

FULL STACK PROJECT REPORT

On Shopping Website

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Mathura – 281406

Declaration

We hereby declare that the work which is being presented in “**Shopping Website**” in partial fulfillment of the requirements for Full Stack Project, is an authentic record of our own work carried under the supervision of “**Mr. Pankaj Kapoor**”.

Signature of Candidate:

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Course: B.Tech.

Year: III

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Synopsis

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Project Information:

Title Of Project/Training/Task	Shopping Website
Role & Responsibility	Trainee
Technical Details	Hardware Requirements - Computer System with minimum 8GB of RAM Software Requirements – Brackets Installed, Git Installed
Training Implementation Details	Fully Implemented - YES Partial Implemented - NO Not Implemented - NO
Training Period	Start Date: 20/08/2019 End Date: 25/11/2019 Duration Of Project (In Weeks): 15 weeks

Summary of the Training Work:

During making of this project, we learnt about various front end and backend languages and their advantages in development of web sites. We also learnt about various elements of HTML, CSS, Bootstrap and Javascript and their syntax.

Acknowledgement

We would like to express my special thanks of gratitude to **Mr. Pankaj Kapoor** who gave us this opportunity to fulfil this project. He gave us moral support and guided in different matters regarding this topic. He had been very kind and patient while suggesting us the outlines of this project. We thank him for his overall support.

We also thank our parents for encouraging us while we were doing this project. We also thank our grandparents who always appreciate our work.

Date -

25/11/2019

Abstract

Full stack development: It refers to the development of both front end(client side) and back end(server side) portions of web application.

Full stack web Developers: Full stack web developers have the ability to design complete web application and websites. They work on the frontend, backend, database and debugging of web application or websites.

Technology related to full stack development:

Front end: It is the visible part of website or web application which is responsible for user experience. The user directly interacts with the front end portion of the web application or website.

Back end: It refers to the server-side development of web application or website with a primary focus on how the website works. It is responsible for managing the database through queries and APIs by client-side commands. This type of website mainly consists of three parts front end, back end, and database.

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CHAPTER 1 HTML

1.1) WHAT IS HTML

- Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.
- Hypertext Markup Language, a standardized system for tagging text files to achieve font, colour, graphic, and hyperlink effects on World Wide Web pages.
- First developed by Tim Berners-Lee in 1990, HTML is short for Hypertext Markup Language. HTML is used to create electronic documents (called pages) that are displayed on the World Wide Web. Each page contains a series of connections to other pages called hyperlinks. Every web page you see on the Internet is written using one version of HTML code or another.

1.2) ADVANTAGES OF HTML

<p>1. </p> <p>HTML is Easy to Learn and Use</p>	<p>2. </p> <p>HTML is Free</p>	<p>3. </p> <p>HTML is Supported by all Browsers</p>	<p>4. </p> <p>HTML is the Most Friendly Search Engine</p>	<p>5. </p> <p>HTML is Simple to Edit</p>
<p>6. </p> <p>HTML can Integrate Easily with Other Languages</p>	<p>7. </p> <p>HTML is Lightweight</p>	<p>8. </p> <p>HTML is Basic of all Programming Languages</p>	<p>9. </p> <p>Display Changes Instantly</p>	<p>10. </p> <p>HTML is User-Friendly</p>

1.2.1) HTML is Easy to Learn and Use

For the one who is learning web development, HTML is the first and foremost language that the person will go through. It has simple tags and there is no hectic of case sensitivity in HTML.

1.2.2) HTML is Free

One of the biggest advantages of HTML is that it is free of cost and there is no need to purchase specific software.

1.2.3) HTML is Supported by all Browsers

Almost all the browsers around the globe are supported by HTML.

1.2.4) HTML is the Most Friendly Search Engine

HTML is one of the most friendly search engines in comparison to all the programming languages available in the market.

1.2.5) HTML is Simple to Edit

HTML is very easy to edit as there is no need to have a special interface or platform to edit it.

1.2.6) HTML is Lightweight

It has a high signal to noise ratio as compared to other forms of communication.

1.2.7) HTML can Integrate Easily with Other Languages

HTML can be easily integrated with multiple languages and does not create any issues in it.

1.2.8) HTML is Basic of all Programming Languages

It is the basic language and all the other languages integrate with it

1.2.9) Display Changes Instantly

One of the biggest advantages of HTML is that one can see the changes instantly just by saving it and reload the previous HTML page.

1.2.10) HTML is User-Friendly

One does not need to have any prior knowledge of any language.

CHAPTER 2 CSS

2.1) WHAT IS CSS

- **Cascading Style Sheets (CSS)** is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.
- CSS is one of the core languages of the **open Web** and is standardized across Web browsers according to the W3C specification.
- **Cascading Style Sheets**, fondly referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows us to apply styles to web pages. More importantly, CSS enables us to do this independent of the HTML that makes up each web page.
- CSS is easy to learn and understood but it provides powerful control over the presentation of an HTML document.

2.2) WHY CSS

2.2.1) CSS saves time

You can write CSS once and reuse same sheet in multiple HTML pages.

2.2.2) Easy Maintenance

To make a global change simply change the style, and all elements in all the webpages will be updated automatically.

2.2.3) Search Engines

CSS is considered as clean coding technique, which means search engines won't have to struggle to "read" its content.

2.2.4) Superior Styles to HTML

CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.

2.2.5) Offline Browsing

CSS can store web applications locally with the help of offline cache. Using of this we can view offline websites.

2.3) CSS SELECTORS

CSS selectors are used to “find” (or select) HTML elements based on their element name, id, class, attribute, and more.

2.3.1) The Universal Selectors

Rather than selecting elements of a specific type, the universal selector quite simply matches the name of any element type.

2.3.2) The Element Selector

The element selector selects elements based on the element name.

2.3.3) The Descendant Selector

Suppose we want to apply a style rule to a particular element only when it lies inside a particular element.

2.3.4) The ID Selector

The id selector uses the id attribute of an HTML element to select a specific element. The id of an element should be unique within a page, so the id selector is used to select one unique element! To select an element with a specific id, write a hash (#) character, followed by the id of the element.

