

Kitchen Story-Backend Source Code

Config

CustomerUserDetails

```
package com.kitchenstory.config;

import java.util.Collection;

import java.util.HashSet;

import org.springframework.security.core.GrantedAuthority;

import org.springframework.security.core.authority.SimpleGrantedAuthority;

import org.springframework.security.core.userdetails.UserDetails;

import com.kitchenstory.entities.AdminCred;

@SuppressWarnings("serial")

public class CustomUserDetails implements UserDetails{

    private AdminCred adminCred;

    public CustomUserDetails(AdminCred adminCred) {

        this.adminCred = adminCred;

    }

    @Override

    public Collection<? extends GrantedAuthority> getAuthorities() {

        HashSet<SimpleGrantedAuthority> set = new HashSet<>();
```

```
        set.add(new SimpleGrantedAuthority(this.adminCred.getRole()));  
        return set;  
    }  
  
    @Override  
    public String getPassword() {  
        // TODO Auto-generated method stub  
        return this.adminCred.getPassword();  
    }  
  
    @Override  
    public String getUsername() {  
        // TODO Auto-generated method stub  
        return this.adminCred.getUsername();  
    }  
  
    @Override  
    public boolean isAccountNonExpired() {  
        // TODO Auto-generated method stub  
        return true;  
    }  
  
    @Override  
    public boolean isAccountNonLocked() {
```

```
        // TODO Auto-generated method stub  
        return true;  
    }  
}
```

```
@Override  
public boolean isCredentialsNonExpired() {  
    // TODO Auto-generated method stub  
    return true;  
}  
}
```

```
@Override  
public boolean isEnabled() {  
    // TODO Auto-generated method stub  
    return true;  
}  
}
```

```
}
```

JwtAuthEntryPoint

```
package com.kitchenstory.config;
```

```
import java.io.IOException;
```

```
import javax.servlet.ServletException;
```

```
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
import org.springframework.security.core.AuthenticationException;
import org.springframework.security.web.AuthenticationEntryPoint;
import org.springframework.stereotype.Component;
```

```
@Component
```

```
public class JwtAuthEntryPoint implements AuthenticationEntryPoint{
```

```
    @Override
```

```
        public void commence(HttpServletRequest request, HttpServletResponse
response,
```

```
                               AuthenticationException authException) throws IOException,
ServletException {
```

```
        response.sendError(401,"Unauthorized");
```

```
    }
```

```
}
```

```
JwtAuthFilter
```

```
package com.kitchenstory.config;
```

```
import java.io.IOException;
```

```
import javax.servlet.FilterChain;
```

```
import javax.servlet.ServletException;
```

```
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import  
org.springframework.security.authentication.UsernamePasswordAuthenticationToken;
```

```
import org.springframework.security.core.context.SecurityContextHolder;
```

```
import org.springframework.security.core.userdetails.UserDetails;
```

```
import  
org.springframework.security.web.authentication.WebAuthenticationDetailsSource  
;
```

```
import org.springframework.stereotype.Component;
```

```
import org.springframework.web.filter.OncePerRequestFilter;
```

```
import com.kitchenstory.jwtHelper.JwtUtil;
```

```
import com.kitchenstory.services.CustomUserDetailsService;
```

```
@Component
```

```
public class JwtAuthFilter extends OncePerRequestFilter {
```

@Autowired

CustomUserService customUserService;

@Autowired

private JwtUtil jwtUtil;

@Override

protected void doFilterInternal(HttpServletRequest request,
HttpServletResponse response, FilterChain filterChain)

throws ServletException, IOException {

String requestTokenHeader = request.getHeader("Authorization");

String username = null;

String jwtToken = null;

if(requestTokenHeader!=null &&
requestTokenHeader.startsWith("Bearer ")) {

jwtToken = requestTokenHeader.substring(7);

try {

username = this.jwtUtil.extractUsername(jwtToken);

} catch(Exception e) {

```

        e.printStackTrace();
    }

    UserDetails userDetails =
this.customUserDetailsService.loadUserByUsername(username);

    if(username!=null &&
SecurityContextHolder.getContext().getAuthentication()==null) {
        UsernamePasswordAuthenticationToken
usernamePasswordAuthenticationToken = new
UsernamePasswordAuthenticationToken(userDetails, null,
userDetails.getAuthorities());

        usernamePasswordAuthenticationToken.setDetails(new
WebAuthenticationDetailsSource().buildDetails(request));

SecurityContextHolder.getContext().setAuthentication(usernamePasswordAuthenti
cationToken);

    }else {
        System.out.println("Token is invalid!");
    }

}

filterChain.doFilter(request, response);

}

