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```
Source Code :-
Com.to.resources:- (Package)
1. AdminLoginResource.java
package com.to.resources;
import java.util.Date;
import java.util.HashMap;
import java.util.Map;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.Constants;
import com.to.entities.AdminLogin;
import com.to.entities.User;
import com.to.services.AdminLoginService;
import io.jsonwebtoken.Jwts;
import io.jsonwebtoken.SignatureAlgorithm;
@RestController
@RequestMapping("/api/admin")
public class AdminLoginResource {
       @Autowired
       AdminLoginService adminLoginService;
       @PostMapping("/login")
       public ResponseEntity<Map<String, String>> loginAdmin(@RequestBody Map<String, Object>
adminMap) {
               String adminId = (String) adminMap.get("adminId");
               String password = (String) adminMap.get("password");
               // checking the admin id and password is correct or not
               AdminLogin adminLogin = adminLoginService.adminLogin(adminId, password);
```

```
return new ResponseEntity<>(generateJWTToken(adminLogin), HttpStatus.OK);
       }
       @PostMapping("/changeAdminPass")
       public Map<String, String> changeAdminPass(@RequestBody Map<String, Object> adminMap) {
               String adminId = (String) adminMap.get("adminId");
               String password = (String) adminMap.get("password");
               String newPass = (String) adminMap.get("newPass");
               // checking the admin id and password is correct or not
               adminLoginService.adminPasswordChange(adminId, password, newPass);
               Map<String, String> map = new HashMap<>();
               map.put("Message", "Password Changed Successfully Login with new Password " + adminId);
               return map;
       }
       // methodn for generating the tocken
       private Map<String, String> generateJWTToken(AdminLogin adminLogin) {
               // getting the current time in milisecods
               long timestamp = System.currentTimeMillis();
               String token = Jwts.builder().signWith(SignatureAlgorithm.HS256,
Constants.API SECRET KEY STRING)
                              .setIssuedAt(new Date(timestamp)).setExpiration(new Date(timestamp +
Constants.TOKEN_VALIDITY))
                              .claim("adminId", adminLogin.getAdminId()).compact();
               Map<String, String> map = new HashMap<>();
               map.put("Succes", "Login Successfull Admin Use the given token");
               map.put("token", token);
               return map;
       }
}
2. AdminCategoryResource.java
package com.to.resources;
import java.util.HashMap;
import java.util.List;
import java.util.Map;
import javax.servlet.http.HttpServletRequest;
```

```
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.stereotype.Repository;
import org.springframework.web.bind.annotation.DeleteMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PatchMapping;
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.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.entities.Category;
import com.to.entities.Product;
import com.to.services.CategoryService;
import com.to.services.ProductServices;
@RestController
@RequestMapping("/api/admin/category")
public class AdminCategoryResource {
       @Autowired
       CategoryService categoryService;
       // controller for getting the all category details
       @GetMapping("")
       public ResponseEntity<List<Category>> getAllCategories(HttpServletRequest request) {
               // getting the admin id
               String adminId = (String) request.getAttribute("adminId");
               List<Category> categories = categoryService.getAllCategories();
               System.out.println(categories);
               return new ResponseEntity<>(categories, HttpStatus.OK);
       }
       // controller for getting the specific category details
       @GetMapping("/{catId}")
       public ResponseEntity<Category> getCategoryById(HttpServletRequest request,
@PathVariable("catId") Integer catId) {
               // getting the admin Id
               String adminId = (String) request.getAttribute("adminId");
               // searching the category
               Category category = categoryService.getCategoryById(catId);
               System.out.println("get category by id called" + category + " " + catld);
```

```
return new ResponseEntity<>(category, HttpStatus.OK);
}
// controller for deleting the specific category details
@DeleteMapping("/delete/{catId}")
public ResponseEntity<Map<String, String>> deleteCategoryById(HttpServletRequest request,
                @PathVariable("catId") Integer catId) {
        // getting the admin Id
        String adminId = (String) request.getAttribute("adminId");
        // deleting the category
        categoryService.deleteCategory(catId);
        Map<String, String> map = new HashMap<>();
        map.put("Success", "Category Id: " + catId + " Deleted Successfully");
        return new ResponseEntity<>(map, HttpStatus.OK);
}
// controller for adding the new category details
@PostMapping("")
public ResponseEntity<Map<String, String>> addCategory(HttpServletRequest request,
                @RequestBody Map<String, Object> catMap) {
        // getting the admin id from tocken provided
        String adminId = (String) request.getAttribute("adminId");
        System.out.println("Control is here");
        // adding category details into the bean
        Category category = new Category();
        category.setCatName((String) catMap.get("cname"));
        // calling the service method to save the data
        categoryService.createCategory(category.getCatName());
        System.out.println("Control is here aftefr product");
        Map<String, String> map = new HashMap<>();
        map.put("msg", "Category Details added");
        return new ResponseEntity<>(map, HttpStatus.OK);
}
// controller for updating existing category details
@PatchMapping("")
public ResponseEntity<Map<String, String>> updateCategory(HttpServletRequest request,
                @RequestBody Map<String, Object> catMap) {
```

```
// getting the admin id from tocken provided
               String adminId = (String) request.getAttribute("adminId");
               System.out.println("Control is here");
               // adding category details into the bean
               Category category = new Category();
               category.setCatId(Integer.parseInt((String) catMap.get("cid")));
               category.setCatName((String) catMap.get("cname"));
               // calling the service method to save the data
               categoryService.updateCategory(category.getCatId(), category.getCatName());
               Map<String, String> map = new HashMap<>();
               map.put("msg", "Category Details updates Successfully");
               return new ResponseEntity<>(map, HttpStatus.OK);
       }
}
3. AdminProductResource.java
package com.to.resources;
import java.util.HashMap;
import java.util.List;
import java.util.Map;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
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.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.services.ProductServices;
@RestController
@RequestMapping("/api/admin/product")
public class AdminProductResource {
       @Autowired
       ProductServices productServices;
```

// controller for getting the all product details

```
@GetMapping("")
       public ResponseEntity<List<Product>> getAllProducts(HttpServletRequest request) {
               String adminId = (String) request.getAttribute("adminId");
               List<Product> products = productServices.getAllProductDetails();
               System.out.println(products);
               return new ResponseEntity<>(products, HttpStatus.OK);
       }
       // controller for getting the specific product details
        @GetMapping("/{pld}")
       public ResponseEntity<Product> getProductById(HttpServletRequest request, @PathVariable("pId")
Integer pld) {
               // getting the admin Id
               String adminId = (String) request.getAttribute("adminId");
               // searching the product
               Product products = productServices.getProductById(pId);
               System.out.println("get product by id called" + products + " " + pld);
               return new ResponseEntity<>(products, HttpStatus.OK);
       }
       // controller for deleting the specific product details
        @GetMapping("/delete/{pld}")
       public ResponseEntity<Map<String, String>> deleteProductById(HttpServletRequest request,
                       @PathVariable("pld") Integer pld) {
               // getting the admin Id
               String adminId = (String) request.getAttribute("adminId");
               // deleting the product
               productServices.deleteProduct(pld);
               Map<String, String> map = new HashMap<>();
               map.put("Success", "Product Id : " + pld + " Deleted Successfully");
               return new ResponseEntity<>(map, HttpStatus.OK);
       }
       // controller for adding the new product details
        @PostMapping("")
       public ResponseEntity<Map<String, String>> addProduct(HttpServletRequest request,
                       @RequestBody Map<String, Object> productMap) {
               // getting the admin add from tocken provide
               String adminId = (String) request.getAttribute("adminId");
               System.out.println("Control is here");
               // adding product details into the bean
               Product product = new Product();
               prodcut.setPname((String) productMap.get("pname"));
               prodcut.setPdescription((String) productMap.get("pdescription"));
               prodcut.setPrice(Integer.parseInt(productMap.get("price").toString()));
               prodcut.setGender((String) productMap.get("gender"));
               prodcut.setCid(Integer.parseInt(productMap.get("cid").toString()));
               // calling the service method to save the data
```

```
productServices.createNewProduct(prodcut);
               System.out.println("Control is here aftefr product");
               Map<String, String> map = new HashMap<>();
               map.put("msg", "Product Details added");
               return new ResponseEntity<>(map, HttpStatus.OK);
       }
}
4. AdminReportsResource:-
package com.to.resources;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.entities.Product;
import com.to.entities.User;
import com.to.services.AdminReportService;
import com.to.services.ProductServices;
@RestController
@RequestMapping("/api/admin/report")
public class AdminReportsResource {
       @Autowired
       AdminReportService adminReportService;
       // controller for getting the all product details
       @GetMapping("/loggedUsers")
       public ResponseEntity<List<User>> getAllUsers(HttpServletRequest request) {
               //getting the admin od from tocken
               String adminId = (String) request.getAttribute("adminId");
               List<User> users = adminReportService.getAllLoggedUsersDetails();
               System.out.println(users);
               return new ResponseEntity<>(users, HttpStatus.OK);
       }
}
```

5. UserResource.java:-