2.3.5) The Class Selectors

The class selector selects elements with a specific class attribute. To select elements with a specific class, write a period (.) character, followed by the name of the class.

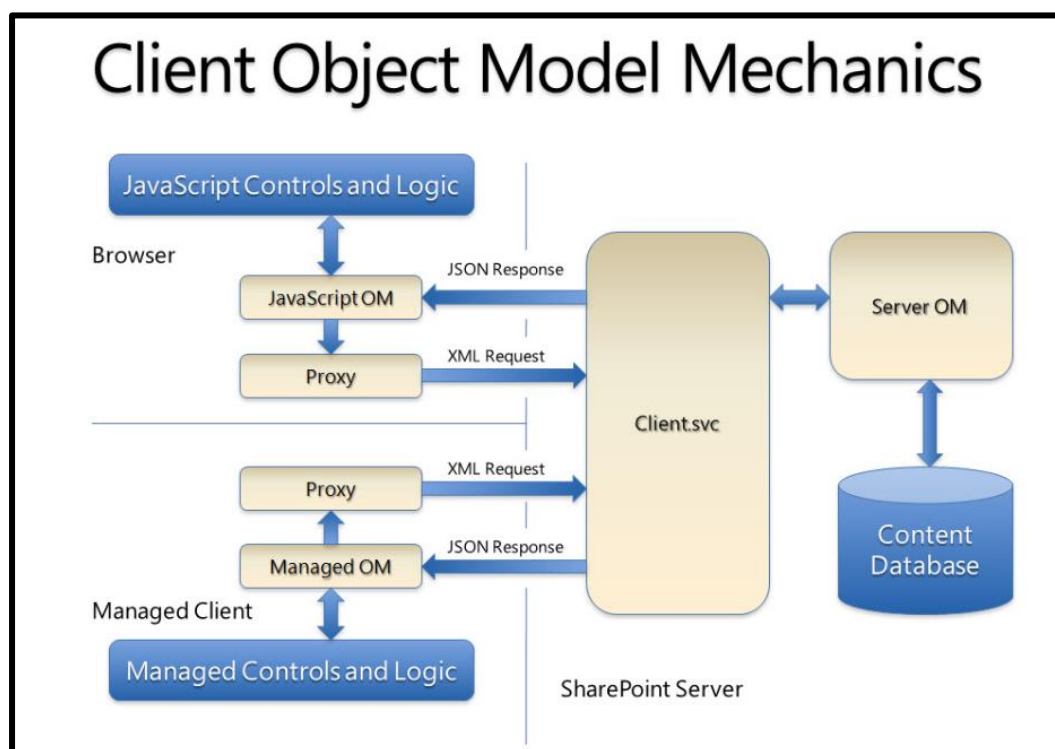
CHAPTER 3 JAVASCRIPT

3.1) WHAT IS JAVASCRIPT

- JavaScript often abbreviated as JS, is a high-level, just-in-time compiled, object-oriented programming language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.
- Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it.
- JavaScript was once upon a time used only in client side(browser), but node js (execution engine/run time/web server) have made possible to run javascript on server side. JavaScript is everywhere – on Desktop/Server/Mobile.

3.2) ADVANTAGES OF JAVASCRIPT

3.2.1) JavaScript is a client side language



The JavaScript code is executed on the user's processor instead of the web server thus it saves bandwidth and load on the web server.

3.2.2) JavaScript is an easy language to learn

The JavaScript language is easy to learn and offers syntax that is close to English.

3.2.3) JavaScript is comparatively fast for the end user

As the code is executed on the client side, results and processing is completed almost instantly depending on the task (tasks in JavaScript on web pages are usually simple so as to prevent being a memory hog) as it does not need to be processed in the site's web server and sent back to the user consuming local as well as server bandwidth.

3.2.4) Extended functionality to web pages

Third party add-ons like Greasemonkey enable JavaScript developers to write snippets of JavaScript which can execute on desired web pages to extend its functionality.

3.2.5) No compilation needed

Javascript does not require compilation process so no compiler is needed. The browser interprets JavaScript as it HTML tags.

3.2.6) Easy to debug and test

The understanding syntax of JavaScript is easy. Any person can learn it very easily and use it to develop dynamic and scalable websites.

3.2.7) Platform Independent

Any JavaScript-enabled browser can understand and interpret JavaScript code. Any JavaScript code can be executed on different types of hardware a JavaScript program written for.

3.2.8) Event – Based Programming Language

Being an event-based language, different code segments are executed whenever a certain event occurs in JavaScript. In simple language, a code segment is executed when a user clicks a button or moves a mouse over the object.

3.2.9) Procedural programming capabilities

JavaScript language encompasses all the capabilities of a procedural language. Branching, looping, condition checking are some of those capabilities that can be executed on a web page.

CHAPTER 4 BOOTSTRAP

4.1) WHAT IS BOOTSTRAP

- Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.
- Bootstrap is a free and open-source collection of tools for creating websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites. It solves many problems which we had once, one of which is the cross browser compatibility issue. Nowadays, the websites are perfect for all the browsers (IE, Firefox and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets and Phones). All thanks to Bootstrap developers -Mark Otto and Jacob Thornton of Twitter, though it was later declared to be an open-source project.

4.2) WHY BOOTSTRAP

- Faster and Easier Web-Development
- It creates Platform-independent web-pages
- It creates Responsive Web-pages
- It's designed to be responsive to mobile devices too.

Websites which were built with a lot of CSS and JavaScript can now be built with a few lines of code using Bootstrap. Bootstrap comprises of mainly three components:

- CSS
- Fonts
- Javascript

4.3) ADVANTAGES OF BOOTSTRAP

4.3.1) Speed of Development

The speed of development is one of its major advantages. It helps to save your coding effort by offering less CSS functionality and pre-built blocks of code rather than structuring code from the scratch.