```

```
}
```

SecurityConfig

```
package com.kitchenstory.config;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.context.annotation.Bean;
```

```
import org.springframework.context.annotation.Configuration;
```

```
import org.springframework.security.authentication.AuthenticationManager;
```

```
import
```

```
org.springframework.security.config.annotation.authentication.builders.Authenticat  
ionManagerBuilder;
```

```
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
```

```
import
```

```
org.springframework.security.config.annotation.web.configuration.EnableWebSec  
urity;
```

```
import
```

```
org.springframework.security.config.annotation.web.configuration.WebSecurityCo  
nfigurerAdapter;
```

```
import org.springframework.security.config.http.SessionCreationPolicy;
```

```
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
```

```
import
```

```
org.springframework.security.web.authentication.UsernamePasswordAuthenticatio  
nFilter;
```

```
import com.kitchenstory.services.CustomUserDetailsService;
```


@SuppressWarnings("deprecation")

@Configuration

@EnableWebSecurity

public class SecurityConfig extends WebSecurityConfigurerAdapter{

 @Autowired

 private CustomUserDetailsService customUserDetailsService;

 @Autowired

 private JwtAuthEntryPoint entryPoint;

 @Autowired

 JwtAuthFilter authFilter;

 @Override

 protected void configure(HttpSecurity http) throws Exception {

 http

 .csrf()

 .disable()

 .cors().and()

 .authorizeRequests()

```

        .antMatchers("/token").permitAll()
        .antMatchers("/changePassword").permitAll()
        .antMatchers("/getProduct/**").permitAll()
        .antMatchers("/getItem/**").permitAll()
        .antMatchers("/order").permitAll()
        .antMatchers("/getOrder/**").permitAll()
        .anyRequest().authenticated()
        .and().sessionManagement().sessionCreationPolicy(SessionCre
ationPolicy.STATELESS)
        .and().exceptionHandling().authenticationEntryPoint(entryPoint
);

        http.addFilterBefore(authFilter,
UsernamePasswordAuthenticationFilter.class);

    }

```

```

@Override
protected void configure(AuthenticationManagerBuilder auth) throws
Exception {

    auth.userDetailsService(this.customUserDetailService).passwordEncoder(passwordEncoder());

}

```

@Bean

```
public BCryptPasswordEncoder passwordEncoder() {  
    return new BCryptPasswordEncoder(10);  
}
```

@Bean

```
public AuthenticationManager authenticationManagerBean() throws  
Exception {  
    return super.authenticationManagerBean();  
}
```

```
}
```

Controller

AdminLoginController

```
package com.kitchenstory.controller;
```

```
import java.util.List;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.http.HttpStatus;
```

```
import org.springframework.http.ResponseEntity;
```

```
import org.springframework.web.bind.annotation.CrossOrigin;
```

```
import org.springframework.web.bind.annotation.DeleteMapping;
```

```
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;
```

```
import com.kitchenstory.entities.Product;
import com.kitchenstory.services.ProductService;
```

```
@RestController
```

```
@CrossOrigin(origins = "*")
```

```
public class AdminLoginController {
```

```
    @Autowired
```

```
    private ProductService prodService;
```

```
    @PostMapping("/saveItem")
```

```
    public ResponseEntity<?> saveItem(@RequestBody Product product) {
```

```
        this.prodService.addProduct(product);
```

```
        return ResponseEntity.status(HttpStatus.CREATED).build();
```

```
    }
```

```

@GetMapping("/getItems")
public ResponseEntity<?> getItems() {
    List<Product> allItems = this.prodService.showProducts();
    if(allItems.isEmpty()) {
        return
ResponseEntity.status(HttpStatus.NOT_FOUND).build();
    }else {
        return ResponseEntity.ok(allItems);
    }
}

@DeleteMapping("/deleteItem/{name}")
public ResponseEntity<?> deleteItem(@PathVariable("name") String name)
{
    try {
        this.prodService.deleteProduct(name);
        return ResponseEntity.status(HttpStatus.OK).build();

    }catch(Exception e) {
        System.out.println("Empty Result Data Access Exception.");
        return
ResponseEntity.status(HttpStatus.INTERNAL_SERVER_ERROR).build();
    }
}