```
package com.to.resources;
import java.util.Date;
import java.util.HashMap;
import java.util.Map;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.Constants;
import com.to.entities.User;
import com.to.services.UserService;
import io.jsonwebtoken.Jwts;
import io.jsonwebtoken.SignatureAlgorithm;
@RestController
@RequestMapping("/api/users")
public class UserResource {
     @Autowired
     UserService userService;
     @PostMapping("/register")
     public ResponseEntity<Map<String, String>> registerUser(@RequestBody
Map<String, Object> userMap) {
          String firstName = (String) userMap.get("fname");
          String lastName = (String) userMap.get("lname");
          String email = (String) userMap.get("email");
          String password = (String) userMap.get("password");
          User user = userService.registerUser(firstName, lastName, email,
password);
           return new ResponseEntity<>(generateJWTToken(user),
HttpStatus.OK);
     }
     @PostMapping("/loginuser")
     public ResponseEntity<Map<String, String>> loginUser(@RequestBody
Map<String, Object> userMap) {
          String emailString = (String) userMap.get("email");
          String passwordString = (String) userMap.get("password");
          // checking the user id and password is correct or not
          User user = userService.validateUser(emailString,
passwordString);
```

```
return new ResponseEntity<>(generateJWTToken(user),
HttpStatus.OK);
      }
      // methodn for generating the tocken
      private Map<String, String> generateJWTToken(User user) {
            // getting the current time in milisecods
            long timestamp = System.currentTimeMillis();
            String token = Jwts.builder().signWith(SignatureAlgorithm.HS256,
Constants.API SECRET KEY STRING)
                          .setIssuedAt(new Date(timestamp)).setExpiration(new
Date(timestamp + Constants.TOKEN VALIDITY))
                          .claim("userId", user.getUserId()).claim("email",
user.getEmail()).claim("firstName", user.getFname())
                          .claim("lastName", user.getLname()).compact();
            Map<String, String> map = new HashMap<>();
            map.put("token", token);
             return map;
      }
}
6. UserPurchaseResource.java
package com.to.resources;
import java.util.HashMap;
import java.util.List;
import java.util.Map;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
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.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.services.UserPurchaseService;
```

```
@RestController
@RequestMapping("/api/userPurchase")
public class UserPurchaseResource {
       @Autowired
       UserPurchaseService userPurchaseService;
       @GetMapping("")
       public ResponseEntity<List<UserPurchase>> getAllPurchase(HttpServletRequest request) {
               int userId = (Integer) request.getAttribute("userId");
               List<UserPurchase> userPurchases = userPurchaseService.fetchAllPurchases(userId);
               System.out.println(userPurchases);
               return new ResponseEntity<>(userPurchases, HttpStatus.OK);
       }
       @GetMapping("/products/{catId}")
       public ResponseEntity<List<Product>> getAllProductCategorywise(HttpServletRequest request,
                       @PathVariable("catId") Integer catId) {
               int userId = (Integer) request.getAttribute("userId");
               List<Product> products = userPurchaseService.getAllProductByCategory(catId);
               System.out.println(products);
               return new ResponseEntity<>(products, HttpStatus.OK);
       }
       // controller for adding the purchase details
       @PostMapping("")
       public ResponseEntity<Map<String, String>> addUserPurchase(HttpServletRequest request,
                       @RequestBody Map<String, Object> userMap) {
               Integer userId = (Integer) request.getAttribute("userId");
               System.out.println("Control is here");
               UserPurchase userPurchase = new UserPurchase();
               userPurchase.setProduct_id(Integer.parseInt(userMap.get("product_id").toString()));
               userPurchase.setPdate((String) userMap.get("pdate"));
               userPurchase.setCat_id(Integer.parseInt(userMap.get("cat_id").toString()));
               userPurchase.setQuantity(Integer.parseInt(userMap.get("quantity").toString()));
               userPurchase.setPrice(Integer.parseInt(userMap.get("price").toString()));
               userPurchase.setTotal price(Integer.parseInt(userMap.get("total price").toString()));
               userPurchase.setUser_id(userId);
               System.out.println("Control is here before add purchase");
               userPurchaseService.addPurchase(userPurchase);
               System.out.println("Control is here aftefr add purchase");
               Map<String, String> map = new HashMap<>();
               map.put("msg", "Purchase Details added" + userPurchase);
               return new ResponseEntity<>(map, HttpStatus.OK);
```

.....

Com.to.filters:- (Package)

1. AdminAuthFilter.java

```
package com.to.filters;
import java.io.IOException;
import javax.servlet.FilterChain;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.springframework.http.HttpStatus;
import org.springframework.web.filter.GenericFilterBean;
import com.to.Constants;
import io.jsonwebtoken.Claims;
import io.jsonwebtoken.Jwts;
public class AdminAuthFilter extends GenericFilterBean {
        @Override
       public void doFilter(ServletRequest servletRequest, ServletResponse servletResponse, FilterChain
filterChain)
                       throws IOException, ServletException {
               HttpServletRequest httpRequest = (HttpServletRequest) servletRequest;
               HttpServletResponse httpResponse = (HttpServletResponse) servletResponse;
               // getting the bearer string
               String authHeader = httpRequest.getHeader("Authorization");
               // checking the header is null or not
```

```
System.out.println("Auth header string " + authHeader);
                if (authHeader != null) {
                        // split the string into the array
                        String[] authHeaderArr = authHeader.split("Bearer ");
                        if (authHeaderArr.length > 1 && authHeaderArr[1] != null) {
                                String token = authHeaderArr[1];
                                try {
                                        Claims claims =
{\tt Jwts.parser().setSigningKey(Constants.API\_SECRET\_KEY\_STRING).parseClaimsJws(token)}
                                                        .getBody();
                                        httpRequest.setAttribute("adminId",claims.get("adminId").toString());
                                        System.out.println("Admin Filter: "+claims.get("adminId").toString());
                                } catch (Exception e) {
                                        httpResponse.sendError(HttpStatus.FORBIDDEN.value(),
"Invalid/Expired Admin token reason:"+e.getMessage());
                                        return;
                                }
                        else {
                                httpResponse.sendError(HttpStatus.FORBIDDEN.value(), "Authorization
tocken must be Bearer[token] in admin token");
                                return;
                        }
                }else {
                        httpResponse.sendError(HttpStatus.FORBIDDEN.value(), "Authorization token must be
provided for admin");
                        return;
                //If all is set then continue the process
                filterChain.doFilter(servletRequest, servletResponse);
       }
2. AuthFilter.java
package com.to.filters;
import java.io.IOException;
import javax.servlet.FilterChain;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
```

```
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.springframework.http.HttpStatus;
import org.springframework.web.filter.GenericFilterBean;
import com.to.Constants;
import io.jsonwebtoken.Claims;
import io.jsonwebtoken.Jwts;
public class AuthFilter extends GenericFilterBean {
        @Override
       public void doFilter(ServletRequest servletRequest, ServletResponse servletResponse, FilterChain
filterChain)
                       throws IOException, ServletException {
               HttpServletRequest httpRequest = (HttpServletRequest) servletRequest;
               HttpServletResponse httpResponse = (HttpServletResponse) servletResponse;
               // getting the bearer string
               String authHeader = httpRequest.getHeader("Authorization");
               // checking the header is null or not
               System.out.println("Auth header string " + authHeader);
               if (authHeader != null) {
                       // split the string into the array
                       String[] authHeaderArr = authHeader.split("Bearer");
                       if (authHeaderArr.length > 1 && authHeaderArr[1] != null) {
                               String token = authHeaderArr[1];
                               try {
                                       System.out.println("filter Control here");
                                       Claims claims =
Jwts.parser().setSigningKey(Constants.API SECRET KEY STRING).parseClaimsJws(token)
                                                       .getBody();
                                       // parsing the userId into Integer and setting to http request object
                                       httpRequest.setAttribute("userId",
Integer.parseInt(claims.get("userId").toString()));
                               } catch (Exception e) {
                                       httpResponse.sendError(HttpStatus.FORBIDDEN.value(),
"Invalid/Expired token" + e.getMessage());
                                       return;
                               }
                       } else {
                               httpResponse.sendError(HttpStatus.FORBIDDEN.value(), "Authorization
tocken must be Bearer[token]");
                               return;
```

```
} else {
          httpResponse.sendError(HttpStatus.FORBIDDEN.value(), "Authorization token must be
provided");
          return;
}

// If all is set then continue the process
filterChain.doFilter(servletRequest, servletResponse);
}
```

Com.to.exceptions:- (package)

1. EtAuthException.java

```
package com.to.exceptions;
import org.springframework.http.HttpStatus;
import org.springframework.web.bind.annotation.ResponseStatus;
@ResponseStatus(HttpStatus.UNAUTHORIZED)
public class EtAuthException extends RuntimeException{
          public EtAuthException(String message) {
                super(message);
          }
}
```

2. EtBadRequestException.java

package com.to.exceptions;

import org.springframework.http.HttpStatus; import org.springframework.web.bind.annotation.ResponseStatus;

@ResponseStatus(HttpStatus.BAD_REQUEST)
public class EtBadRequestException extends RuntimeException{