4.3.2) Responsiveness

Bootstrap is equipped with responsive layout and 12-column grid system that help dynamically adjust the website to a suitable screen resolution. The ‘responsive utility classes’ feature of Bootstrap enables us to hide / show a certain section of content for a particular screen size.

4.3.3) Consistency

Consistency was the fundamental principle behind the introduction of Bootstrap. It ensures the ultimate consistency regardless of designer/developer, who is working on it. Moreover, the results work uniformly across various browsers and the output remains same.

4.3.4) Customizable

Bootstrap facilitates abundant customization and helps developers in designing tailor made websites, according to their specifications. It has the facility to select any feature that is actually needed to create a customized website. With this feature, one can get rid of what they do not require.

4.3.5) Support

Bootstrap helps to fix issues promptly with an immense support community. Bootstrap also releases continual updates to fix any new issues. Currently, it is being developed, hosted and maintained by GitHub with over 9000 commits and 500 contributors.

CHAPTER 5 MODULE DESCRIPTION

5.1) HOME PAGE

The following modules are involved:

5.1.1) Creating Basic HTML Skeleton

HTML Skeleton allows us to add various HTML elements straight into our document, freeing from typing it ourselves. Usage – a) Place our cursor where we want the elements to be added. b) Select the elements we desire. c) Click Done and the HTML elements will be added to our document.

5.1.2) Creating Menu Page

Menu button is fixed at the top right corner of the webpage. It's styling is done with the help of CSS. On clicking it, the menu options will open. It consists of Reach Us, Address, Home, Abouts, Men, Women, Handbags and Shoes. There are further details in Reach Us and Address. Home is created as a link which directs to the home page. Internal linking is used in the Home link. Men Women, Handbags and Shoes are created as external links and will direct to corresponding pages.

5.1.3) Creating Home Page Icon

Home page icon is created using HTML. Its styling is done with the help of CSS. On scrolling down, it will shrink and will act as a link to home page.

5.1.4) Adding Images

Various images are added and transition effect is added to them with the help of CSS.

5.1.5) Adding lists

Different options available are added corresponding to every image, using the HTML tags for creating lists.

5.1.6) Creating slides of images

We have created a slider of images. It consists of total 5 images. To navigate through, left arrow and right arrow are created. This is implemented using Bootstrap.

5.2) WOMEN'S PAGE

The following modules are involved:

5.2.1) Creating Basic HTML Skeleton

HTML Skeleton allows us to add various HTML elements straight into our document, freeing from typing it ourselves. Usage – a) Place our cursor where we want the elements to be added. b) Select the elements we desire. c) Click Done and the HTML elements will be added to our document.

5.2.2) Creating Menu Bar

Menu button is fixed at the top left corner of the webpage. On clicking it, the menu options will open. It consists of Close Menu, Home, Sarees, Kurta & Kurtis, Salwar Suits, Dresses. Home is created as an external link which directs to the home page. Sarees, Kurta & Kurtis, Salwar Suits and Dresses are created as internal links which will direct to the respective sections of the webpage.

5.2.3) Creating Photo Grid

Photo grid is made is using the div tags of HTML and styling is done with the help of CSS. The photo grid consists of three components – a) image b) description about the image c) price. The whole is created as a link and shadow effect is added on hover.

5.2.4) Creating Pagination

Pagination is added at the last to toggle between the various pages.

5.2.5) Adding Background

Background is added to the whole body with the help of CSS.

5.3) MEN'S PAGE

5.3.1) Creating Menu Bar

Menu button is fixed at the top left corner of the webpage. On clicking it, the menu options will open. It consists of Close Menu, Home, T-Shirts and Polos, Shirts, Kurtas, Jeans. Home is created as an external link which directs to the home page. T-Shirts and Polos, Shirts, Kurtas and Jeans are created as internal links which will direct to the respective sections of the webpage.

5.4) HANDBAG'S PAGE

5.3.2) Creating Menu Bar

Menu button is fixed at the top left corner of the webpage. On clicking it, the menu options will open. It consists of Close Menu, Home, Handbags, Wallets, Backpacks, Rucksacks. Home is created as an external link which directs to the home page. Handbags, Wallets, Backpacks and Rucksacks are created as internal links which will direct to the respective sections of the webpage.

5.5) SHOES' PAGE

5.3.3) Creating Menu Bar

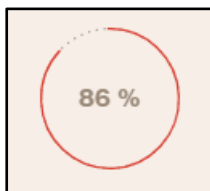
Menu button is fixed at the top left corner of the webpage. On clicking it, the menu options will open. It consists of Close Menu, Home, Casual Shoes, Sports Shoes, Heels, Flat Slip-on & Sandal. Home is created as an external link which directs to the home page. Casual Shoes, Sports Shoes, Heels and Flat Slip-on & Sandal are created as internal links which will direct to the respective sections of the webpage.

CHAPTER 6 USER INTERFACE AND IMPLEMENTATION

6.1) HOME PAGE

6.1.1) Timer

The time at the load of home page.



6.1.2) The tag line

The tag line on the load of webpage.

Where fashion meets fun!