```

```

    @PutMapping("/updateItem/{name}")

    public ResponseEntity<?> updateItem(@PathVariable("name") String
name,@RequestBody Product product) {

        try {

            this.prodService.updateProduct(name, product);

            return ResponseEntity.status(HttpStatus.OK).build();

        }catch(Exception e) {

            System.out.println("Empty Result Data Access Exception.");

            return
ResponseEntity.status(HttpStatus.INTERNAL_SERVER_ERROR).build();

        }

    }

    @GetMapping("/getItem/{name}")

    public ResponseEntity<?> getItem(@PathVariable("name") String name){

        Product product = this.prodService.getProduct(name);

        if(product!=null) {

            return ResponseEntity.ok(product);

        }else {

            return
ResponseEntity.status(HttpStatus.NOT_FOUND).build();

        }

    }

```

```
}
```

```
}
```

JwtController

```
package com.kitchenstory.controller;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.http.ResponseEntity;
```

```
import org.springframework.security.authentication.AuthenticationManager;
```

```
import
```

```
org.springframework.security.authentication.UsernamePasswordAuthenticationToken;
```

```
import org.springframework.security.core.userdetails.UserDetails;
```

```
import
```

```
org.springframework.security.core.userdetails.UsernameNotFoundException;
```

```
import org.springframework.web.bind.annotation.CrossOrigin;
```

```
import org.springframework.web.bind.annotation.RequestBody;
```

```
import org.springframework.web.bind.annotation.RequestMapping;
```

```
import org.springframework.web.bind.annotation.RequestMethod;
```

```
import org.springframework.web.bind.annotation.RestController;
```

```
import com.kitchenstory.entities.JwtRequest;
```

```
import com.kitchenstory.entities.JwtResponse;
```

```
import com.kitchenstory.jwtHelper.JwtUtil;
```

```
import com.kitchenstory.services.CustomUserDetailsService;
```

@RestController

@CrossOrigin(origins = "*")

public class JwtController {

 @Autowired

 AuthenticationManager authenticationManager;

 @Autowired

 CustomUserDetailsService customUserDetailsService;

 @Autowired

 JwtUtil jwtUtil;

 @RequestMapping(value="/token",method = RequestMethod.POST)

 public ResponseEntity<?> generateToken(@RequestBody JwtRequest
jwtRequest){

 System.out.println(jwtRequest);

 try {

 this.authenticationManager.authenticate(new
UsernamePasswordAuthenticationToken(jwtRequest.getUsername(),
jwtRequest.getPassword()));


```

        } catch (UsernameNotFoundException e) {
            e.printStackTrace();
        }

        UserDetails userDetails =
this.customUserDetailsService.loadUserByUsername(jwtRequest.getUsername());

        String token = this.jwtUtil.generateToken(userDetails);

        System.out.println("Token: "+token);

        return ResponseEntity.ok(new JwtResponse(token));
    }

}

```

SignInController

```

package com.kitchenstory.controller;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.web.bind.annotation.CrossOrigin;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;

```

```
import com.kitchenstory.entities.AdminCred;
import com.kitchenstory.services.AdminService;
```

```
@RestController
```

```
@CrossOrigin(origins = "*")
```

```
public class SignInController {
```

```
    @Autowired
```

```
    private AdminService adminService;
```

```
    @Autowired
```

```
    private BCryptPasswordEncoder passwordEncoder;
```

```
    @PutMapping("/changePassword")
```

```
    public ResponseEntity<?> setPassword(@RequestBody AdminCred admin)
    {
```

```
        AdminCred adm =
        this.adminService.findAdmin(admin.getUsername());
```

```
        if(adm == null) {
```

```
            return
            ResponseEntity.status(HttpStatus.NOT_FOUND).build();
```

```
        }
```

```
        else {
```

```
        adm.setPassword(this.passwordEncoder.encode(admin.getPassword()));

        this.adminService.saveCred(adm);

        return ResponseEntity.ok(adm);

    }

}
```