```
public EtBadRequestException(String message) {
               super(message);
       }
}
   3. <u>EtResourceNotFoundException.java</u>
package com.to.exceptions;
import org.springframework.http.HttpStatus;
import org.springframework.web.bind.annotation.ResponseStatus;
@ResponseStatus(HttpStatus.NOT_FOUND)
public class EtResourceNotFoundException extends RuntimeException{
       public EtResourceNotFoundException(String message) {
               super(message);
}
Com.to.repositories:- (package)
   1. AdminLoginRepository.java
package com.to.repositories;
import com.to.entities.AdminLogin;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface AdminLoginRepository {
       AdminLogin findById(String adminId, String password) throws EtResourceNotFoundException;
       void update(String adminId, String password, String newPass) throws EtBadRequestException;
}
2. AdminLoginRepositoryImpl.java:-
package com.to.repositories;
import org.apache.logging.log4j.message.Message;
```

```
import org.mindrot.jbcrypt.BCrypt;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.jdbc.core.RowMapperResultSetExtractor;
import org.springframework.stereotype.Repository;
import com.to.entities.AdminLogin;
import com.to.entities.User;
import com.to.exceptions.EtAuthException;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
@Repository
public class AdminLoginRepositoryImpl implements AdminLoginRepository {
       private static final String SQL_FIND_BY_ADMIN_ID_PASS = "select * from admin_login WHERE
adminId=? and adminPass=?";
       private static final String SQL_FIND_BY_ADMIN_ID = "select * from admin_login WHERE adminId=?";
       private static final String SQL_UPDATE_PASS = "update admin_login set adminPass=? where
adminId=?";
       @Autowired
       JdbcTemplate jdbcTemplate;
       @Override
       public AdminLogin findById(String adminId, String password) throws EtResourceNotFoundException {
               try {
                      // getting the user record from db
                      AdminLogin adminLogin = jdbcTemplate.queryForObject(SQL FIND BY ADMIN ID,
new Object[] { adminId },
                                      adminRowMapper);
                      // checking the password
                      if (!password.equals(adminLogin.getPassword()))
                              throw new EtAuthException("Invalid AdminId/Pasword");
                      return adminLogin;
               } catch (Exception e) {
                      throw new EtAuthException("Invalid AdminId/Pasword");
               }
       @Override
       public void update(String adminId, String password, String newPass) throws EtBadRequestException {
```

```
try {
                      // getting the user record from db
                      AdminLogin adminLogin = jdbcTemplate.queryForObject(SQL FIND BY ADMIN ID,
new Object[] { adminId },
                                      adminRowMapper);
                      adminLogin.setNewPass(newPass);
                      System.out.println(adminLogin);
                      // checking the password
                      if (password.equals(newPass))
                              throw new EtAuthException("Enter Old Password and new Pasword should
be different");
                      else if (!password.equals(adminLogin.getPassword()))
                              throw new EtAuthException("Enter Correct Old Password");
                      else {
                              // update the admin password with new password
                              jdbcTemplate.update(SQL_UPDATE_PASS, newPass, adminId);
                      }
               } catch (EtAuthException e) {
                      throw new EtAuthException(e.getMessage());
               }
               catch (Exception e) {
                      throw new EtAuthException("Invalid AdminId/Pasword");
               }
       }
       // row mapper
       private RowMapper<AdminLogin> adminRowMapper = ((rs, rowNum) -> {
               return new AdminLogin(rs.getString("adminId"), rs.getString("adminPass"));
       });
}
3. AdminReports.java
package com.to.repositories;
import java.util.List;
import com.to.entities.User;
public interface AdminReports {
```

```
List<User> getAllLoggedUsers();
}
4. AdminReportsImpl.java
package com.to.repositories;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.to.entities.User;
@Repository
public class AdminReportsImpl implements AdminReports {
       @Autowired
       JdbcTemplate jdbcTemplate;
       private static String SQL_ALL_USERS = "select * from user_login";
       @Override
       public List<User> getAllLoggedUsers() {
               return jdbcTemplate.query(SQL_ALL_USERS, userRowMapper);
       }
       // row mapper
       private RowMapper<User> userRowMapper = ((rs, rowNum) -> {
               return new User(rs.getInt("userid"), rs.getString("first_name"), rs.getString("last_name"),
                               rs.getString("email"));
       });
}
5. CategoryRepository.java
package com.to.repositories;
import java.util.List;
import com.to.entities.Category;
import com.to.entities.Product;
```

```
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface CategoryRepository {
       void create(String categoryName);
       void update(Integer catId, String catName);
       void delete(Integer catId);
  Category getById(Integer catid);
  List<Category> getAllCategories();
}
6. CategoryRepositoryImpl.java
package com.to.repositories;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.to.entities.Category;
import com.to.entities.Product;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
@Repository
public class CategoryRepositoryImpl implements CategoryRepository {
       @Autowired
       JdbcTemplate jdbcTemplate;
       private static String SQL_INSERT = "INSERT INTO category(cname) values(?)";
       private static String SQL SELECT = "select * from category";
       private static String SQL_SELECT_BY_ID = "select * from category where cid=?";
       private static String SQL DELETE = "delete from category where cid=?";
       private static String SQL_UPDATE = "update category set cname=? where cid=?";
       @Override
       public void create(String categoryName) {
```

```
try {
                       jdbcTemplate.update(SQL_INSERT, new Object[] { categoryName });
               } catch (Exception e) {
                       throw new EtBadRequestException(
                                       "Something went wrong while creating the category try again" +
e.getMessage());
       }
       @Override
       public void update(Integer catId, String catName) {
                       int i = jdbcTemplate.update(SQL UPDATE, new Object[] { catName, catId });
                       if (i == 0)
                               throw new EtResourceNotFoundException(
                                               "Sorry Given Category Is not present first add the category
then update");
               } catch (Exception e) {
                       throw new EtBadRequestException(
                                       "Something went wrong while updating the category try again Reason
:" + e.getMessage());
       @Override
       public void delete(Integer catId) {
               try {
                       int i = jdbcTemplate.update(SQL_DELETE, new Object[] { catId });
                       if (i == 0)
                               throw new EtResourceNotFoundException("Sorry The given cat id: " + catId +
" not available ");
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(e.getMessage());
               }
       }
       // row mapper
       private RowMapper<Category> catRowMapper = ((rs, rowNum) -> {
               return new Category(rs.getInt("cid"), rs.getString("cname"));
       });
       @Override
       public Category getById(Integer catid) {
```

```
return jdbcTemplate.queryForObject(SQL_SELECT_BY_ID, new Object[] { catid },
catRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(" category not available details " +
e.getMessage());
       @Override
       public List<Category> getAllCategories() {
               try {
                       return jdbcTemplate.query(SQL_SELECT, catRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException("Failed to fetch the all category details " +
e.getMessage());
}
7. ProductRepository.java
package com.to.repositories;
import java.util.List;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadReguestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface ProductRepository {
       void create(Product product) throws EtBadRequestException;
       void update(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException;
       void delete(Integer pld);
       Product getById(Integer pid) throws EtResourceNotFoundException;
       List<Product> getAllProduct() throws EtResourceNotFoundException;
8. ProductRepositoryImpl.java
```

```
package com.to.repositories;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.to.entities.Product;
import com.to.entities.User;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtAuthException;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
@Repository
public class ProductRepositoryImpl implements ProductRepository {
       private static final String SQL_CREATE = "insert into product(pname,pdescription,price,gender,cid)
values(?,?,?,?,?)";
       private static final String SQL_FIND_ALL = "select * from product";
       private static final String SQL FIND BY ID = "select * from product where pid=?";
       private static final String SQL DELETE BY ID = "delete from product where pid=?";
       @Autowired
       JdbcTemplate jdbcTemplate;
       @Override
       public void create(Product product) throws EtBadRequestException {
               try {
                       jdbcTemplate.update(SQL CREATE, product.getPname(), product.getPdescription(),
product.getPrice(),
                                      product.getGender(), product.getCid());
               } catch (Exception e) {
                       throw new EtAuthException("Failed to insert into product table try again" +
e.getMessage());
       }
       @Override
       public void update(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException {
               // TODO Auto-generated method stub
       }
       @Override
```

```
public void delete(Integer pld) {
               try {
                       int i = jdbcTemplate.update(SQL_DELETE_BY_ID, new Object[] { pld });
                       if (i == 0)
                               throw new EtResourceNotFoundException("Sorry The given produt id: " + pld
+ " not available ");
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(e.getMessage());
               }
       @Override
       public Product getById(Integer pid) throws EtResourceNotFoundException {
                       return jdbcTemplate.queryForObject(SQL_FIND_BY_ID, new Object[] { pid },
productRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(
                                       "Sorry The given produt id: " + pid + " not available " +
e.getMessage());
       }
       // method for getting the all product details
       public List<Product> getAllProduct() throws EtResourceNotFoundException {
               try {
                       return jdbcTemplate.query(SQL FIND ALL, productRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException("Failed to fetch the all product details " +
e.getMessage());
       }
       // row mapper
       private RowMapper<Product> productRowMapper = ((rs, rowNum) -> {
               return new Product(rs.getInt("pid"), rs.getString("pname"), rs.getString("pdescription"),
rs.getInt("price"),
                               rs.getString("gender"), rs.getInt("cid"), rs.getString("imgpath"));
       });
}
```