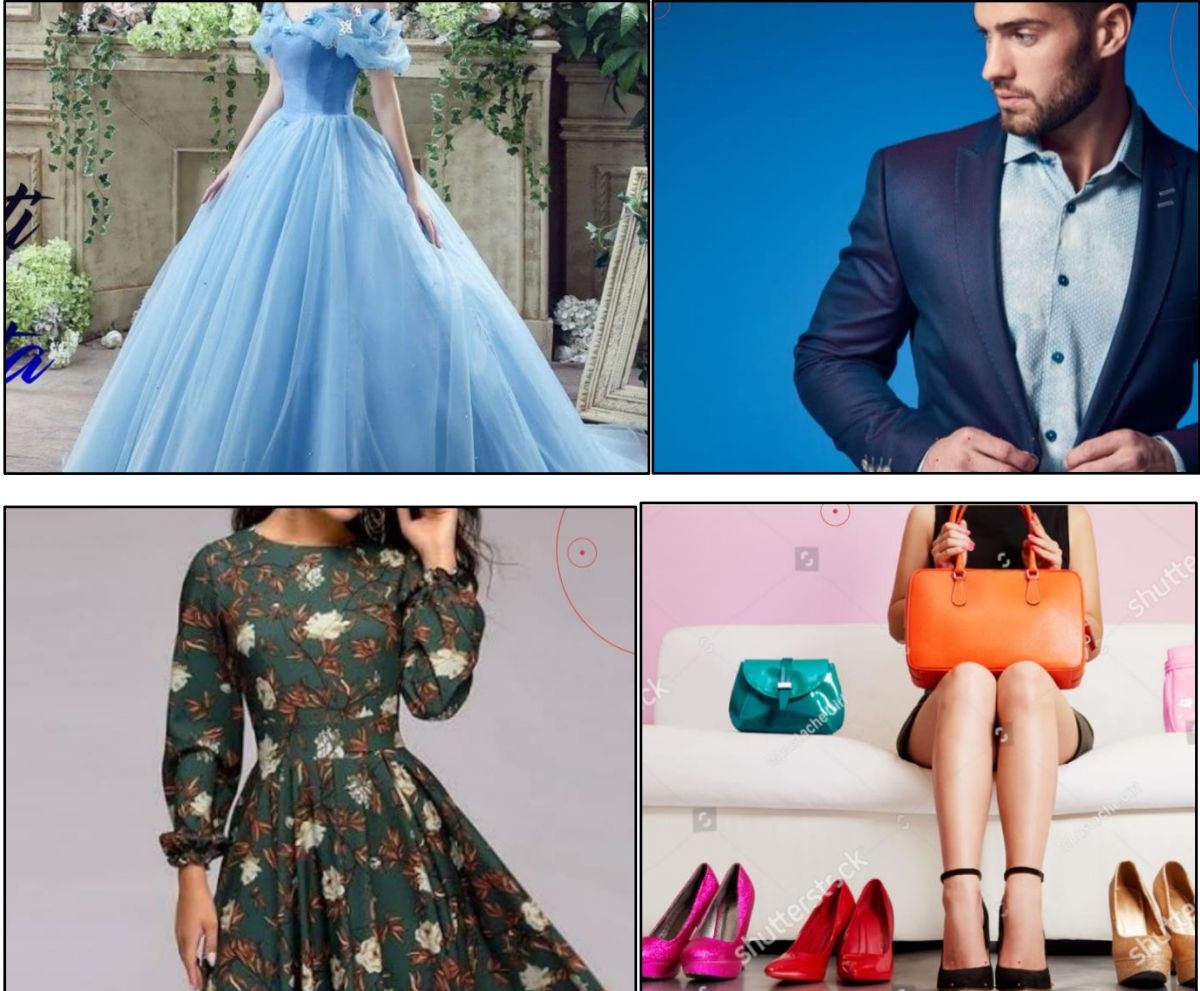
6.1.3) The Icon

The icon of page.

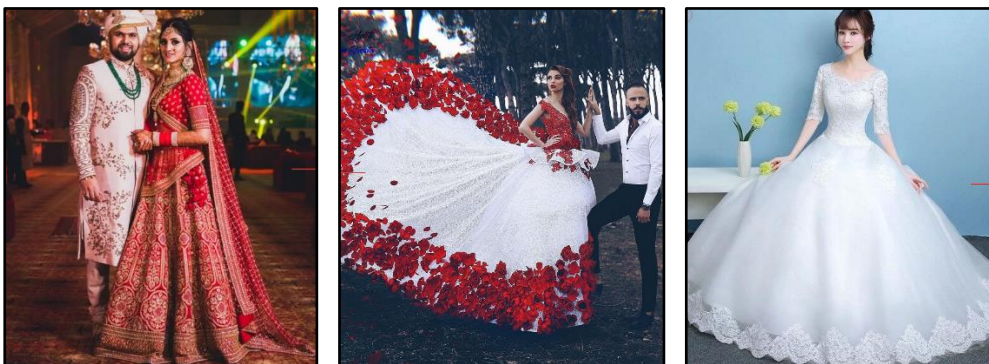


6.1.4) The Images

Various images on the page.



