```
BussinessException.java=
package com.ecommerce.sportyshoes.exceptions;
public class BusinessException extends Exception{
       private String message;
       public BusinessException(String message) {
              this.message=message;
       }
       @Override
       public String getMessage() {
              return message;
        */
       private static final long serialVersionUID = -851150852212525045L;
}
ProductServicelface.java=
package com.ecommerce.sportyshoes.service.iface;
import java.util.List;
import java.util.Optional;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Product;
public interface ProductServiceIface {
public int updateProduct(Product prodDataInput) throws BusinessException;
public int createProduct(Product prodDataInput) throws BusinessException;
public int deleteProduct(Product prodDataInput) throws BusinessException;
public List<Product> getProdByCategory(Product prodDataInput) throws BusinessException;
```

```
public Optional<Product> getPodById(Product prodDataInput) throws BusinessException;
}
Userrepository.java=
package com.ecommerce.sportyshoes.repository;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import\ org. spring framework. jdbc. core. Bean Property Row Mapper;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.ecommerce.sportyshoes.enums.UserType;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.User;
@Repository
public class UserRepository {
       @Autowired
       JdbcTemplate jdbcTemplate;
```

@Override

```
public User mapRow(ResultSet rs, int rowNum) throws SQLException {
                       User user=new User();
                       user.setID(rs.getLong("id"));
                       user.setFirstName(rs.getString("first_name"));
                       user.setLastName(rs.getString("last_name"));
                       user.setEmail(rs.getString("email"));
                       user.setMobile(rs.getString("mobile"));
                       user.setPassword(rs.getString("password"));
                       user.setUserType(UserType.getUserType(rs.getString("user_type")));
                       user.setCreatedAt(rs.getDate("created_at"));
                       user.setUpdatedAt(rs.getDate("updated_at"));
                       return user;
               }
       }
       public List<User> findAll() throws BusinessException{
       try {
               return jdbcTemplate.query("select * from users",new UserRowMapper());}
               catch (Exception exception) {
               throw new BusinessException("Internal Error Occured "+exception.getMessage());
               }
               }
       public Optional<User> findByEmail(Object object) throws BusinessException{
               try {
               return Optional.of(jdbcTemplate.queryForObject("select * from users where
email=?",
```

```
new Object[] {object}, new
BeanPropertyRowMapper<User>(User.class)));}
               catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
                       }
       public int createUser(User user) throws BusinessException {
               try {
               return jdbcTemplate.update("insert into users( first_name,last_name,
email,password, mobile) values(?,?,?,?,?)",
                               new Object[]
{user.getFirstName(),user.getLastName(),user.getEmail(),user.getPassword(),user.getMobile()});
               }
               catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
                       }
       public int updateUser(User user) throws BusinessException {
               try {
                       return jdbcTemplate.update("update users "
                                       + "set first name=ifnull(?,first name), "
                                       + "last name=ifnull(?,last name), "
                                       + "password=ifnull(?,password) where email=?",
                                       new Object[]
{user.getFirstName(),user.getLastName(),user.getPassword(),user.getEmail()});
                       }
```

```
catch (Exception exception) {
                              throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                              }
                       }
       public int deleteUser(String email) throws BusinessException {
               try {
                       return jdbcTemplate.update("delete from users where email=?", new
Object[] {email});}
                       catch (Exception exception) {
                              throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                              }
                       }
}
Purchaserepository.java=
package com.ecommerce.sportyshoes.repository;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.BeanPropertyRowMapper;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
```

```
import com.ecommerce.sportyshoes.enums.Category;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Purchase;
@Repository
public class PurchaseRepository {
       @Autowired
       JdbcTemplate jdbcTemplate;
       class PurchaseRowMapper implements RowMapper<Purchase> {
               @Override
               public Purchase mapRow(ResultSet rs, int rowNum) throws SQLException {
                      Purchase purchase=new Purchase();
                      purchase.setId(rs.getLong("id"));
                      purchase.setUser_id(rs.getLong("user_id"));
                      purchase.setProduct_id(rs.getLong("product_id"));
                      purchase.setQuantity(rs.getInt("quantity"));
                      purchase.setCategory(Category.getCategory(rs.getString("category")));
                      purchase.setCreatedAt(rs.getDate("created_at"));
                      purchase.setUpdatedAt(rs.getDate("updated_at"));
                      return purchase;
               }
       }
       public Optional<Purchase> findById(Long id) throws BusinessException{
               try {
               return Optional.of(jdbcTemplate.queryForObject("select * from purchase_order
where id=?",
```

```
new Object[] {id}, new
BeanPropertyRowMapper<Purchase>(Purchase.class)));}
               catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
                       }
       public List<Purchase> findByDateCategory(Purchase purchase) throws BusinessException{
               try {
                       return jdbcTemplate.query("select * from purchase_order where category=?