```
9. UserProductDisplay.java
package com.to.repositories;
import java.util.List;
import com.to.entities.Product;
import com.to.exceptions.EtResourceNotFoundException;
public interface UserProductDisplay {
       List<Product> getAllProductByCategory(Integer catId);
}
10. UserProductDisplayImpl.java
package com.to.repositories;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.to.entities.Product;
import com.to.exceptions.EtResourceNotFoundException;
@Repository
public class UserProductDisplayImpl implements UserProductDisplay {
       @Autowired
       JdbcTemplate jdbcTemplate;
       private static String sQL FIND ALL PRODUCT BY CAT ID = "select * from product where cid=?";
       @Override
       public List<Product> getAllProductByCategory(Integer catId) {
               try {
                       return jdbcTemplate.query(sQL_FIND_ALL_PRODUCT_BY_CAT_ID, new Object[] { catId
}, productRowMapper);
               } catch (Exception e) {
                      throw new EtResourceNotFoundException("Failed to fetch the all product details " +
e.getMessage());
       // row mapper
```

```
private RowMapper<Product> productRowMapper = ((rs, rowNum) -> {
               return new Product(rs.getInt("pid"), rs.getString("pname"), rs.getString("pdescription"),
rs.getInt("price"),
                              rs.getString("gender"), rs.getInt("cid"), rs.getString("imgpath"));
       });
}
11. UserPurchaseRepository.java
package com.to.repositories;
import java.util.List;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface UserPurchaseRepository {
       List<UserPurchase> fetchAll(Integer userId) throws EtResourceNotFoundException;
       UserPurchase findById(Integer userId, Integer purId) throws EtResourceNotFoundException;
       void create(UserPurchase userPurchase) throws EtBadRequestException;
       void update(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException;
}
12. UserPurchaseRepositoryImpl.java
package com.to.repositories;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.objenesis.instantiator.basic.NewInstanceInstantiator;
import org.springframework.stereotype.Repository;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtAuthException;
```

```
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
@Repository
public class UserPurchaseRepositoryImpl implements UserPurchaseRepository {
       private static final String SQL FIND ALL = "SELECT * FROM user purchases where user id=?";
       private static final String SQL_CREATE = "INSERT INTO user_purchases(product_id, pdate, cat_id,
quantity, price, total price, user id) VALUES (?, ?, ?, ?, ?, ?, ?)";
       private static final String SQL_FIND_BY_ID = "SELECT * FROM user_purchases where pid=? and
user_id=?";
       @Autowired
       JdbcTemplate jdbcTemplate;
       @Override
       public List<UserPurchase> fetchAll(Integer userId) throws EtResourceNotFoundException {
               try {
                       return jdbcTemplate.query(SQL_FIND_ALL, new Object[] { userId },
userPurchaseRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(
                                       "Purchase details not found for user id:" + userId + " purchased id:");
               }
       }
       @Override
       public UserPurchase findById(Integer userId, Integer purId) throws EtResourceNotFoundException {
                       return jdbcTemplate.queryForObject(SQL FIND BY ID, new Object[] { purId, userId, },
userPurchaseRowMapper);
               } catch (Exception e) {
                       throw new EtResourceNotFoundException(
                                       "Purchase details not found for user id:" + userId + " purchased id:" +
purld);
               }
       }
       // row mapper
       private RowMapper<UserPurchase> userPurchaseRowMapper = ((rs, rowNum) -> {
               return new UserPurchase(rs.getInt("pid"), rs.getInt("product id"), rs.getString("pdate"),
rs.getInt("cat_id"),
                               rs.getInt("quantity"), rs.getInt("price"), rs.getInt("total price"),
rs.getInt("user_id"));
       });
```

```
@Override
       public void create(UserPurchase userPurchase) throws EtBadRequestException {
               try {
                       jdbcTemplate.update(SQL_CREATE, userPurchase.getProduct_id(),
userPurchase.getPdate(),
                                       userPurchase.getCat_id(), userPurchase.getQuantity(),
userPurchase.getPrice(),
                                       userPurchase.getTotal_price(), userPurchase.getUser_id());
               } catch (Exception e) {
                       throw new EtAuthException("Invalid details. Failed to insert user purchase details");
       }
       @Override
       public void update(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException {
               // TODO Auto-generated method stub
}
13. UserRepository.java
package com.to.repositories;
import com.to.entities.User;
import com.to.exceptions.EtAuthException;
public interface UserRepository {
       Integer create(String fname, String lname, String email, String password) throws EtAuthException;
       User findByEmailAndPassword(String email, String password) throws EtAuthException;
       Integer getCountByEmail(String email);
       User findByld(Integer userId);
14. UserRepositoryImpl.java
package com.to.repositories;
```

```
import java.beans.Statement;
import java.security.interfaces.RSAKey;
import java.sql.PreparedStatement;
import org.mindrot.jbcrypt.BCrypt;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.jdbc.support.GeneratedKeyHolder;
import org.springframework.jdbc.support.KeyHolder;
import org.springframework.stereotype.Repository;
import com.to.entities.User;
import com.to.exceptions.EtAuthException;
import com.to.services.UserService;
import net.bytebuddy.asm.Advice.Return;
@Repository
public class UserRepositoryImpl implements UserRepository {
       private static final String SQL_CREATE = "INSERT INTO user_login (first_name, last_name, email,
password) VALUES (?, ?, ?, ?)";
       private static final String SQL_COUNT_BY_EMAIL = "SELECT COUNT(*) FROM user_login WHERE
email=?";
       private static final String SQL FIND BY ID = "SELECT * FROM user login WHERE userid=?";
       private static final String SQL FIND BY EMAIL = "SELECT * FROM user login WHERE email=?";
       private static final String SQL_FIND_BY_EMAIL_USER_ID = "SELECT * FROM user_login WHERE
email=?";
       @Autowired
       JdbcTemplate jdbcTemplate;
       // method for creating new user
       @Override
       public Integer create(String fname, String Iname, String email, String password) throws
EtAuthException {
               Integer userId = null;
               // generating the hashed password
               String hashedPassword = BCrypt.hashpw(password, BCrypt.gensalt(10));
               try {
                       jdbcTemplate.update(SQL CREATE, fname, Iname, email, hashedPassword);
                       User user;
                       user = findByEmail userId(email);
                       userId = user.getUserId();
               } catch (Exception e) {
                       throw new EtAuthException("Invalid details. Failed to create account");
               }
               return userId;
```

```
// method for getting the user by email id
       public User findByEmail_userId(String email) {
               return jdbcTemplate.queryForObject(SQL_FIND_BY_EMAIL_USER_ID, new Object[] { email },
userRowMapper);
//method for checking the email id and password is correct or not
       @Override
       public User findByEmailAndPassword(String email, String password) throws EtAuthException {
               try {
                       // getting the user record from db
                       User user = jdbcTemplate.queryForObject(SQL_FIND_BY_EMAIL, new Object[] { email
}, userRowMapper);
                       // checking the password
                       if (!BCrypt.checkpw(password, user.getPassword()))
                               throw new EtAuthException("Invalid Email/Pasword");
                       return user;
               } catch (Exception e) {
                       throw new EtAuthException("Invalid Email/Pasword");
               }
       }
       // method for checking the email is already used or not
       @Override
       public Integer getCountByEmail(String email) {
               return jdbcTemplate.queryForObject(SQL COUNT BY EMAIL, new Object[] { email },
Integer.class);
       }
       // method for finding the user by id
       @Override
       public User findById(Integer userId) {
               return jdbcTemplate.queryForObject(SQL_FIND_BY_ID, new Object[] { userId },
userRowMapper);
       // row mapper
       private RowMapper<User> userRowMapper = ((rs, rowNum) -> {
               return new User(rs.getInt("userid"), rs.getString("first_name"), rs.getString("last_name"),
                               rs.getString("email"), rs.getString("password"));
```

```
});
}
package com.to.services
   1. AdminLoginService.java
package com.to.services;
import com.to.entities.AdminLogin;
import com.to.exceptions.EtAuthException;
public interface AdminLoginService {
       AdminLogin adminLogin(String adminId, String password) throws EtAuthException;
       void adminPasswordChange(String adminId, String password, String newPass) throws
EtAuthException;
}
   2. AdminLoginServiceImpl.java
package com.to.services;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.AdminLogin;
import com.to.exceptions.EtAuthException;
import com.to.repositories.AdminLoginRepository;
@Service
@Transactional
public class AdminLoginServiceImpl implements AdminLoginService {
       @Autowired
       AdminLoginRepository adminLoginRepository;
       @Override
       public AdminLogin adminLogin(String adminId, String password) throws EtAuthException {
```