6.1.5) The Slideshow Images

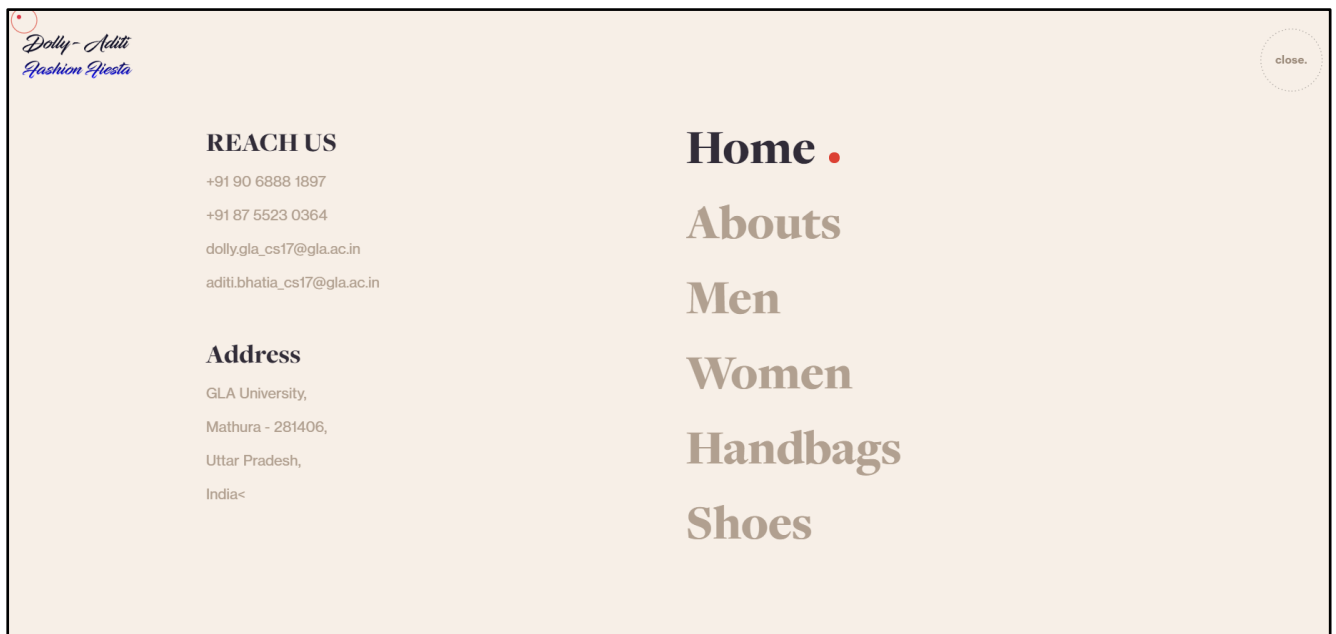




The images added in the slider.

6.1.6) Menu Page

Various options of menu page.



6.1.7) Men's Corner



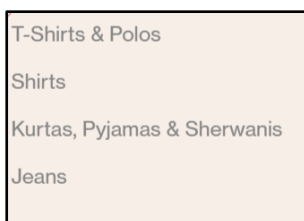
6.1.8) Women's Corner



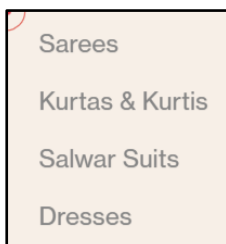
6.1.9) Shoes and Handbags



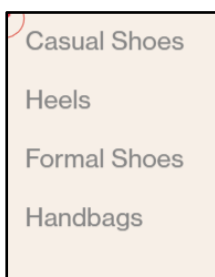
6.1.10) Men's List Options



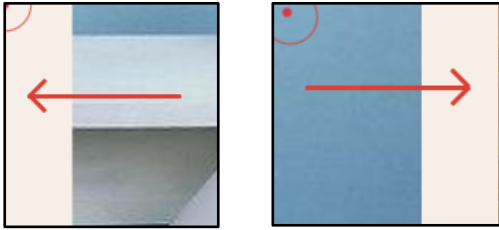
6.1.11) Women's List Options



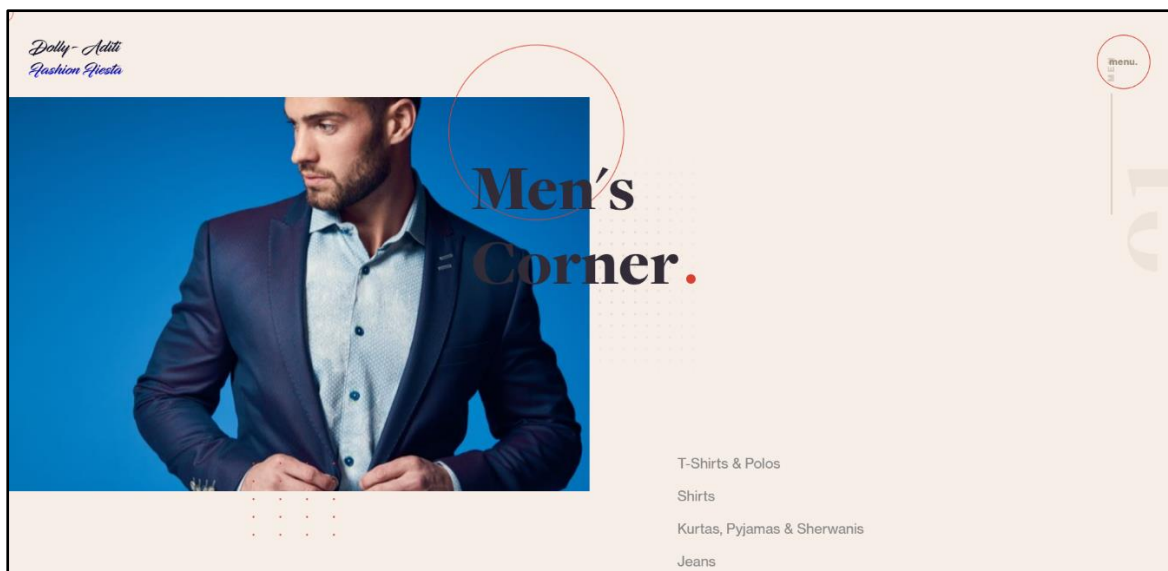
6.1.12) Shoes and Handbags' List Options

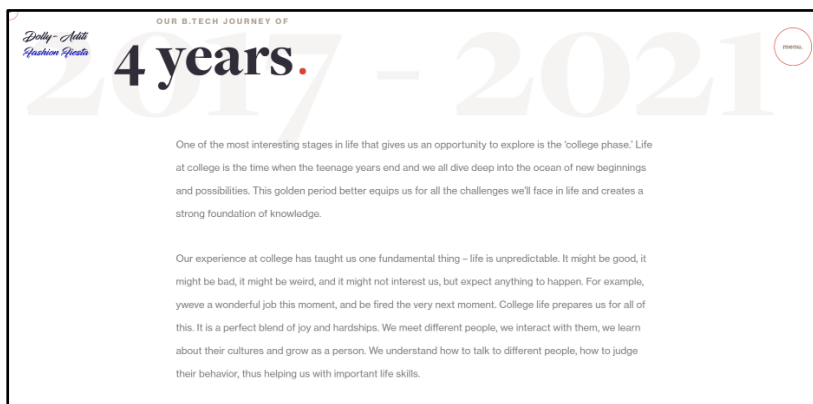
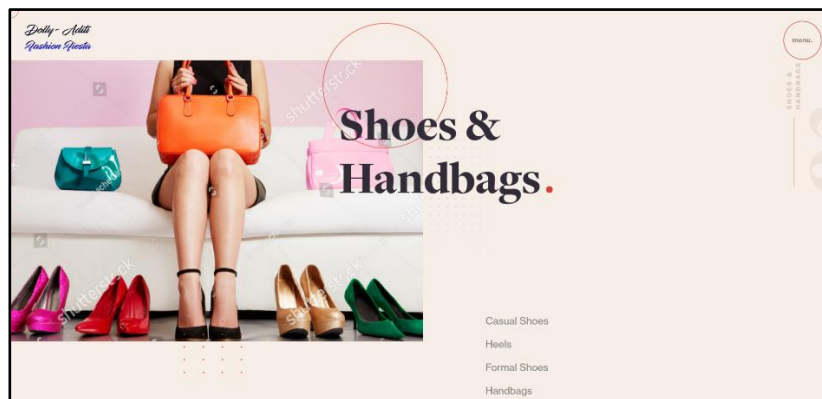