and created_at=?", new Object[] {purchase.getCategory(),
                                      purchase.getCreatedAt()},new PurchaseRowMapper());}
                       catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
                       }
       public int deleteSale(Long id) throws BusinessException {
               try {
                       return jdbcTemplate.update("delete from purchase order where id=?", new
Object[] {id});}
                       catch (Exception exception) {
                              throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                              }
                      }
       public int createSale(Purchase purchase) throws BusinessException {
               try {
```

```
return jdbcTemplate.update("insert into purchase_report( user_id,product_id,
quantity, category) values(?,?,?,?)",
                              new Object[]
{purchase.getUser_id(),purchase.getProduct_id(),purchase.getQuantity(),purchase.getCategory()});
               }
               catch (Exception exception) {
                      throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                      }
Po]roductrepository.java=
package com.ecommerce.sportyshoes.repository;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.BeanPropertyRowMapper;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import org.springframework.stereotype.Repository;
import com.ecommerce.sportyshoes.enums.Category;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Product;
```

```
@Repository
public class ProductRepository {
       @Autowired
       JdbcTemplate jdbcTemplate;
       class ProductRowMapper implements RowMapper<Product> {
               @Override
               public Product mapRow(ResultSet rs, int rowNum) throws SQLException {
                       Product product=new Product();
                       product.setId(rs.getLong("id"));
                       product.setPrice1(rs.getString("name"));
                       product.setdescription(rs.getString("description"));
                       product.setAvailability(rs.getInt("availability"));
                       product.setPrice(rs.getLong("price"));
                       product.setCategory(Category.getCategory(rs.getString("category")));
                       product.setCreatedAt(rs.getDate("created_at"));
                       product.setCreatedAt(rs.getDate("updated_at"));
                       return product;
               }
       }
       public List<Product> findByCategory(String category) throws BusinessException{
               try {
                       return jdbcTemplate.query("select * from products where category=?", new
Object[] {category},new ProductRowMapper());}
                       catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
```

```
}
```

```
public Optional<Product> findById(Long id) throws BusinessException{
               try {
               return Optional.of(jdbcTemplate.queryForObject("select * from products where
id=?",
                               new Object[] {id}, new
BeanPropertyRowMapper<Product>(Product.class)));}
               catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
        public int createProduct(Product product) throws BusinessException {
               try {
               return jdbcTemplate.update("insert into products( name,description,
availability,price, category) values(?,?,?,?)",
                               new Object[] {product.getName(),
product.getDescription(),product.getAvailability(),product.getPrice(),
                                               product.getCategory().toString()});
               }
               catch (Exception exception) {
                       throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                       }
                       }
```

```
public int deleteProduct(Long id) throws BusinessException {
               try {
                        return jdbcTemplate.update("delete from products where id=?", new
Object[] {id});}
                        catch (Exception exception) {
                               throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                               }
                       }
        public int updateProduct(Product product) throws BusinessException {
               try {
                        return jdbcTemplate.update("update products"
                                        + "set availability=ifnull(?,availability), "
                                        + "price=ifnull(?,price), "
                                        + " where id=?",
                                        new Object[]
{product.getAvailability(),product.getPrice(),product.getId()});
                       catch (Exception exception) {
                               throw new BusinessException("Internal Error Occured
"+exception.getMessage());
                               }
                       }
