

IT Lab Report – Assignment 4

TITLE

Name – Biswarup Ray

Roll – 001810501082

Class – BCSE 3rd year

Group – A3

Assignment Number – 4

Design an online apparel store using either the Spring framework or servlets. The store keeps records for its items in a database where some items may be discounted and some other items should be displayed as “new arrivals”. A user may search for a specific item. By default, when a user signs in, based on his/her profile (male/female etc.), show him/her preferred set of clothing. Users will be divided into two groups: some users looking for discounted items mainly, some others looking for new arrivals. So, initially, depending on their preference already set in the database, the order of the displayed list would vary. By default, discounted items will be displayed first. This order may change depending on usage behavior at runtime.

You may apply the concept of “dependency injection” here. Dependency injection (DI) is a technique where one object supplies the dependencies of another object. Basically you have an interface and a number of java beans implementing them. The major benefit of DI is loose coupling and ease of use. DI makes classes more cohesive because they have fewer responsibilities. You should use SessionListener or ServletContextListener.

Four main features of the backend of your application should be – (i) session handling, (ii) database connectivity, (iii) event handling, and (iv) security (e.g. https). DI is made optional here.

Implementation Details:

Front end:

React JS



Thymeleaf



Back end:

Spring boot

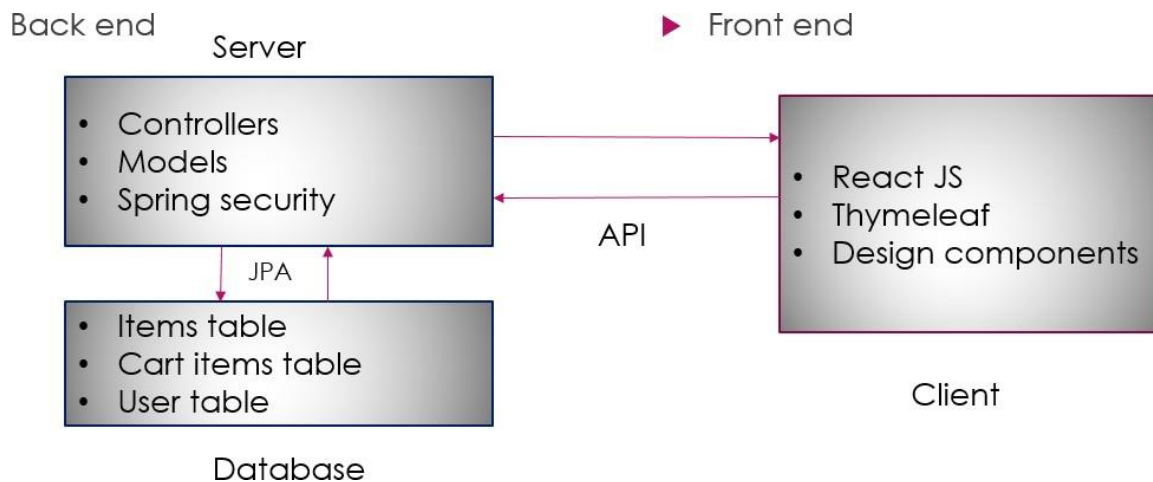


Spring security

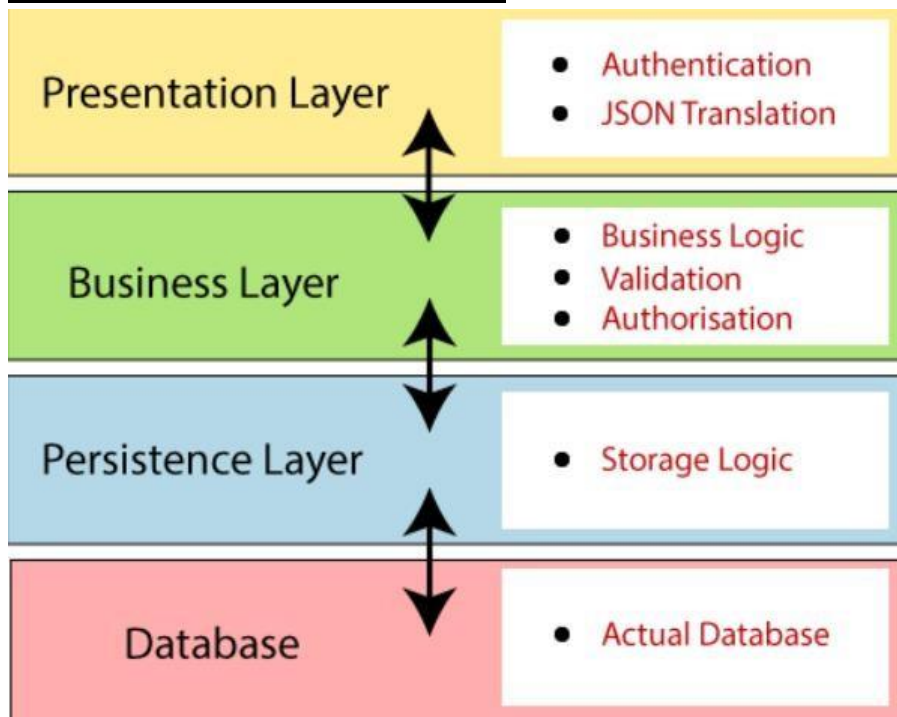
MySQL



Structure Diagram:



Implementation Details:



Presentation layer: Front end

Business logic layer: Consists of controllers, dispatcher servlet and all aspects of spring security, including authentication and authorization

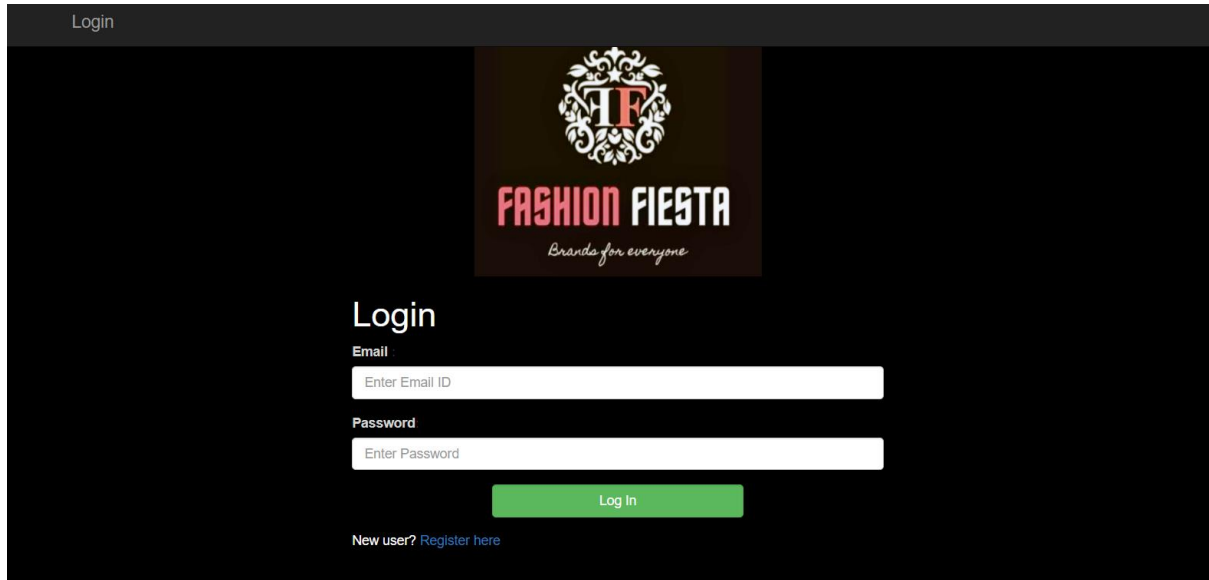
Persistence layer: Java persistence API (JPA) and entities for data access.

Database: MySQL in this case.

