catalog:
Fields marked with * are required!
Name * : Max size 100 symbols
Description : Max size 200 symbols
Number of available * : 1
Price * : USD
Choose category * :
mobile_phones
tablets
tv's
gaming_consoles
monitors
Choose manufacturer * :
--
Apple
Samsung
Huawei
OnePlus
LG
Add good


All users
localhost:8080/menu/all_users
Home Catalog About Services Contacts Reviews
Hello, Admin123!
Sign Out
All users
Taktomysh
Admin123
MidleOS3


Concrete user
localhost:8080/menu/all_users/11
Home Catalog About Services Contacts Reviews
Hello, Admin123!
Sign Out
User info
User id: 11
User login: MidirDS3
Current user is active: true
Current user role: user
Choose variant : Unblock
Choose variant : user
user
admin
Save