        public Optional<Product> findById(Object id) {
               // TODO Auto-generated method stub
               return null;
       }
}
```

```
Purchase.java=
package com.ecommerce.sportyshoes.model;
import java.util.Date;
import com.ecommerce.sportyshoes.enums.Category;
import lombok.AllArgsConstructor;
import lombok.Getter;
import lombok.NoArgsConstructor;
import lombok.Setter;
@Getter
@Setter
@AllArgsConstructor
@NoArgsConstructor
public class Purchase {
private long id;
private long user_id;
private long product_id;
private Category category;
private int quantity;
private Date createdAt;
private Date updatedAt;
public void setId(long long1) {
       // TODO Auto-generated method stub
}
public void setUser_id(long long1) {
```

```
// TODO Auto-generated method stub
}
public void setProduct_id(long long1) {
       // TODO Auto-generated method stub
}
public void setCategory(Category category2) {
       // TODO Auto-generated method stub
}
public void setQuantity(int int1) {
       // TODO Auto-generated method stub
}
public void setCreatedAt(java.sql.Date date) {
       // TODO Auto-generated method stub
}
public void setUpdatedAt(java.sql.Date date) {
       // TODO Auto-generated method stub
}
public java.sql.Date getCreatedAt() {
       // TODO Auto-generated method stub
       return null;
}
public Long getUser_id() {
       // TODO Auto-generated method stub
       return null;
}
```

```
public Object getProduct_id() {
       // TODO Auto-generated method stub
       return null;
}
public Object getQuantity() {
       // TODO Auto-generated method stub
       return null;
}
public Category getCategory() {
       // TODO Auto-generated method stub
       return null;
}
}
Product.java=
package com.ecommerce.sportyshoes.model;
import java.util.Date;
import com.ecommerce.sportyshoes.enums.Category;
import lombok.AllArgsConstructor;
import lombok.Getter;
import lombok.NoArgsConstructor;
import lombok.Setter;
@Getter
@Setter
@AllArgsConstructor
@NoArgsConstructor
```

```
public class Product {
private long id;
private String name;
private String description;
private long price;
private long availability;
private Category category;
private Date createdAt;
private Date updatedAt;
public void setName(String string) {
       // TODO Auto-generated method stub
}
public void setdescription(String string) {
       // TODO Auto-generated method stub
}
public void setAvailability(Object object) {
       // TODO Auto-generated method stub
}
public void setPrice(long I) {
       // TODO Auto-generated method stub
}
public void setCategory(Category category2) {
       // TODO Auto-generated method stub
}
public void setCreatedAt(java.sql.Date date) {
```

```
// TODO Auto-generated method stub
}
public Object getName() {
       // TODO Auto-generated method stub
       return null;
}
public Object getDescription() {
       // TODO Auto-generated method stub
       return null;
}
public Object getAvailability() {
       // TODO Auto-generated method stub
       return null;
}
public Object getPrice() {
       // TODO Auto-generated method stub
       return null;
}
public Object getCategory() {
       // TODO Auto-generated method stub
       return null;
}
public void setId(long long1) {
       // TODO Auto-generated method stub
}
public void setPrice1(String string) {
       // TODO Auto-generated method stub
}
```

```
public Long getId() {
       // TODO Auto-generated method stub
       return null;
}
public void setId(Object id2) {
       // TODO Auto-generated method stub
}
public void setAvailability11(Object availability2) {
       // TODO Auto-generated method stub
}
public void setPrice(Object price2) {
       // TODO Auto-generated method stub
}
}
Usertype.java=
package com.ecommerce.sportyshoes.enums;
public enum UserType {
       ADMIN, NORMAL;
       public static UserType getUserType(String userTypeString) {
       return UserType.valueOf(userTypeString);
    }
}
Category.java=
```

```
package com.ecommerce.sportyshoes.enums;
public enum Category {
       SPORTS, FORMAL, KIDS;
       public static Category getCategory(String categoryString) {
       return Category.valueOf(categoryString);
    }
}
Usercontroller.java=
package com.ecommerce.sportyshoes.controller;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.User;
import com.ecommerce.sportyshoes.service.iface.UserServiceIface;
@RestController
@RequestMapping("/user")
public class UserController {
       @Autowired
```

```
UserServiceIface userServiceIface;
       @PutMapping(value = "updateUser")
       public int updateUser(@RequestBody User userDataInput) throws BusinessException {
               return userServiceIface.updateUser(userDataInput);
       }
       @GetMapping(value = "getAllUsers")
       public List<User> getAllUsers() throws BusinessException{
               return userServiceIface.getAllUsers();
       }
       @GetMapping(value = "/getUserByEmail")