6.1.13) Left and Right Arrows in Slider



6.1.14) Full Page

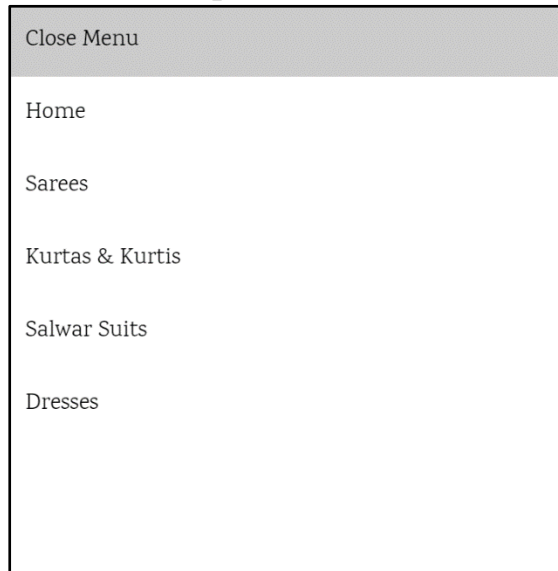




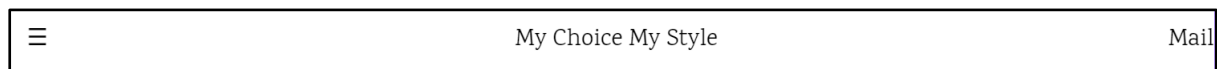
6.2) WOMEN'S PAGE

6.2.1) Menu Bar

The various options in menu bar.