Table: user		Table: items		Table: cart_items	
Columns:		Columns:		Columns:	
id	bigint AI PK	id	bigint AI PK	id	bigint AI PK
email	varchar(255)	category	varchar(255)	category	varchar(255)
first_name	varchar(255)	cost	int	cost	int
gender	varchar(255)	discount	int	discount	int
last_name	varchar(255)	image_url	varchar(255)	email	varchar(255)
password	varchar(255)	latest	varchar(255)	image_url	varchar(255)
preference	varchar(255)	name	varchar(255)	latest	varchar(255)
role	varchar(255)			name	varchar(255)
				quantity	int

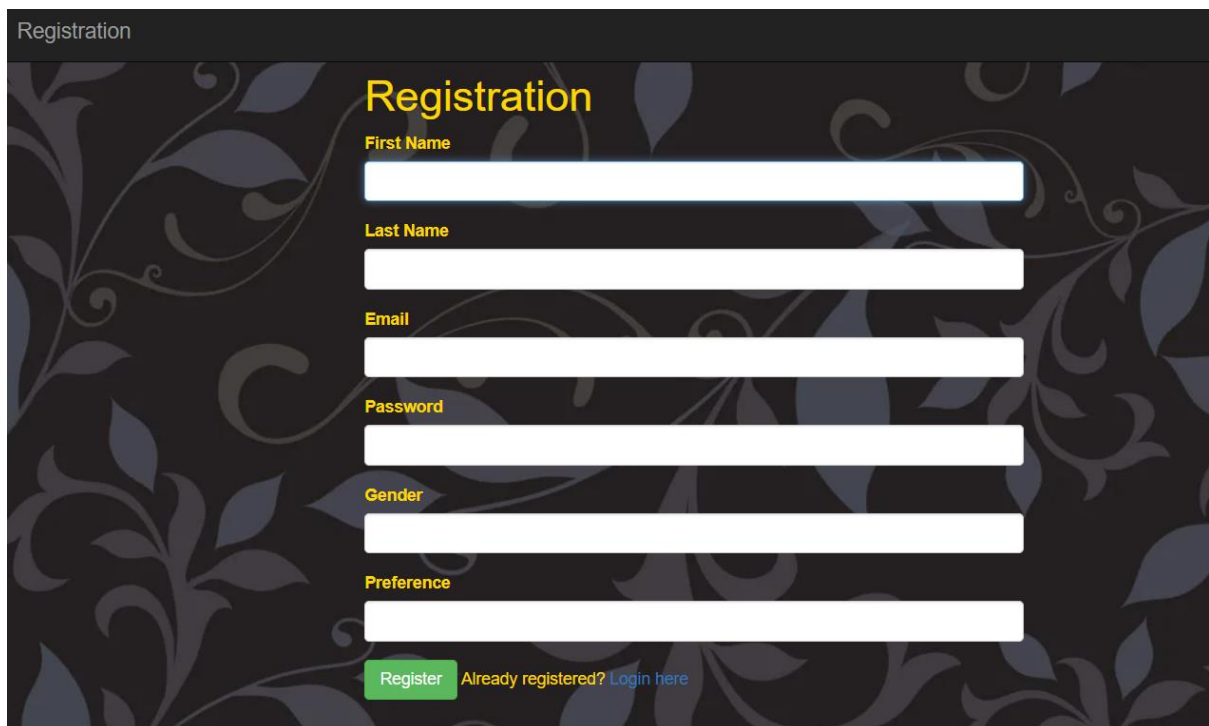
Frontend and Results.