```
return adminLoginRepository.findById(adminId, password);
       }
       @Override
       public void adminPasswordChange(String adminId, String password, String newPass) throws
EtAuthException {
               adminLoginRepository.update(adminId, password, newPass);
       }
}
   3. AdminReportService.java
package com.to.services;
import java.util.List;
import com.to.entities.User;
public interface AdminReportService {
       List<User> getAllLoggedUsersDetails();
}
   4. AdminReportServiceImpl.java
package com.to.services;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.User;
import com.to.repositories.AdminReports;
@Service
@Transactional
public class AdminReportServiceImpl implements AdminReportService {
       @Autowired
       AdminReports adminReports;
       @Override
       public List<User> getAllLoggedUsersDetails() {
               // TODO Auto-generated method stub
```

```
return adminReports.getAllLoggedUsers();
       }
}
   5. CategoryService.java
package com.to.services;
import java.util.List;
import com.to.entities.Category;
import com.to.exceptions.EtBadRequestException;
public interface CategoryService {
       void createCategory(String categoryName);
       void updateCategory(Integer catld, String catName) throws EtBadRequestException;
       void deleteCategory(Integer catId);
  Category getCategoryById(Integer catid);
  List<Category> getAllCategories();
}
   6. CategoryServiceImpl.java
package com.to.services;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.Category;
import com.to.exceptions.EtBadRequestException;
import com.to.repositories.CategoryRepository;
@Service
@Transactional
public class CategoryServiceImpl implements CategoryService {
       @Autowired
       CategoryRepository categoryRepository;
```

```
@Override
       public void createCategory(String categoryName) {
               categoryRepository.create(categoryName);
       }
       @Override
       public void updateCategory(Integer catId, String catName) throws EtBadRequestException {
               categoryRepository.update(catId, catName);
       @Override
       public void deleteCategory(Integer catId) {
               categoryRepository.delete(catId);
       }
       @Override
       public Category getCategoryById(Integer catid) {
               return categoryRepository.getById(catid);
       }
       @Override
       public List<Category> getAllCategories() {
               return categoryRepository.getAllCategories();
       }
}
   7. ProductServices.java
package com.to.services;
import java.util.List;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface ProductServices {
       void createNewProduct(Product product) throws EtBadRequestException;
       void updateProduct(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException;
       void deleteProduct(Integer pId) throws EtResourceNotFoundException;
```

```
Product getProductById(Integer pid) throws EtResourceNotFoundException;
       List<Product> getAllProductDetails() throws EtResourceNotFoundException;
}
   8. ProductServicesImpl.java
package com.to.services;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
import com.to.repositories.ProductRepository;
@Service
@Transactional
public class ProductServicesImpl implements ProductServices {
       @Autowired
       ProductRepository productRepository;
       @Override
       public void createNewProduct(Product product) throws EtBadRequestException {
               productRepository.create(product);
       }
       @Override
       public void updateProduct(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException {
               // TODO Auto-generated method stub
       }
       @Override
       public void deleteProduct(Integer pld) throws EtResourceNotFoundException {
               productRepository.delete(pld);
```

```
@Override
       public Product getProductById(Integer pid) throws EtResourceNotFoundException {
               // TODO Auto-generated method stub
               return productRepository.getById(pid);
       }
       @Override
       public List<Product> getAllProductDetails() throws EtResourceNotFoundException {
               return productRepository.getAllProduct();
}
   9. UserPurchaseService.java
package com.to.services;
import java.util.List;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
public interface UserPurchaseService {
       List<UserPurchase> fetchAllPurchases(Integer userId);
       UserPurchase fetchUserPurchaseByld(Integer userId, Integer purId) throws
EtResourceNotFoundException;
       void addPurchase(UserPurchase userPurchase) throws EtBadRequestException;
       void updatePurchase(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException;
       List<Product> getAllProductByCategory(Integer catId);
}
   10. UserPurchaseServiceImpl.java
package com.to.services;
import java.util.List;
```

```
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.Product;
import com.to.entities.UserPurchase;
import com.to.exceptions.EtBadRequestException;
import com.to.exceptions.EtResourceNotFoundException;
import com.to.repositories.UserProductDisplay;
import com.to.repositories.UserPurchaseRepository;
@Service
@Transactional
public class UserPurchaseServiceImpl implements UserPurchaseService {
       @Autowired
       UserPurchaseRepository userPurchaseRepository;
       @Autowired
       UserProductDisplay userProductDisplay;
       @Override
       public List<UserPurchase> fetchAllPurchases(Integer userId) {
               return userPurchaseRepository.fetchAll(userId);
       @Override
       public UserPurchase fetchUserPurchaseById(Integer userId, Integer purId) throws
EtResourceNotFoundException {
               return userPurchaseRepository.findById(userId, purId);
       }
       // method for saving the purchased product details
       public void addPurchase(UserPurchase userPurchase) throws EtBadRequestException {
               userPurchaseRepository.create(userPurchase);
       }
       @Override
       public void updatePurchase(Integer userId, Integer purId, UserPurchase userPurchase) throws
EtBadRequestException {
               // TODO Auto-generated method stub
       }
       @Override
       public List<Product> getAllProductByCategory(Integer catId) {
```

```
return userProductDisplay.getAllProductByCategory(catId);
       }
}
    11. UserService.java
package com.to.services;
import com.to.entities.User;
import com.to.exceptions.EtAuthException;
public interface UserService {
        User validateUser(String email, String password) throws EtAuthException;
       User registerUser(String fname, String lname, String email, String password) throws EtAuthException;
}
   12. UserServiceImpl.java
package com.to.services;
import java.util.regex.Pattern;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;
import com.to.entities.User;
import com.to.exceptions.EtAuthException;
import com.to.repositories.UserRepository;
@Service
@Transactional
public class UserServiceImpl implements UserService {
        @Autowired
        UserRepository userRepository;
       // method for validating the user name password for logging
        @Override
        public User validateUser(String email, String password) throws EtAuthException {
```

```
if (email != null)
                        email = email.toLowerCase();
               // returnig the user
               return userRepository.findByEmailAndPassword(email, password);
       }
        @Override
        public User registerUser(String fname, String lname, String email, String password) throws
EtAuthException {
               // pettern for validating email
               Pattern pattern = Pattern.compile("^(.+)@(.+)$");
               if (email != null)
                        email = email.toLowerCase();
               if (!pattern.matcher(email).matches())
                        throw new EtAuthException("Invalid email format");
               // getting the email count
               Integer count = userRepository.getCountByEmail(email);
               if (count > 0)
                        throw new EtAuthException("Email Already in use");
               // creating the user and getting the user id back
               Integer userId = userRepository.create(fname, lname, email, password);
               // returning the user detail wth jwt tocken
               return userRepository.findById(userId);
       }
}
```

package com.to.entities

1. AdminLogin.java

```
package com.to.entities;

public class AdminLogin {
    private String adminId;
    private String password;
    private String newPass;
```

```
// constructor
       public AdminLogin(String adminId, String password, String newPass) {
               super();
               this.adminId = adminId;
               this.password = password;
               this.newPass = newPass;
       }
       public AdminLogin(String adminId, String password) {
               super();
               this.adminId = adminId;
               this.password = password;
       }
       // getter and setters
       public String getAdminId() {
               return adminId;
       }
       public void setAdminId(String adminId) {
               this.adminId = adminId;
       }
       public String getPassword() {
               return password;
       }
       public void setPassword(String password) {
               this.password = password;
       public String getNewPass() {
               return newPass;
       public void setNewPass(String newPass) {
               this.newPass = newPass;
       }
       @Override
       public String toString() {
               return "AdminLogin [adminId=" + adminId + ", password=" + password + ", newPass=" +
newPass + "]";
2. Category.java
```

```
package com.to.entities;
public class Category {
        private Integer catld;
        private String catName;
//constructor using fields
        public Category(Integer catId, String catName) {
                super();
                this.catId = catId;
                this.catName = catName;
        }
        public Category() {
                // TODO Auto-generated constructor stub
       // getter and setters
        public Integer getCatId() {
                return catld;
        public void setCatId(Integer catId) {
                this.catId = catId;
       }
        public String getCatName() {
                return catName;
        public void setCatName(String catName) {
                this.catName = catName;
        @Override
        public String toString() {
                return "Category [catId=" + catId + ", catName=" + catName + "]";
       }
}
3. Product.java
package com.to.entities;
public class Product {
```

```
private Integer pid;
private String pname;
private String pdescription;
private Integer price;
private String gender;
private Integer cid;
private String imagePath;
// constructor using fields
public Product(Integer pid, String pname, String pdescription, Integer price, String gender, Integer cid,
                String imagePath) {
        super();
        this.pid = pid;
        this.pname = pname;
        this.pdescription = pdescription;
        this.price = price;
        this.gender = gender;
        this.cid = cid;
        this.imagePath = imagePath;
}
public Product() {
        // TODO Auto-generated constructor stub
}
public Integer getPid() {
        return pid;
}
public void setPid(Integer pid) {
        this.pid = pid;
public String getPname() {
        return pname;
public void setPname(String pname) {
        this.pname = pname;
}
public String getPdescription() {
        return pdescription;
public void setPdescription(String pdescription) {
        this.pdescription = pdescription;
```