       public Optional<User> getUserByEmail(@RequestBody User userDataInput) throws
BusinessException{
               return userServiceIface.getUserByEmail(userDataInput);
       }
       @PutMapping(value = "createUser")
       public int createUser(@RequestBody User userDataInput) throws BusinessException {
               return userServicelface.createUser(userDataInput);
       }
       @PutMapping(value = "deleteUser")
       public int deleteUser(@RequestBody User userDataInput) throws BusinessException {
               return userServiceIface.deleteUser(userDataInput);
       }
}
```

```
User.java=
import java.util.Date;
import com.ecommerce.sportyshoes.enums.UserType;
import lombok.AllArgsConstructor;
import lombok.Getter;
import lombok.NoArgsConstructor;
import lombok.Setter;
@Getter
@Setter
@AllArgsConstructor
@NoArgsConstructor
public class User {
private Long iD;
private String firstName;
private String lastName;
private String email;
private String mobile;
private String password;
private UserType userType;
private Date createdAt;
private Date updatedAt;
public void setID(long long1) {
       // TODO Auto-generated method stub
}
public void setFirstName(Object object) {
       // TODO Auto-generated method stub
```

```
}
public void setLastName(Object object) {
       // TODO Auto-generated method stub
}
public void setEmail(Object object) {
       // TODO Auto-generated method stub
}
public void setMobile(String string) {
       // TODO Auto-generated method stub
}
public void setUserType(UserType userType2) {
       // TODO Auto-generated method stub
}
public void setPassword(Object object) {
       // TODO Auto-generated method stub
}
public void setUpdatedAt(java.sql.Date date) {
       // TODO Auto-generated method stub
}
public void setCreatedAt(java.sql.Date date) {
       // TODO Auto-generated method stub
}
public Object getLastName() {
```

```
// TODO Auto-generated method stub
       return null;
}
public Object getFirstName() {
       // TODO Auto-generated method stub
       return null;
}
public Object getPassword() {
       // TODO Auto-generated method stub
       return null;
}
public String getEmail() {
       // TODO Auto-generated method stub
       return null;
}
public Object getMobile() {
       // TODO Auto-generated method stub
       return null;
}
}
PurchaseController.java=
package com.ecommerce.sportyshoes.controller;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import\ org. spring framework. we b. bind. annotation. Rest Controller;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Purchase;
import com.ecommerce.sportyshoes.service.iface.PurchaseServicelface;
@RestController
@RequestMapping ("/purchase")
public class PurchaseController {
       @Autowired
       PurchaseServiceIface purchaseServiceIface;
       @PutMapping("/createsale")
       public int createSale(@RequestBody Purchase purchaseDataInput) throws
BusinessException
       {
              return purchaseServiceIface.createSale(purchaseDataInput);
       }
       @PutMapping("/deletesale")
       public int deleteSale(@RequestBody Purchase purchaseDataInput) throws
BusinessException
       {
               return purchaseServiceIface.deleteSale(purchaseDataInput);
       }
       @GetMapping("/getById")
```

```
public Optional<Purchase> getById(@RequestBody Purchase purchaseDataInput) throws
BusinessException{
               return purchaseServiceIface.getPurchaseById(purchaseDataInput);
       }
       @GetMapping("/getByDateCategory")
       public List<Purchase> getByDateCategory(@RequestBody Purchase purchaseDataInput)
throws BusinessException{
              return purchaseServiceIface.getByDateCategory(purchaseDataInput);
       }
}
ProductController.java=
package com.ecommerce.sportyshoes.controller;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Product;
import com.ecommerce.sportyshoes.service.iface.ProductServiceIface;
@RestController
@RequestMapping("/product")
```

```
public class ProductController {
       @Autowired
       ProductServiceIface productServiceIface;
       @PutMapping("/update")
       public int updateProduct(@RequestBody Product prodDataInput) throws BusinessException
{
               return productServiceIface.updateProduct(prodDataInput);
       }
       @PutMapping("/create")
       public int createProduct(@RequestBody Product prodDataInput) throws BusinessException {
               return productServiceIface.createProduct(prodDataInput);
       }
       @PutMapping("/delete")
       public int deleteProduct(@RequestBody Product prodDataInput) throws BusinessException {
               return productServiceIface.deleteProduct(prodDataInput);
       }
       @GetMapping("/getByCategory")
       public List<Product> getByCategory(@RequestBody Product prodDataInput) throws
BusinessException{
               return productServiceIface.getProdByCategory(prodDataInput);
       }
```

```
}
ExceptionController.java=