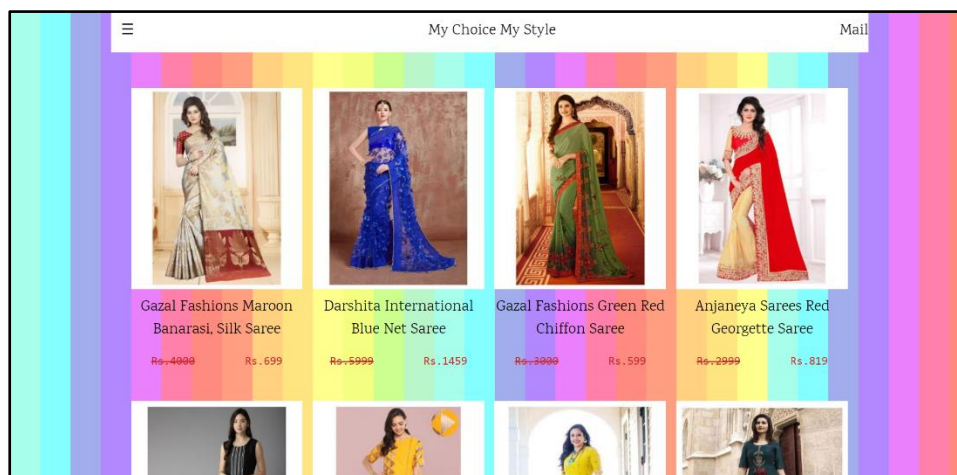
6.2.2) Top Bar

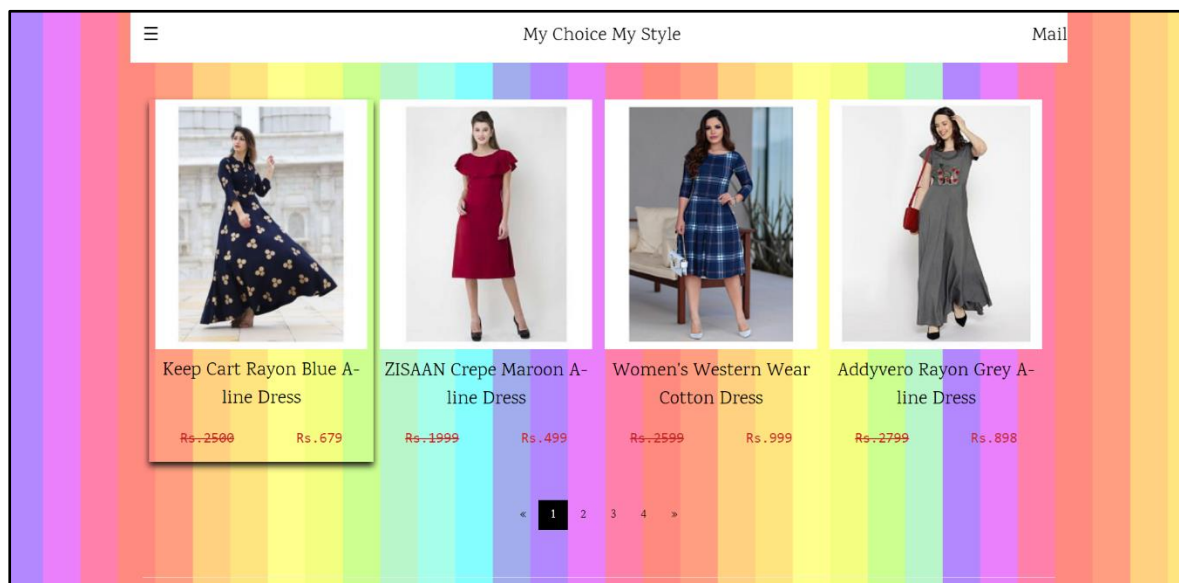
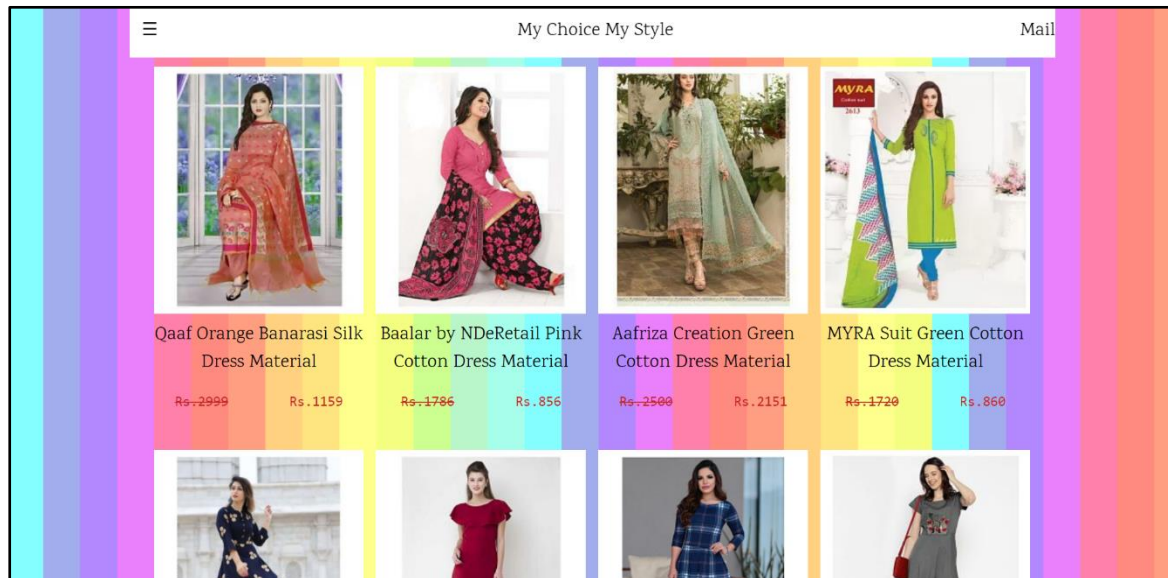
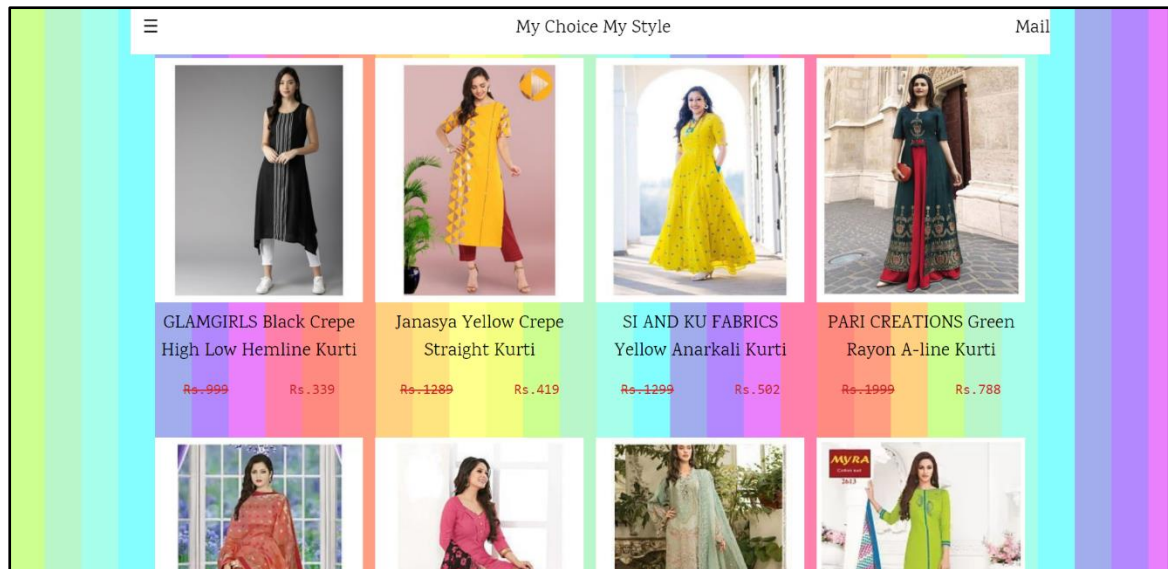


6.2.3) Pagination



6.2.4) Full Page

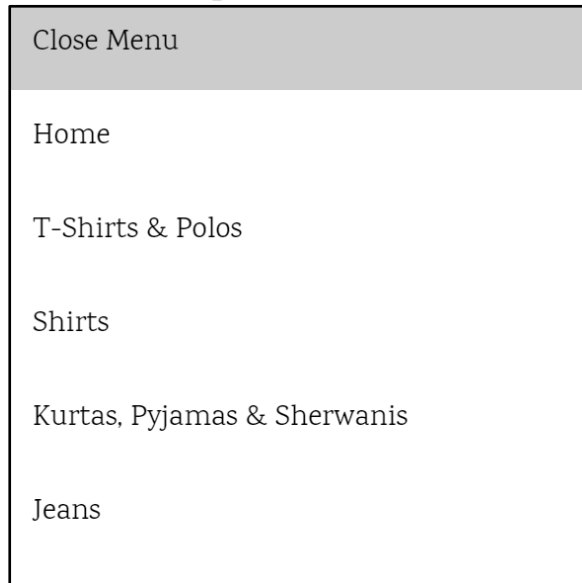




6.3) MEN'S PAGE

6.3.1) Menu Bar

The various options in menu bar.