UserController

```
package com.kitchenstory.controller;

import java.text.DateFormat;
import java.util.Calendar;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.CrossOrigin;
import org.springframework.web.bind.annotation.DeleteMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;
```

```
import com.kitchenstory.entities.Order;
import com.kitchenstory.entities.Product;
import com.kitchenstory.services.OrderService;
import com.kitchenstory.services.ProductService;

@RestController
@CrossOrigin(origins = "*")
public class UserController {

    @Autowired
    private OrderService service;

    @Autowired
    private ProductService pservice;

    @PostMapping("/order")
    public ResponseEntity<?> createOrder(@RequestBody Order order){
        DateFormat df = DateFormat.getDateInstance();
        Calendar cl = Calendar.getInstance();
        String od = df.format(cl.getTime());
        order.setOd(od);
        this.service.saveOrder(order);
        return ResponseEntity.status(HttpStatus.CREATED).build();
    }
}
```

```

    }

    @GetMapping("/getOrders")
    public ResponseEntity<?> getAllOrders() {
        List<Order> orders = this.service.getOrders();
        if(orders.isEmpty()) {
            return
ResponseEntity.status(HttpStatus.NOT_FOUND).build();
        }
        else {
            return ResponseEntity.ok(orders);
        }
    }

    @DeleteMapping("/delete/{id}")
    public ResponseEntity<?> deleteOrder(@PathVariable("id") String id){
        this.service.deleteOrder(id);
        return ResponseEntity.status(HttpStatus.OK).build();
    }

    @GetMapping("/getProduct/{name}")
    public ResponseEntity<?> getProducts(@PathVariable("name") String
name){
        List<Product> products = this.pservice.getAllByName(name);
        if(products.isEmpty()) {

```

```

        return
        ResponseEntity.status(HttpStatus.NOT_FOUND).build();
    }else {
        return ResponseEntity.ok(products);
    }
}

```

```

@GetMapping("/getOrder/{id}")
public ResponseEntity<?> getOrder(@PathVariable("id") String id){
    Order order = this.service.getOrder(id);
    if(order==null) {
        return
        ResponseEntity.status(HttpStatus.NOT_FOUND).build();
    }else {
        return ResponseEntity.ok(order);
    }
}
}

```

Entities

AdminCred

```
package com.kitchenstory.entities;
```

```
import org.springframework.data.annotation.Id;
import org.springframework.data.mongodb.core.mapping.Document;
```

```
@Document(collection = "AdminCred")
```

```
public class AdminCred {
```

```
    @Id
```

```
    private String username;
```

```
    private String password;
```

```
    private String role;
```

```
    public AdminCred() {
```

```
        super();
```

```
        // TODO Auto-generated constructor stub
```

```
    }
```

```
    public AdminCred(String username, String password, String role) {
```

```
        super();
```

```
        this.username = username;
```

```
        this.password = password;
```

```
        this.role = role;
```

```
    }
```

```
    public String getUsername() {
```

```
        return username;
```

```
    }
```

```
    public void setUsername(String username) {  
        this.username = username;  
    }  
    public String getPassword() {  
        return password;  
    }  
    public void setPassword(String password) {  
        this.password = password;  
    }  
    public String getRole() {  
        return role;  
    }  
    public void setRole(String role) {  
        this.role = role;  
    }  
  
}
```

JwtRequest

```
package com.kitchenstory.entities;
```

```
public class JwtRequest {
```



```
String username;

String password;

public JwtRequest() {

}

public JwtRequest(String username, String password) {

    super();

    this.username = username;

    this.password = password;

}

public String getUsername() {

    return username;

}

public void setUsername(String username) {

    this.username = username;

}

public String getPassword() {

    return password;

}

public void setPassword(String password) {

    this.password = password;

}

@Override
```

```
    public String toString() {  
        return "JwtRequest [username=" + username + ", password=" +  
password + "];"  
    }  
  
}
```

```
}
```

JwtResponse

```
package com.kitchenstory.entities;
```

```
public class JwtResponse {
```

```
    String token;
```

```
    public JwtResponse() {
```

```
        super();
```

```
    }
```

```
    public JwtResponse(String token) {
```

```
        super();
```

```
        this.token = token;
```

```
    }
```

```
public String getToken() {  
    return token;  
}
```

```
public void setToken(String token) {  
    this.token = token;  
}
```

```
}
```

Order

```
package com.kitchenstory.entities;
```

```
import org.springframework.data.annotation.Id;
```

```
import org.springframework.data.mongodb.core.mapping.DBRef;
```

```
import org.springframework.data.mongodb.core.mapping.Document;
```

```
@Document(collection = "Orders")
```

```
public class Order {
```