```
public Integer getPrice() {
                return price;
        }
        public void setPrice(Integer price) {
                this.price = price;
        public String getGender() {
                return gender;
        public void setGender(String gender) {
                this.gender = gender;
        }
        public Integer getCid() {
                return cid;
        }
        public void setCid(Integer cid) {
                this.cid = cid;
        }
        public String getImagePath() {
                return imagePath;
        }
        public void setImagePath(String imagePath) {
                this.imagePath = imagePath;
        @Override
        public String toString() {
                return "Product [pid=" + pid + ", pname=" + pname + ", pdescription=" + pdescription + ",
price=" + price
                                + ", gender=" + gender + ", cid=" + cid + ", imagePath=" + imagePath + "]";
        }
}
4. User.java
package com.to.entities;
```

```
public class User {
        private Integer userId;
        private String fname;
        private String Iname;
        private String email;
        private String password;
        // constructor
        public User(Integer userId, String fname, String Iname, String email, String password) {
                super();
                this.userId = userId;
                this.fname = fname;
                this.lname = lname;
                this.email = email;
                this.password = password;
        }
        public User(Integer userId, String fname, String lname, String email) {
                super();
                this.userId = userId;
                this.fname = fname:
                this.lname = lname;
                this.email = email;
        }
        @Override
        public String toString() {
                return "User [userId=" + userId + ", fname=" + fname + ", Iname=" + Iname + ", email=" + email
+ ", password="
                                + password + "]";
        }
        // getters and setters
        public Integer getUserId() {
                return userId;
        }
        public void setUserId(Integer userId) {
                this.userId = userId;
        }
        public String getFname() {
                return fname;
        public void setFname(String fname) {
                this.fname = fname;
```

```
public String getLname() {
                return Iname;
        public void setLname(String Iname) {
                this.lname = Iname;
        public String getEmail() {
                return email;
        }
        public void setEmail(String email) {
                this.email = email;
        }
        public String getPassword() {
                return password;
        public void setPassword(String password) {
                this.password = password;
}
    4. <u>UserPurchase.java</u>
package com.to.entities;
public class UserPurchase {
        private Integer pid;
        private Integer product_id;
        private String pdate;
        private Integer cat_id;
        private Integer quantity;
        private Integer price;
        private Integer total_price;
        private Integer user_id;
        // constructor
        public UserPurchase() {
```

