

**1. Dynamic web-based application and its difference from static web page**

Dynamic websites have dynamic content which changes according to the person. For example, any banking application, social media website. If you login it shows the data related to you. And user can add data which stores in a database and will reflect in the UI, whereas in static web applications the content is similar to everyone. Example : any blog. No user interactions available in static web applications.

**2. Role of HTML, CSS & JS in dynamic website:**

HTML – HyperText Markup Language ; It is a markup language. It is used to give the structure for the User Interface. In this HTML, we have tags for everything which need to create/design a website like header text(h1,h2,h3,h4,h5,h6), aligning items(center), wrap contents (div, span), paragraph(p),image(img)etc., For an instance, if you want to design a website like top section image and left side a paragraph about the image. Now this design(structure) can be achieved by the HTML.

CSS – Cascading Style Sheet. The name itself telling it is used to style the website.

Using HTML you can structure the website. It looks like a skeleton. If your website wants to look beautiful and attractive you have to use CSS. In simple terms, it beautifies your html page. Some of the styles like : color, background color, justify contents, align items, float, animation, word wrap, flex items etc.,

JS – JavaScript ; It is a scripting language. It gives interaction to your website. It plays a major role in dynamic website. It helps to capture data which user provided. Some of them are click events(onclick, onClickOutside,..), mouse events(onMouseOver, onMouseOut..), submit , change, alert etc., And it is not meant that if JS is used for dynamic website. We can also use JS events for static website like onHover – this event gives you the feel of interactive with website

**3. Concept of Client-side Scripting and Server-side Scripting in web development:**

Client-side scripting done in the client-side which is in your browser to make the user to feel the interaction with the website. Example – Javascript.

Server-side scripting done in the server end which is in web server. Some of the functionalities like updating, managing data, etc., Example- PHP

**4. Responsive web design and Bootstrap role in achieving it:**

Responsive web page is nothing but the web page has to be adapt the content structure according to the layout of the various devices(laptop, mobile, tablet,etc.,). If you are seeing the website in laptop where the design includes navbar for menu. And you are accessing the same website in mobile then menus are in Breadcrumb or sideNav which is visible onHover. This adaptability of webpage in look and functionality is achieved through RWD (Responsive Web Design).

Bootstrap which is a framework in CSS which provides various utilities to attain that. Some of them are Grid system(col-12, col-4, row, etc), media queries (@media (max-width: 768px){.....}), bootstrap classes, etc.,

**5. Syntax for hyperlink:**

In HTML, hyperlink is the one which helps to navigate to next page or tab. For that we use anchor tag.

Syntax: `<a href="URL">Link Text</a>`

Example : `<a href="https://www.google.com">Visit Google</a>`

## 6. Syntax for unordered list :

For unordered list `<ul>` tag is used – This tag gives you the bulletin symbol which can be customized using html and css ; To show items name we need `<li>` tag – this tag show the content of the tag.

For example :

- Chocolate
- Cake

`<ul>` tag is responsible for that bulletin dot

`<li>` tag is responsible to display that word chocolate and cake

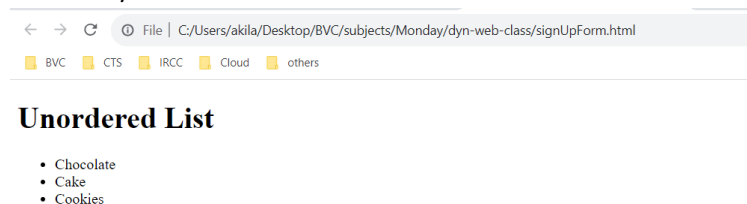
Syntax : `<ul>`

`<li> item 1</li>`

`<li> item 2</li>`

`<li> item 3</li>`

`</ul>`



## 7. Newsletter Form to signup :

`<!DOCTYPE html>`

`<html>`

`<head>`

`<title>Newsletter Signup</title>`

`</head>`

`<body>`

`<h1>Signup for Our Newsletter</h1>`

`<p>Get the latest updates delivered to your inbox. </p>`

`<form action="mailto:a.srinivasan036@mybvc.ca" method="post">`

`<label for="name">Name:</label>`

`<input type="text" id="name" name="name" required><br><br>`

`<label for="email">Email:</label>`

`<input type="email" id="email" name="email" required><br><br>`

`<input type="submit" value="Sign Up">`

`</form>`

`</body>`

`</html>`

## Signup for Our Newsletter

Get the latest updates delivered to your inbox.

Name:

Email:

```
File Edit Selection View Go Run Terminal Help
Welcome
C:\Users\akila\Desktop\BVC\subjects\Monday\dyn-web-class> signupForm.html
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Newsletter Signup</title>
5 </head>
6 <body>
7 <div>
8 <div>
9 <div>
10 <div>
11 <div>
12 <div>
13 <div>
14 <div>
15 <div>
16 <div>
17 <div>
18 <div>
19 <div>
20 <div>
21 <div>
22 <div>
```