package com.ecommerce.sportyshoes.controller;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.ControllerAdvice;
import org.springframework.web.bind.annotation.ExceptionHandler;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
@ControllerAdvice
public class ExceptionController {
       @ExceptionHandler(value = BusinessException.class)
       public ResponseEntity<Object> exception(BusinessException exception){
               return new ResponseEntity<>(exception.getMessage(),
HttpStatus.EXPECTATION_FAILED);
       }
}
Application.java=
package com.ecommerce.sportyshoes;
import org.springframework.boot.SpringApplication;
import\ org. spring framework. boot. autoconfigure. Spring Boot Application;
```

```
@SpringBootApplication
public class SportyshoesApplication {
       public static void main(String[] args) {
               SpringApplication.run(SportyshoesApplication.class, args);
       }
}
PurchaseServlecface.java=
package com.ecommerce.sportyshoes.service.iface;
import java.util.List;
import java.util.Optional;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Purchase;
public interface PurchaseServiceIface {
public int createSale(Purchase purchaseDataInput) throws BusinessException;
public int deleteSale(Purchase purchaseDataInput) throws BusinessException;
public List<Purchase> getByDateCategory(Purchase purchaseDataInput) throws BusinessException;
public Optional<Purchase> getPurchaseById(Purchase purchaseDataInput) throws
BusinessException;
}
Userservlecface.java=
package com.ecommerce.sportyshoes.service.iface;
```

```
import java.util.List;
import java.util.Optional;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.User;
public interface UserServiceIface {
       public int updateUser(User userDataInput) throws BusinessException;
       public List<User> getAllUsers() throws BusinessException;
       public Optional<User> getUserByEmail(User userDataInput) throws BusinessException;
       public int createUser(User userDataInput) throws BusinessException;
       public int deleteUser(User userDataInput) throws BusinessException;
}
Productservlecimpl.java=
package com.ecommerce.sportyshoes.service.impl;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
```

```
import com.ecommerce.sportyshoes.model.Product;
import com.ecommerce.sportyshoes.repository.ProductRepository;
import com.ecommerce.sportyshoes.service.iface.ProductServiceIface;
@Service
public class ProductServiceImpl implements ProductServiceIface{
       @Autowired
       ProductRepository productRepository;
       @Override
       public int updateProduct(Product prodDataInput) throws BusinessException {
               Product product = new Product();
               product.setId(prodDataInput.getId());
               product.set Availability (prod DataInput.get Availability ());\\
               product.setPrice(prodDataInput.getPrice());
               return productRepository.updateProduct(product);
       }
       @Override
       public int createProduct(Product prodDataInput) throws BusinessException {
               // TODO Auto-generated method stub
               return productRepository.createProduct(prodDataInput);
       }
       @Override
       public int deleteProduct(Product prodDataInput) throws BusinessException {
               // TODO Auto-generated method stub
               return productRepository.deleteProduct(prodDataInput.getId());
       }
```

```
@Override
       public List<Product> getProdByCategory(Product prodDataInput) throws BusinessException {
               // TODO Auto-generated method stub
               return productRepository.findByCategory(prodDataInput.getCategory().toString());
       }
       @Override
       public Optional<Product> getPodById(Product prodDataInput) throws BusinessException {
               // TODO Auto-generated method stub
               return productRepository.findById(prodDataInput.getId());
       }
}
PurchaseServlecImpl.java=
package com.ecommerce.sportyshoes.service.impl;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import com.ecommerce.sportyshoes.model.Purchase;
import com.ecommerce.sportyshoes.repository.PurchaseRepository;
import com.ecommerce.sportyshoes.service.iface.PurchaseServiceIface;
@Service
```

```
@Autowired
       PurchaseRepository purchaseRepository;
       @Override
       public int createSale(Purchase purchaseDataInput) throws BusinessException {
              // TODO Auto-generated method stub
              return purchaseRepository.createSale(purchaseDataInput);
       }
       @Override
       public int deleteSale(Purchase purchaseDataInput) throws BusinessException {
              // TODO Auto-generated method stub
              return purchaseRepository.deleteSale(purchaseDataInput.getUser_id());
       }
       @Override
       public List<Purchase> getByDateCategory(Purchase purchaseDataInput) throws
BusinessException {
              // TODO Auto-generated method stub
              Purchase purchase=new Purchase();