```
public UserPurchase(Integer pid, Integer product_id, String pdate, Integer cat_id, Integer quantity,
Integer price,
                         Integer total_price, Integer user_id) {
                super();
                this.pid = pid;
                this.product_id = product_id;
                this.pdate = pdate;
                this.cat_id = cat_id;
                this.quantity = quantity;
                this.price = price;
                this.total_price = total_price;
                this.user_id = user_id;
        }
        public UserPurchase(Integer product_id, String pdate, Integer cat_id, Integer quantity, Integer price,
                         Integer total_price, Integer user_id) {
                super();
                // this.pid = pid;
                this.product_id = product_id;
                this.pdate = pdate;
                this.cat_id = cat_id;
                this.quantity = quantity;
                this.price = price;
                this.total_price = total_price;
                this.user_id = user_id;
        }
        // getter and settetrs
        public Integer getPid() {
                return pid;
        }
        public void setPid(Integer pid) {
                this.pid = pid;
        }
        public Integer getProduct_id() {
                return product_id;
        }
        public void setProduct_id(Integer product_id) {
                this.product_id = product_id;
        public String getPdate() {
                return pdate;
        }
```

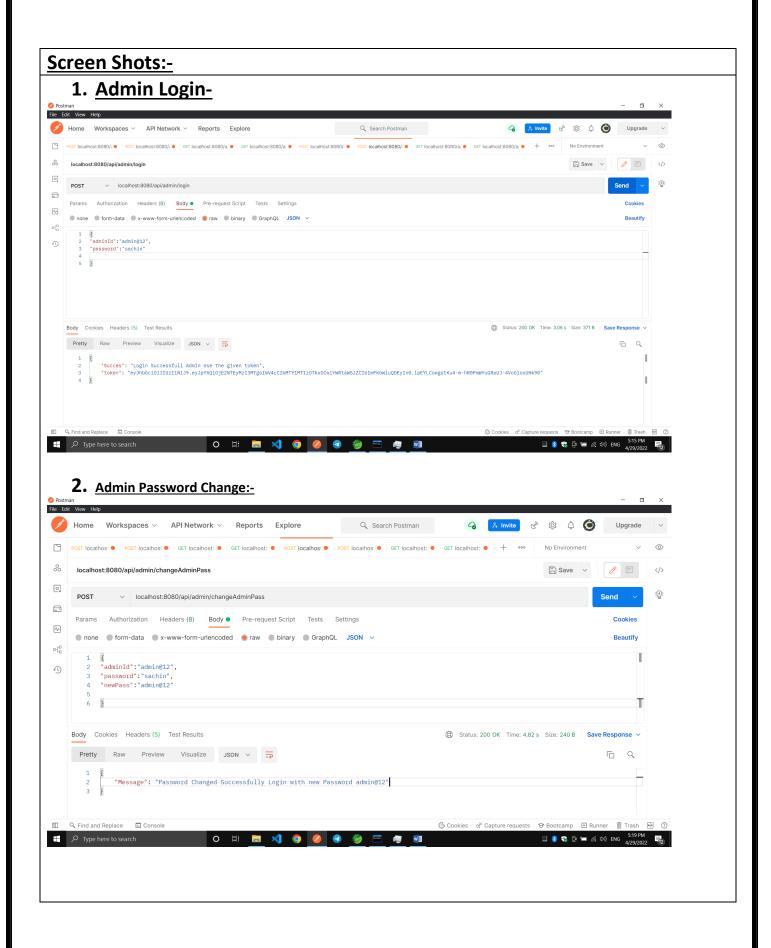
```
public void setPdate(String pdate) {
        this.pdate = pdate;
public Integer getCat_id() {
        return cat_id;
}
public void setCat_id(Integer cat_id) {
        this.cat_id = cat_id;
}
public Integer getQuantity() {
        return quantity;
}
public void setQuantity(Integer quantity) {
        this.quantity = quantity;
public Integer getPrice() {
        return price;
public void setPrice(Integer price) {
        this.price = price;
}
public Integer getTotal_price() {
        return total_price;
}
public void setTotal_price(Integer total_price) {
        this.total_price = total_price;
}
public Integer getUser_id() {
        return user_id;
}
public void setUser_id(Integer user_id) {
        this.user_id = user_id;
// to string method
@Override
public String toString() {
```

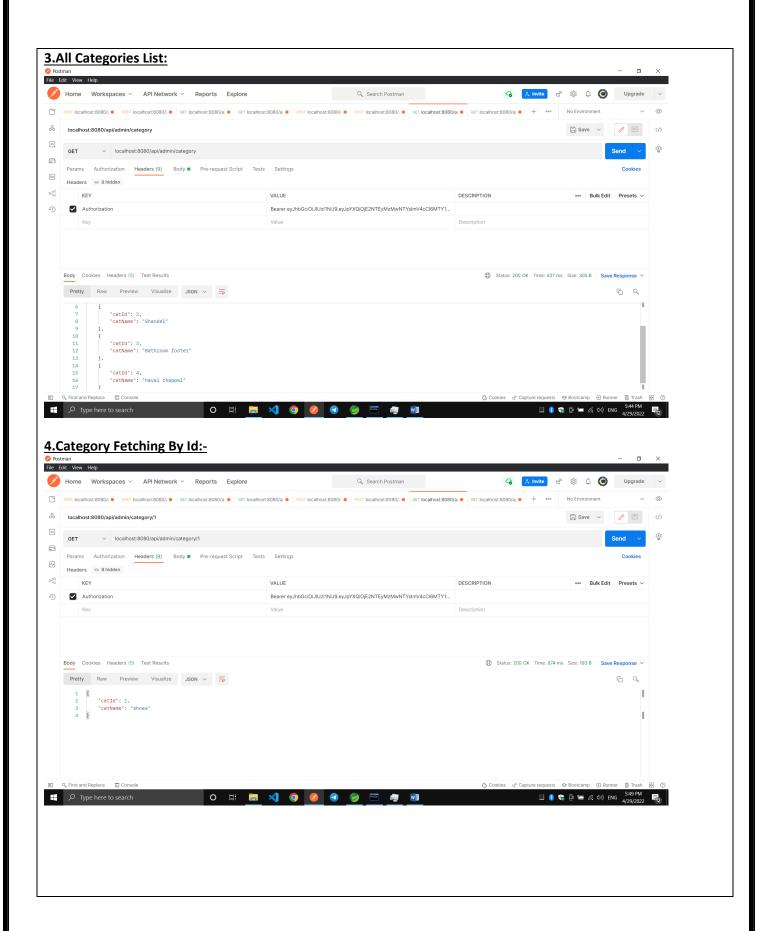
```
return "UserPurchase [pid=" + pid + ", product id=" + product id + ", pdate=" + pdate + ",
cat_id=" + cat_id
                               + ", quantity=" + quantity + ", price=" + price + ", total_price=" + total_price +
", user_id="
                               + user id + "]";
}
  ackage com.to;
1. Constants.java
package com.to;
//class for declaring the constants
public class Constants {
       public static final String API_SECRET_KEY_STRING = "sportshoes";
       public static final long TOKEN_VALIDITY = 2 * 60 * 60 * 1000;
}
   2. SimplyLearnSportShoesProjectApplication.java
package com.to;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.CommandLineRunner;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.boot.web.servlet.FilterRegistrationBean;
import org.springframework.context.annotation.Bean;
import com.to.filters.AdminAuthFilter;
import com.to.filters.AuthFilter;
import com.to.services.UserService;
import springfox.documentation.swagger2.annotations.EnableSwagger2;
@SpringBootApplication
@EnableSwagger2
public class SimplyLearnSportShoesProjectApplication implements CommandLineRunner {
       private Logger logger = LoggerFactory.getLogger(this.getClass());
       @Autowired
```

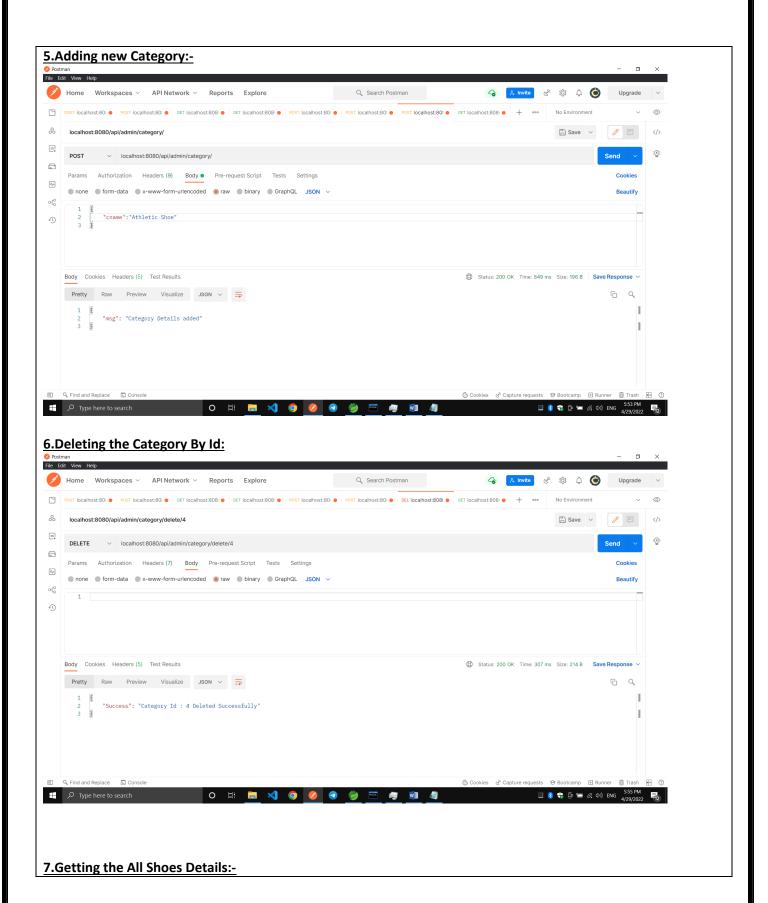
```
UserService userService;
       public static void main(String[] args) {
              SpringApplication.run(SimplyLearnSportShoesProjectApplication.class, args);
       }
       // registerning a user filter bean
       @Bean
       public FilterRegistrationBean<AuthFilter> filterRegistrationBean() {
              FilterRegistrationBean<AuthFilter> registrationBean = new FilterRegistrationBean<>();
              AuthFilter authFilter = new AuthFilter();
              registrationBean.setFilter(authFilter);
              // set the url for scanning the request
              registrationBean.addUrlPatterns("/api/userPurchase/*");
              return registrationBean;
       }
       // registerning a admin filter bean
       @Bean
       public FilterRegistrationBean<AdminAuthFilter> adminfilterRegistrationBean() {
              FilterRegistrationBean<AdminAuthFilter> registrationBean = new FilterRegistrationBean<>();