Login page:



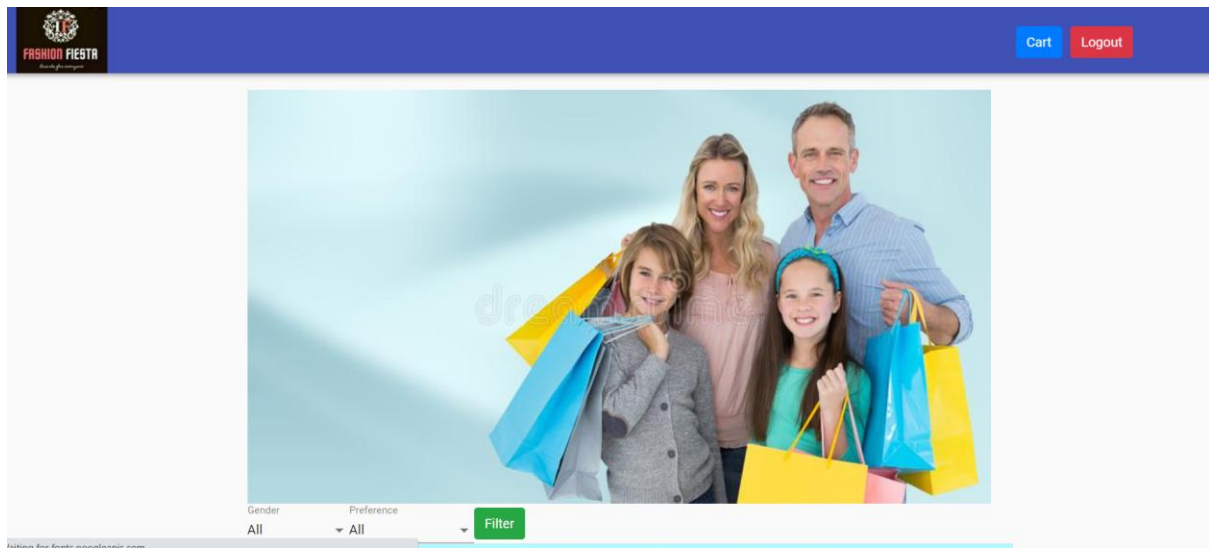
The screenshot shows the login page for Fashion Fiesta. At the top, there is a dark header with the word "Login" in white. Below the header, the Fashion Fiesta logo is centered, featuring a stylized "FF" in a circular emblem with the text "FASHION FIESTA" and "Brands for everyone" underneath. The main content area has a dark background. The word "Login" is displayed in white. Below it, there are two input fields: "Email" with the placeholder "Enter Email ID" and "Password" with the placeholder "Enter Password". A green "Log In" button is positioned below the password field. At the bottom, there is a link that says "New user? Register here".

Registration for new user:



The screenshot shows the registration page for Fashion Fiesta. At the top, there is a dark header with the word "Registration" in white. Below the header, the word "Registration" is displayed in a large, bold, yellow font. The background of the page features a dark, ornate floral pattern. Below the title, there are six input fields with labels in yellow: "First Name", "Last Name", "Email", "Password", "Gender", and "Preference". At the bottom, there is a green "Register" button and a link that says "Already registered? Login here".


Home page Navbar:





Home page Item List:

Image	Name	Category	Original Cost	Discount %	Latest	
	levis jeans	Menswear	₹ 1000	15	No	₹ 850 Add to Cart
	zara dress	Womenswear	₹ 5000	15	No	₹ 4250 Add to Cart
	adidas Tshirt	Menswear	₹ 200	10	No	₹ 180 Add to Cart
	addidas shirt	Menswear	₹ 600	5	No	₹ 570 Add to Cart
	chanel handbag	Womenswear	₹ 12500	5	No	₹ 11875 Add to Cart

Cart Page:

 [Home](#)






Total: ₹ 380

Image	Name	Category	Original Cost	Discount %	Latest	
	nike Tshirt	Menswear	₹ 200	0	Yes	₹ 200
	adidas Tshirt	Menswear	₹ 200	10	No	₹ 180

Admin Page (add and delete items):

Admin Update Site

[Add Item](#) [Home](#)

Image	Name	Category	Cost	Discount %	Latest	Actions
	nike shirt	Menswear	200	0	Yes	Edit Remove
	levis shirt	Menswear	500	0	Yes	Edit Remove
	gucci dress	Womenswear	10000	0	Yes	Edit Remove
	gucci handbag	Womenswear	15000	0	Yes	Edit Remove
	triveni saree	Womenswear	5000	0	Yes	Edit Remove