@Id

private String id;

private String name;

private String address;

private String state;

private String contact;

private String od;

private int quantity;

private String payment;

@DBRef

private Product product;

public Order() {

super();

// TODO Auto-generated constructor stub

}

public Order(String id, String name, String address, String state, String
contact, String od, int quantity,

String payment, Product product) {

super();

this.id = id;

```
        this.name = name;

        this.address = address;

        this.state = state;

        this.contact = contact;

        this.od = od;

        this.quantity = quantity;

        this.payment = payment;

        this.product = product;
    }

    public String getId() {
        return id;
    }

    public void setId(String id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getAddress() {
        return address;
```

```
}  
  
public void setAddress(String address) {  
    this.address = address;  
}  
  
public String getState() {  
    return state;  
}  
  
public void setState(String state) {  
    this.state = state;  
}  
  
public String getContact() {  
    return contact;  
}  
  
public void setContact(String contact) {  
    this.contact = contact;  
}  
  
public String getOd() {  
    return od;  
}  
  
public void setOd(String od) {  
    this.od = od;  
}  
  
public int getQuantity() {
```

```
        return quantity;
    }

    public void setQuantity(int quantity) {
        this.quantity = quantity;
    }

    public String getPayment() {
        return payment;
    }

    public void setPayment(String payment) {
        this.payment = payment;
    }

    public Product getProduct() {
        return product;
    }

    public void setProduct(Product product) {
        this.product = product;
    }
}
```

Product

```
package com.kitchenstory.entities;
```

```
import org.springframework.data.annotation.Id;
import org.springframework.data.mongodb.core.mapping.DBRef;
import org.springframework.data.mongodb.core.mapping.Document;
```

```
@Document(collection = "Orders")
```

```
public class Order {
```

```
    @Id
```

```
    private String id;
```

```
        private String name;
```

```
        private String address;
```

```
        private String state;
```

```
        private String contact;
```

```
        private String od;
```

```
        private int quantity;
```

```
        private String payment;
```

```
        @DBRef
```

```
        private Product product;
```

```
        public Order() {
```



```
        super();

        // TODO Auto-generated constructor stub
    }

    public Order(String id, String name, String address, String state, String
contact, String od, int quantity,

        String payment, Product product) {

        super();

        this.id = id;

        this.name = name;

        this.address = address;

        this.state = state;

        this.contact = contact;

        this.od = od;

        this.quantity = quantity;

        this.payment = payment;

        this.product = product;
    }

    public String getId() {

        return id;
    }

    public void setId(String id) {

        this.id = id;
    }
}
```

```
public String getName() {  
    return name;  
}  
  
public void setName(String name) {  
    this.name = name;  
}  
  
public String getAddress() {  
    return address;  
}  
  
public void setAddress(String address) {  
    this.address = address;  
}  
  
public String getState() {  
    return state;  
}  
  
public void setState(String state) {  
    this.state = state;  
}  
  
public String getContact() {  
    return contact;  
}  
  
public void setContact(String contact) {  
    this.contact = contact;  
}
```

```
}  
  
public String getOd() {  
    return od;  
}  
  
public void setOd(String od) {  
    this.od = od;  
}  
  
public int getQuantity() {  
    return quantity;  
}  
  
public void setQuantity(int quantity) {  
    this.quantity = quantity;  
}  
  
public String getPayment() {  
    return payment;  
}  
  
public void setPayment(String payment) {  
    this.payment = payment;  
}  
  
public Product getProduct() {  
    return product;  
}  
  
public void setProduct(Product product) {
```

```
        this.product = product;
    }
}
```

Repo

AdminCredRepo

```
package com.kitchenstory.repo;
```

```
import org.springframework.data.mongodb.repository.MongoRepository;
```

```
import org.springframework.stereotype.Repository;
```

```
import com.kitchenstory.entities.AdminCred;
```

```
@Repository
```

```
public interface AdminCredRepo extends MongoRepository<AdminCred, String>
{
```

```
    public AdminCred findByUsername(String username);
```

```
}
```

OrderRepo

```
package com.kitchenstory.repo;
```

```
import org.springframework.data.mongodb.repository.MongoRepository;
```

```
import org.springframework.stereotype.Repository;
```

```
import com.kitchenstory.entities.Order;
```

```
@Repository
```

```
public interface OrderRepo extends MongoRepository<Order,String>{
```

```
}
```

