Final Project

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Auction Application

Main System Functions

Main Controller

```java
@Controller
public class MainController {

    private UserService userService;
    private UserDtoValidator userDtoValidator;
    private ProductService productService;
    private BidService bidService;
    private BidValidator bidValidator;


    @Autowired
    public MainController(UserService userService,
                          UserDtoValidator userDtoValidator,
                          ProductService productService,
                          BidService bidService,
                          BidValidator bidValidator){
        this.userService = userService;
        this.userDtoValidator = userDtoValidator;
        this.productService = productService;
        this.bidService = bidService;
        this.bidValidator = bidValidator;
    }

    @GetMapping({"/home", "/"})
    public String home(Model model) {
        List<ProductDto> products = productService.getAllActiveProducts();
        model.addAttribute("products", products);
        return "home";
    }


    @GetMapping("/registration")
    public String registrationGET(Model model) {
        model.addAttribute("userDto", new UserDto());
        return "registration";
    }


    @PostMapping("/registration")
    public String registrationPOST(Model model, UserDto userDto, BindingResult bindingResult) {
        userDtoValidator.validate(userDto, bindingResult);
        if(bindingResult.hasErrors()){
            return "registration";
```

```java
    @GetMapping("/addProduct")
    public String addProductGET(Model model) {
        model.addAttribute("productDto", new ProductDto());
        return "add-product";
    }
    @PostMapping("/addProduct")
    public String addProductPOST(Model model, ProductDto productDto, BindingResult bindingResult,
                                 @RequestParam("productImage") MultipartFile multipartFile, Authentication authentication){
        String userEmail = authentication.getName();
        productService.addProduct(productDto, multipartFile, userEmail);
        return "redirect:/home";
    }


    @GetMapping("/product/{productId}")
    public String viewProductGet(@PathVariable(value="productId") String productId, Model model, Authentication authentication){
        ProductDto productDto = productService.getProductById(productId, authentication.getName());
        model.addAttribute("productDto", productDto);
        model.addAttribute("bidDto", new BidDto());
        return "view-product";
    }


    @PostMapping("/product/{productId}")
    public String viewProductPost(Model model,
                                  BidDto bidDto,
                                  BindingResult bindingResult,
                                  @PathVariable(value="productId") String productId,
                                  Authentication authentication){
        bidValidator.validate(bidDto, productId, bindingResult);
        if(bindingResult.hasErrors()) {
            ProductDto productDto = productService.getProductById(productId, productId);
            model.addAttribute("productDto", productDto);
            return "view-product";
        }
        bidService.addBid(bidDto, productId, authentication.getName());
        return "redirect:/home";
    }


    @GetMapping({"/myProducts"})
    public String myProductsGET(Model model, Authentication authentication) {
        List<ProductDto> products = productService.getProductsFor(authentication.getName());
        model.addAttribute("products", products);
        return "my-product";
    }


    @GetMapping({"/myBids"})
    public String myBidsGET(Model model, Authentication authentication) {
        List<ProductDto> products = productService.getProductsBiddedBy(authentication.getName());
        model.addAttribute("products", products);
        return "my-bids";
    }
```
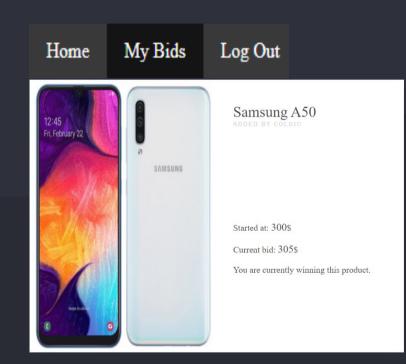
Functionalities

- Only admins can add products and users can only see and bid on them.

- Presentation of the list of recently added auctions.

- Presentation of the list of auctions of the logged-in user.

- Presentation of the list of auctions where the logged-in user is bidding on.

- Only logged-in users can bid on products.

- When product bid date ends, a winner will be chosen by the highest bid.

Admin privileges

Product Name

Description

Starting Price

Category

Please Choose...

Start Bidding Date

mm/dd/yyyy

End Bidding Date

mm/dd/yyyy
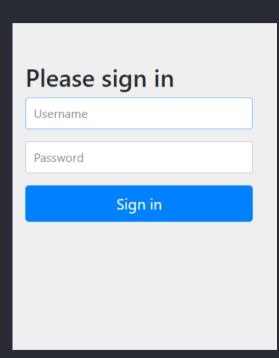
Product Image

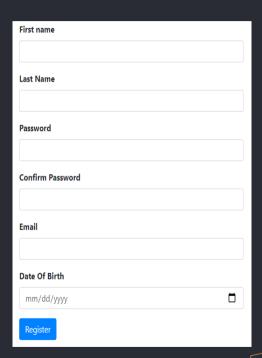Choose File   No file chosen

Add Product

User Privileges

Home   My Bids   Log Out

Samsung A50

ADDED BY COLGIU

Started at: 300$

Current bid: 305$

You are currently winning this product.