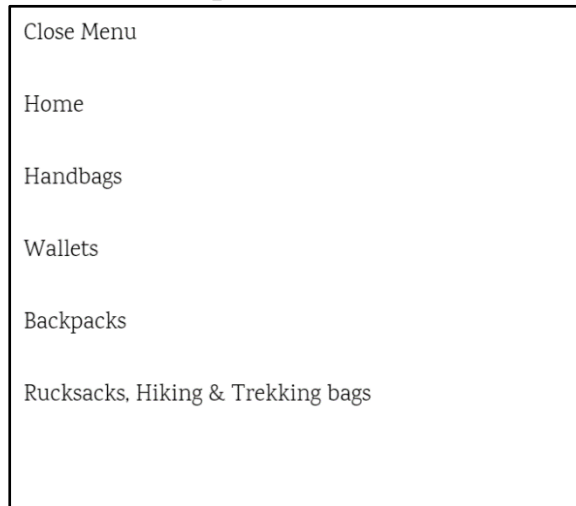
6.3.2) Full Page



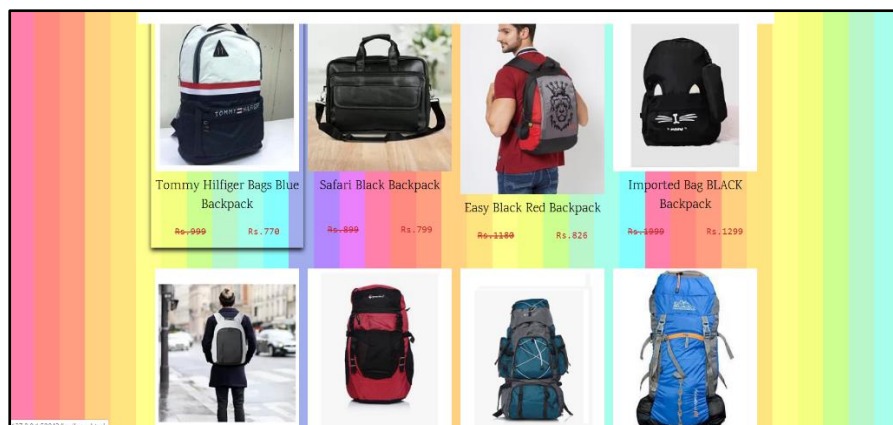
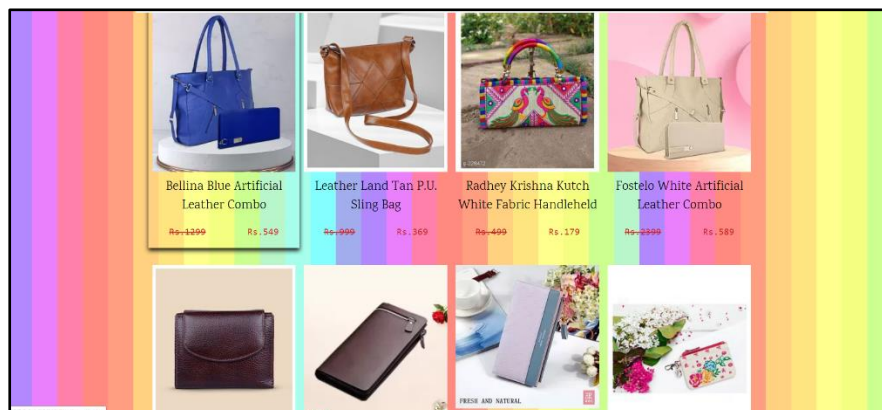
6.4) HANDBAGS' PAGE

6.4.1) Menu Bar

The various options in menu bar.



6.4.2) Full Page



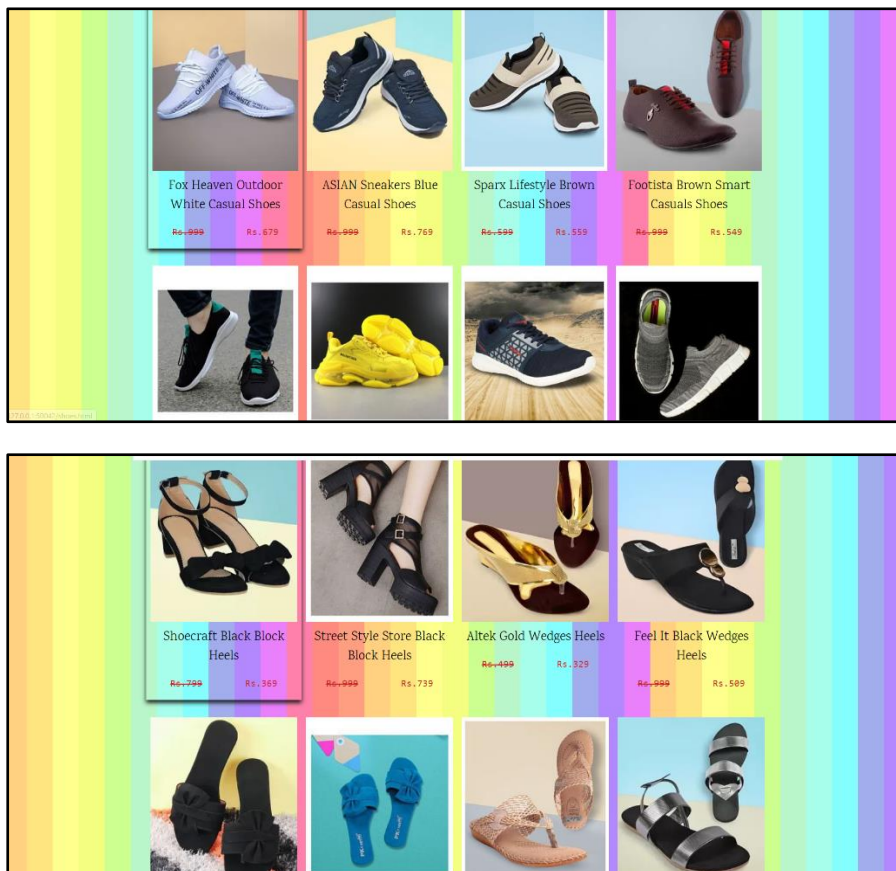
6.5) SHOES' PAGE

6.5.1) Menu Bar

The various options in menu bar.



6.5.2) Full Page



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