ProductRepo

```
package com.kitchenstory.repo;
```

```
import org.springframework.data.mongodb.repository.MongoRepository;
```

```
import org.springframework.stereotype.Repository;
```

```
import com.kitchenstory.entities.Product;
```

```
@Repository
```

```
public interface ProductRepo extends MongoRepository<Product, String>{
```

```
    public Product findByName(String name);
```

```
    public Iterable<Product> findByNameContainingIgnoreCase(String name);
```

```
}
```

Services

AdminService

```
package com.kitchenstory.services;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Service;
```

```
import com.kitchenstory.entities.AdminCred;
```

```
import com.kitchenstory.repo.AdminCredRepo;
```

```
@Service
```

```
public class AdminService {
```

```
    @Autowired
```

```
    private AdminCredRepo adminRepo;
```

```
    public void saveCred(AdminCred adminCred) {
```

```
        this.adminRepo.save(adminCred);
```

```
    }
```

```
    public AdminCred findAdmin(String username) {
```

```
        AdminCred admin = this.adminRepo.findByUsername(username);
```

```
        return admin;
```

```
    }
```

```
}
```

CustomUserService

```
package com.kitchenstory.services;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.security.core.userdetails.UserDetails;
```

```
import org.springframework.security.core.userdetails.UserDetailsService;
```

```
import
```

```
org.springframework.security.core.userdetails.UsernameNotFoundException;
```

```
import org.springframework.stereotype.Service;
```

```
import com.kitchenstory.config.CustomUserDetails;
```

```
import com.kitchenstory.entities.AdminCred;
```

```
import com.kitchenstory.repo.AdminCredRepo;
```

```
@Service
```

```
public class CustomUserDetailService implements UserDetailsService{
```

```
    @Autowired
```

```
    private AdminCredRepo credRepo;
```

```
    @Override
```

```
    public UserDetails loadUserByUsername(String username) throws  
    UsernameNotFoundException {
```

```
        AdminCred admin = this.credRepo.findByUsername(username);
```

```
        if(admin == null) {  
            throw new UsernameNotFoundException("NO USER  
FOUND!");  
        }  
        return new CustomUserDetails(admin);  
    }  
  
}
```

OrderService

```
package com.kitchenstory.services;
```

```
import java.util.List;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Service;
```

```
import com.kitchenstory.entities.Order;
```

```
import com.kitchenstory.repo.OrderRepo;
```

```
@Service
```

```
public class OrderService {
```



```
@Autowired
private OrderRepo orepo;

public void saveOrder(Order order) {
    this.orepo.save(order);
}

public List<Order> getOrders(){
    return this.orepo.findAll();
}

public void deleteOrder(String id) {
    this.orepo.deleteById(id);
}

public Order getOrder(String id) {
    return this.orepo.findById(id).get();
}

}
```

ProductService

```
package com.kitchenstory.services;
```

```
import java.util.List;
```

```
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.data.util.Streamable;
import org.springframework.stereotype.Service;
```

```
import com.kitchenstory.entities.Product;
import com.kitchenstory.repo.ProductRepo;
```

```
@Service
```

```
public class ProductService {
```

```
    @Autowired
```

```
    private ProductRepo prodRepo;
```

```
    public void addProduct(Product product) {
```

```
        this.prodRepo.save(product);
```

```
    }
```

```
    public List<Product> showProducts(){
```

```
        return this.prodRepo.findAll();
```

```
    }
```

```
    public void deleteProduct(String name) {
```

```
        this.prodRepo.deleteById(name);
```

```
    }
```

```

public void updateProduct(String name,Product updateProduct) {
    Product product = this.prodRepo.findByName(name);
    product.setName(updateProduct.getName());
    product.setPid(updateProduct.getPid());
    product.setCategory(updateProduct.getCategory());
    product.setBrand(updateProduct.getBrand());
    product.setIngredient(updateProduct.getIngredient());
    product.setOrigin(updateProduct.getOrigin());
    product.setPrice(updateProduct.getPrice());
    product.setQuantity(updateProduct.getQuantity());
    this.prodRepo.save(product);
}

public Product getProduct(String name) {
    return this.prodRepo.findByName(name);
}

public List<Product> getAllByName(String name){
    Iterable<Product> products =
this.prodRepo.findByNameContainingIgnoreCase(name);
    List<Product> allProducts = Streamable.of(products).toList();
    return allProducts;
}

```

}