User Account

Please sign in

Username

Password

Sign in
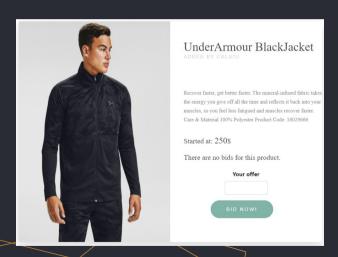
- Log-in
- Password
- Confirm Password
- Account Name
- Date of Birth

First name

Last Name

Password

Confirm Password

Email

Date Of Birth

mm/dd/yyyy

Register

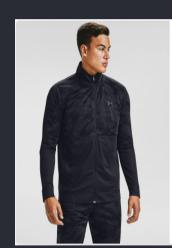# Auction

Title
Description
Photo (on the left)
Bidding price
Current bid
(photo on the right)
The highest bidder

Technologies

- Spring Framework
- Spring Security
- Hibernate
- Thymeleaf
- MySQL Database

Spring Security Integrated

```java
@Configuration
public class SecurityConfig extends WebSecurityConfigurerAdapter {

    private UserDetailsSecurityService userDetailsSecurityService;

    @Autowired
    public SecurityConfig(UserDetailsSecurityService userDetailsSecurityService) {
        this.userDetailsSecurityService = userDetailsSecurityService;
    }

    @Override
    protected void configure(HttpSecurity http) throws Exception {
        http
                .authorizeRequests() ExpressionUrlAuthorizationConfigurer<H>.ExpressionInterceptUrlRegistry
                .antMatchers( ...antPatterns: "/registration", "/").permitAll()
                .antMatchers( ...antPatterns: "/css/**").permitAll()
                .antMatchers( ...antPatterns: "/addProduct").hasRole("ADMIN")
                .anyRequest().authenticated()
                .and() HttpSecurity
                .formLogin() FormLoginConfigurer<HttpSecurity>
                .and() HttpSecurity
                .logout() LogoutConfigurer<HttpSecurity>
                .logoutRequestMatcher(new AntPathRequestMatcher( pattern: "/logout"))
                .logoutSuccessUrl("/home")
                .permitAll();
    }

    @Autowired
    public void globalConfig(AuthenticationManagerBuilder auth) throws Exception {
        auth.userDetailsService(userDetailsSecurityService)
                .passwordEncoder(bCryptPasswordEncoder());
    }

    @Bean
    public BCryptPasswordEncoder bCryptPasswordEncoder() { return new BCryptPasswordEncoder(); }
```

Thymeleaf Integrated

```html
<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org" xmlns:sec="http://www.thymeleaf.org/extras/spring-security">

<head>
    <link rel="stylesheet" type="text/css" th:href="@{/css/style.css}"/>
    <title>Home</title>
</head>
<body>
 <!-- Navigation-->
<ul>
    <li><a class="active" href="/home">Home</a></li>
    <li sec:authorize="hasRole('ROLE_ADMIN')"><a href="/addProduct">Add Product</a></li>
    <li sec:authorize="hasRole('ROLE_ADMIN')"><a href="/myProducts">My Products</a></li>
    <li sec:authorize="hasRole('ROLE_USER')"><a href="/myBids">My Bids</a></li>
    <li sec:authorize="isAnonymous()"><a href="/registration">Register</a></li>
    <li sec:authorize="isAnonymous()"><a  href="/login">Login</a></li>
    <li sec:authorize="isAuthenticated()"><a href="/logout">Log Out</a></li>
</ul>
<div class="container">
    <div th:each="product:${products}" class="card" >
        <a th:href="@{/product/{id}(id=${product.id})}">

            <img th:src="${'data:image/png;base64,'+product.image}" style="...">
            <h3 th:text="${product.name}"></h3>
            <p th:text="${product.startingPrice}"></p>
        </a>
    </div>
</div>
</body>
</html>
```

Database

Products

id	description	end_bidding_date	image	name	product_category	start_bidding_date	starting_price	user_id	winner_id
1		2020-12-24	BLOB	Samsung A50	0	2020-12-17	300	1	NULL
2		2020-12-25	BLOB	IPhone 12	0	2020-12-17	400	1	NULL
3		2020-12-24	BLOB	Nokia 3500	0	2020-12-17	15	1	NULL
4		2020-12-24	BLOB	Motorola V33	0	2020-12-17	50	1	NULL
5		2020-12-24	BLOB	Mercedes Benz E Class w211	1	2020-12-17	12000	1	NULL
6		2020-12-24	BLOB	Nissan GTR	1	2020-12-17	50000	1	NULL
7		2020-12-24	BLOB	Ford Ranger	1	2020-12-17	25000	1	NULL
8		2020-12-24	BLOB	UnderArmour Jacket	4	2020-12-17	180	1	NULL
9		2020-12-24	BLOB	UnderArmour Shoes	4	2020-12-17	540	1	NULL
10		2020-12-24	BLOB	UnderArmour Running Pants	4	2020-12-17	200	1	NULL
11		2020-12-24	BLOB	Miami Mansion	2	2020-12-17	2500000	1	NULL
12	Recover f...	2020-12-24	BLOB	UnderArmour BlackJacket	4	2020-12-17	250	1	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Users

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: IA

id	date_of_birth	email	first_name	last_name	password	role_id
1	2011-06-08	claudiumario216@yahoo.com	Colgiu	Claudiu	$2a$10$yRU2nzUWrm2FbCI7bYupNeXvy1xo.G...	1
2	2020-12-10	vasile.popescu@gmail.com	Vasile	Popescu	$2a$10$WsRagtXb2QvAl4qpfuDQXeaPdHHi51P...	2
*	NULL	NULL	NULL	NULL	NULL	NULL

Thank you for your attention !