              AdminAuthFilter adminAuthFilter = new AdminAuthFilter();
              registrationBean.setFilter(adminAuthFilter);
              // set the url for scanning the request
              registrationBean.addUrlPatterns("/api/admin/category/*", "/api/admin/product/*",
"/api/admin/report/*");
              return registrationBean;
       }
       @Override
       public void run(String... args) throws Exception {
}
Application.properties
#mysql properties
spring.datasource.url=jdbc:mysql://localhost:3306/sporty_shoes_ecom website
spring.datasource.username=root
spring.datasource.password=root
spring.jpa.database-platform=org.hibernate.dialect.MySQL5InnoDBDialect
#swagger
spring.mvc.pathmatch.matching-strategy = ANT PATH MATCHER
```

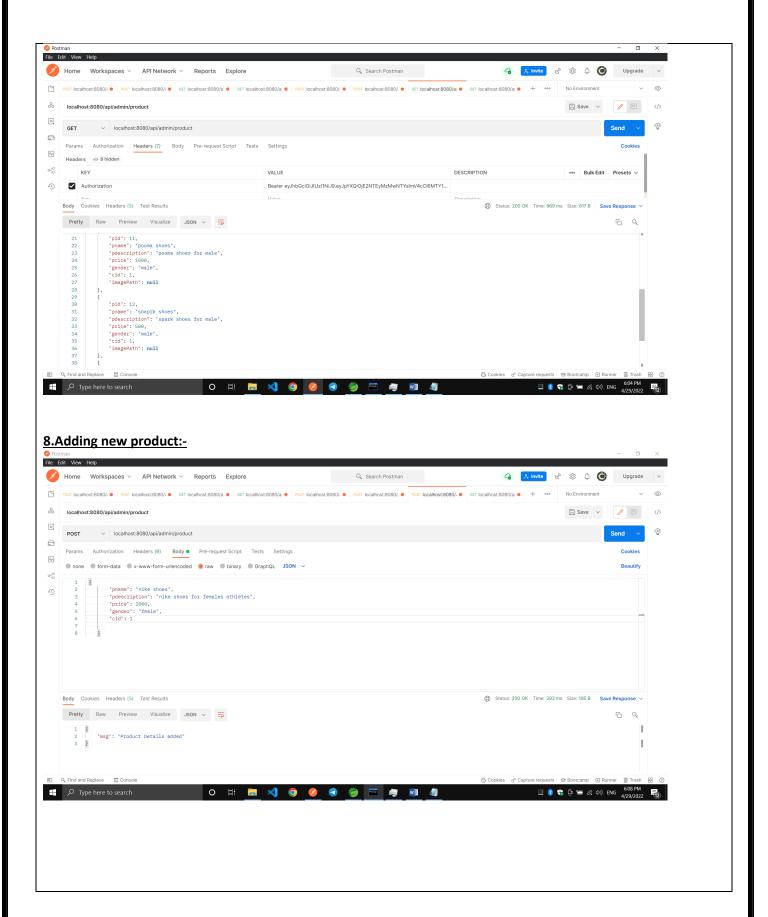
```
pom.xml
<?xml version="1.0" encoding="UTF-8"?>
project xmlns="http://maven.apache.org/POM/4.0.0"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-
4.0.0.xsd">
       <modelVersion>4.0.0</modelVersion>
       <parent>
              <groupId>org.springframework.boot
              <artifactId>spring-boot-starter-parent</artifactId>
              <version>2.6.7</version>
              <relativePath /> <!-- lookup parent from repository -->
       </parent>
       <groupId>com.sachinjava
       <artifactId>simply learn sport shoes project</artifactId>
       <version>0.0.1-SNAPSHOT</version>
       <name>simply_learn_sport_shoes_project</name>
       <description>simply learn e-commerce portal sportyshoes.com</description>
       cproperties>
              <java.version>11</java.version>
       </properties>
       <dependencies>
              <dependency>
                     <groupId>org.springframework.boot
                     <artifactId>spring-boot-starter-jdbc</artifactId>
              </dependency>
              <dependency>
                     <groupId>org.springframework.boot
                     <artifactId>spring-boot-starter-web</artifactId>
              </dependency>
              <!-- dependency for password encryption and decryption -->
              <!-- https://mvnrepository.com/artifact/org.mindrot/jbcrypt -->
              <dependency>
                     <groupId>org.mindrot
                     <artifactId>jbcrypt</artifactId>
                     <version>0.4</version>
              </dependency>
              <dependency>
                     <groupId>org.springframework.boot</groupId>
                     <artifactId>spring-boot-devtools</artifactId>
                     <scope>runtime</scope>
```

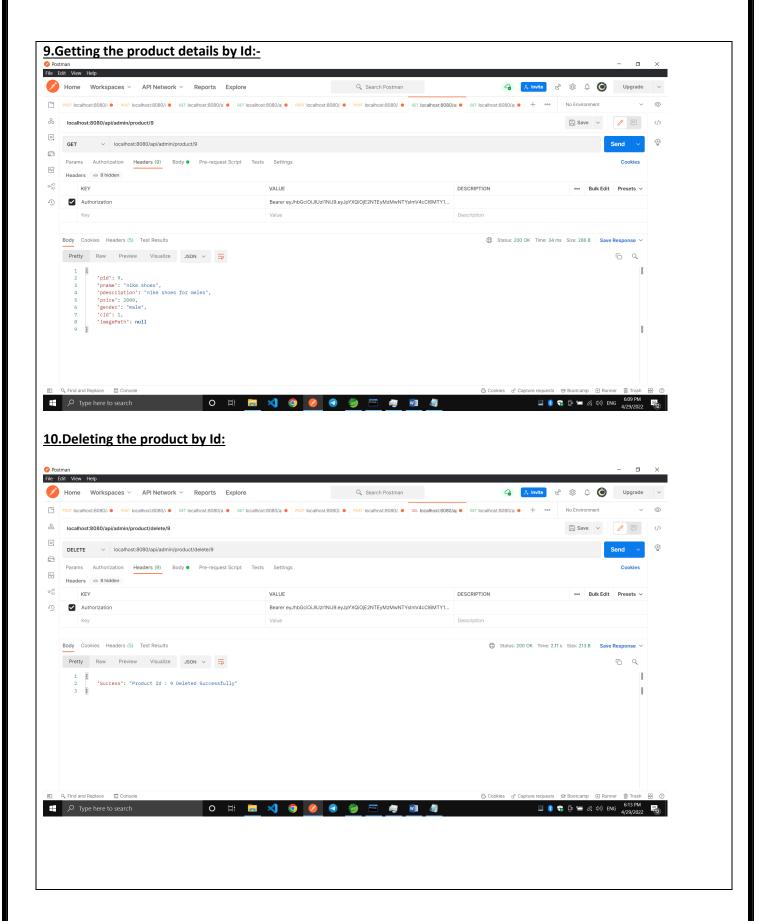
```
<optional>true
              </dependency>
              <dependency>
                     <groupId>mysql
                     <artifactId>mysql-connector-java</artifactId>
                     <scope>runtime</scope>
              </dependency>
              <dependency>
                     <groupId>org.springframework.boot</groupId>
                     <artifactId>spring-boot-starter-test</artifactId>
                     <scope>test</scope>
              </dependency>
              <!-- swagger dependancies -->
              <dependency>
                     <groupId>io.springfox
                     <artifactId>springfox-boot-starter</artifactId>
                     <version>3.0.0</version>
              </dependency>
              <!-- jwt tocken dependancies -->
              <!-- https://mvnrepository.com/artifact/io.jsonwebtoken/jjwt -->
              <dependency>
                     <groupId>io.jsonwebtoken
                     <artifactId>jjwt</artifactId>
                     <version>0.9.1</version>
              </dependency>
              <!-- https://mvnrepository.com/artifact/io.springfox/springfox-swagger2 -->
              <dependency>
                     <groupId>io.springfox
                     <artifactId>springfox-swagger2</artifactId>
                     <version>3.0.0</version>
              </dependency>
              <!-- swagger dependancies end here -->
              <!-- API, java.xml.bind module -->
<dependency>
  <groupId>jakarta.xml.bind
 <artifactId>jakarta.xml.bind-api</artifactId>
  <version>2.3.2</version>
</dependency>
<!-- Runtime, com.sun.xml.bind module -->
<dependency>
  <groupId>org.glassfish.jaxb
  <artifactId>jaxb-runtime</artifactId>
 <version>2.3.2</version>
</dependency>
```

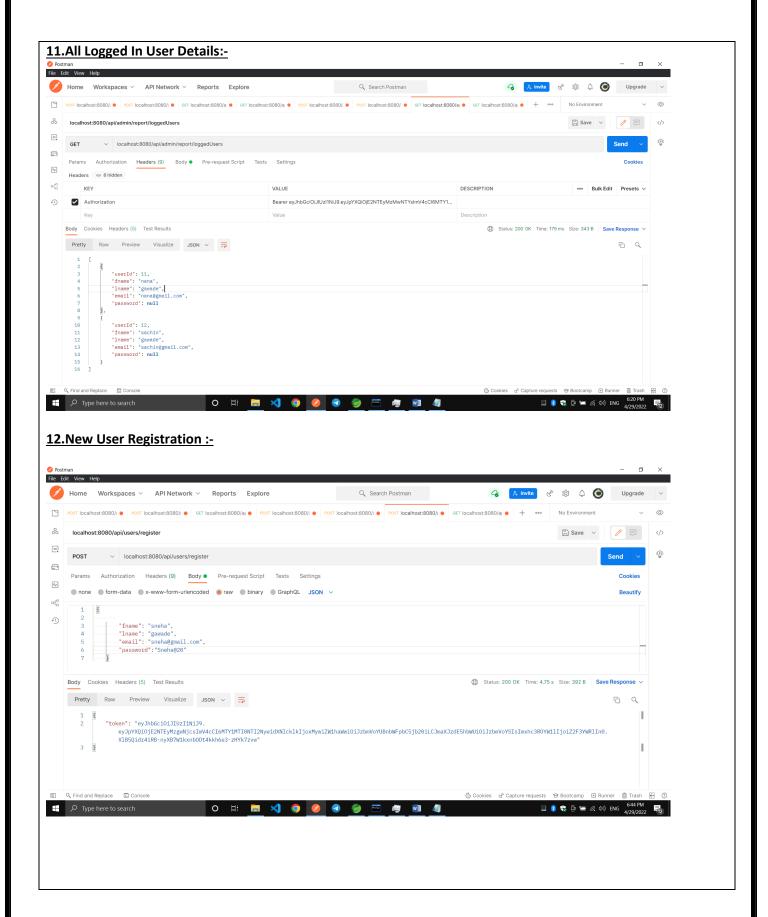


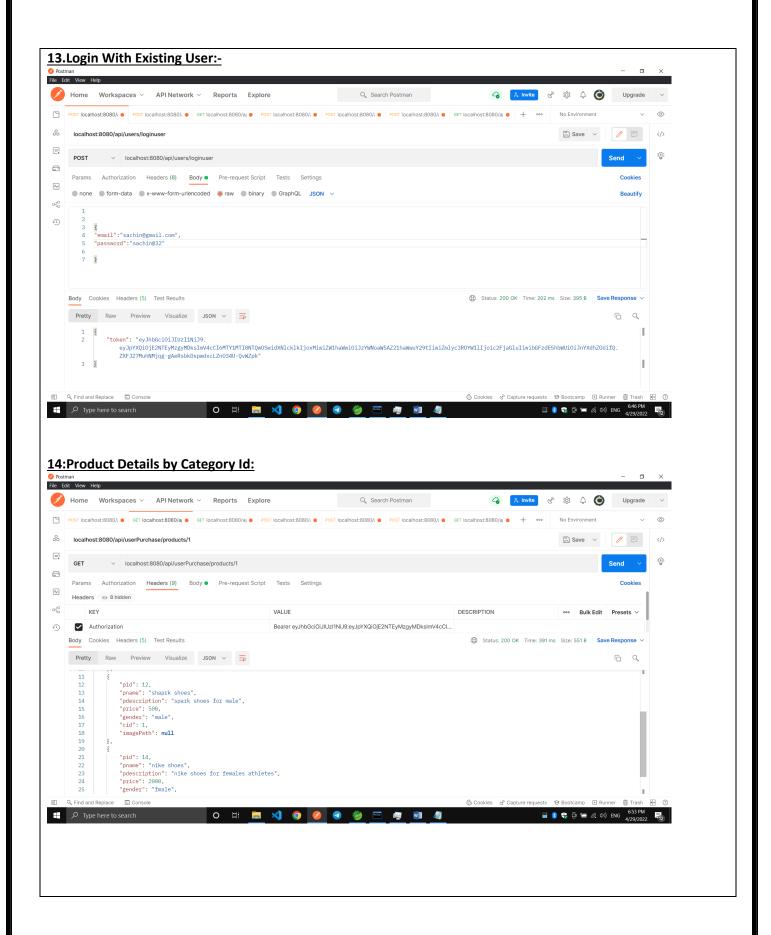


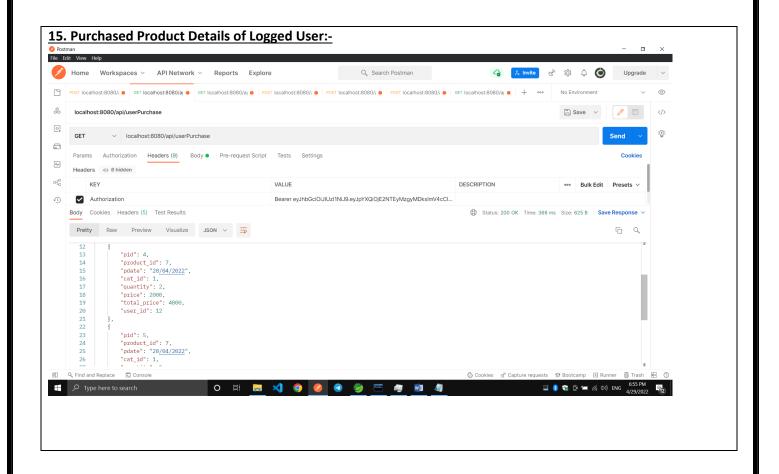












THANK YOU