               purchase.setCategory(purchaseDataInput.getCategory());
               purchase.setCreatedAt(purchaseDataInput.getCreatedAt());
               return purchaseRepository.findByDateCategory(purchase);
       }
       @Override
       public Optional<Purchase> getPurchaseById(Purchase purchaseDataInput) throws
BusinessException {
              // TODO Auto-generated method stub
               return purchaseRepository.findById(purchaseDataInput.getUser id());
```

```
}
}
UserservlecImpl.java=
package com.ecommerce.sportyshoes.service.impl;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.ecommerce.sportyshoes.exceptions.BusinessException;
import\ com. ecommerce. sporty shoes. model. User;
import com.ecommerce.sportyshoes.repository.UserRepository;
import com.ecommerce.sportyshoes.service.iface.UserServiceIface;
@Service
public class UserServiceImpl implements UserServiceIface{
       @Autowired
       UserRepository userRepository;
       public int updateUser(User userDataInput) throws BusinessException {
               User user = new User();
               user.setFirstName(userDataInput.getFirstName());
               user.setLastName(userDataInput.getLastName());
               user.setPassword(userDataInput.getPassword());
               user.setEmail(userDataInput.getEmail());
               return userRepository.updateUser(user);
```

```
public List<User> getAllUsers() throws BusinessException{
               return userRepository.findAll();
       }
       public Optional<User> getUserByEmail(User userDataInput) throws BusinessException{
               return userRepository.findByEmail(userDataInput.getEmail());
       }
       public int createUser(User userDataInput) throws BusinessException {
               return userRepository.createUser(userDataInput);
       }
       public int deleteUser(User userDataInput) throws BusinessException {
               return userRepository.deleteUser(userDataInput.getEmail());
       }
}
SwaggerConfiguration.java=
package com.ecommerce.sportyshoes.swagger;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import springfox.documentation.builders.PathSelectors;
import springfox.documentation.builders.RequestHandlerSelectors;
```

}

```
import springfox.documentation.spi.DocumentationType;
import springfox.documentation.spring.web.plugins.Docket;
import springfox.documentation.swagger2.annotations.EnableSwagger2;
import static springfox.documentation.builders.PathSelectors.regex;
@Configuration
@EnableSwagger2
public class SwaggerConfiguration {
      @Bean
      public Docket productAPi() {
             return new Docket(DocumentationType.SWAGGER_2)
                           .select().apis(RequestHandlerSelectors.
      basePackage("com.ecommerce.sportyshoes.controller"))
                           .paths(PathSelectors.any()).build();}
}
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>2.3.2.RELEASE
             <relativePath/> <!-- lookup parent from repository -->
      </parent>
      <groupId>com.ecommerce
       <artifactId>sportyshoes</artifactId>
       <version>0.0.1-SNAPSHOT</version>
       <name>sportyshoes</name>
```

```
<description>Phase 3 live project sporty shoes</description>
      cproperties>
            <java.version>1.8</java.version>

      <dependencies>
            <dependency>
                  <groupId>org.springframework.boot
                  <artifactId>spring-boot-starter-data-jdbc</artifactId>
            </dependency>
            <dependency>
                  <groupId>org.springframework.boot
                  <artifactId>spring-boot-starter-web</artifactId>
            </dependency>
            <dependency>
                  <groupId>mysql
                  <artifactId>mysql-connector-java</artifactId>
                  <scope>runtime</scope>
            </dependency>
            <dependency>
                  <groupId>org.projectlombok
                  <artifactId>lombok</artifactId>
                  <optional>true</optional>
            </dependency>
            <dependency>
   <groupId>io.springfox
   <artifactId>springfox-swagger2</artifactId>
   <version>3.0.0
   <scope>compile</scope>
</dependency>
            <dependency>
                  <groupId>org.springframework.boot
                  <artifactId>spring-boot-starter-test</artifactId>
                  <scope>test</scope>
                  <exclusions>
                        <exclusion>
                              <groupId>org.junit.vintage
                              <artifactId>junit-vintage-engine</artifactId>
                        </exclusion>
                  </exclusions>
            </dependency>
      </dependencies>
      <build>
            <plugins>
                  <plugin>
                        <groupId>org.springframework.boot
                        <artifactId>spring-boot-maven-plugin</artifactId>
                  </plugin>
            </plugins>
      </build>
</project>
```