



INTRO TO WEB DEVELOPMENT

by Pavan Gandhi

Contexts for Today

1. Building blocks of web dev.
2. Learning HTML, CSS & JS.
3. Login/signup form example.
4. Showcase some websites.
5. Roadmap for web dev.
6. Resources to learn.
7. Your questions & queries.

Basic Terms in Web Development

- Front end developers

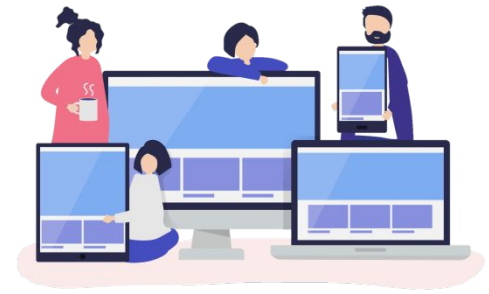
Deals with the front part like design, layout, etc.

- Back end developers

Deals with the server part like server side, databases, etc.

- Full stack developers

Deals with both (front + back)



Front End Developer

vs

Back End Developer

HOW DO THEY COMPARE?

Front End
Developers Income

\$107,683



Per Year

Back End
Developers Income

\$124,703

Languages Used

HTML

CSS

Javascript



Technology

Languages Used

Python

Ruby

PHP

Clojure

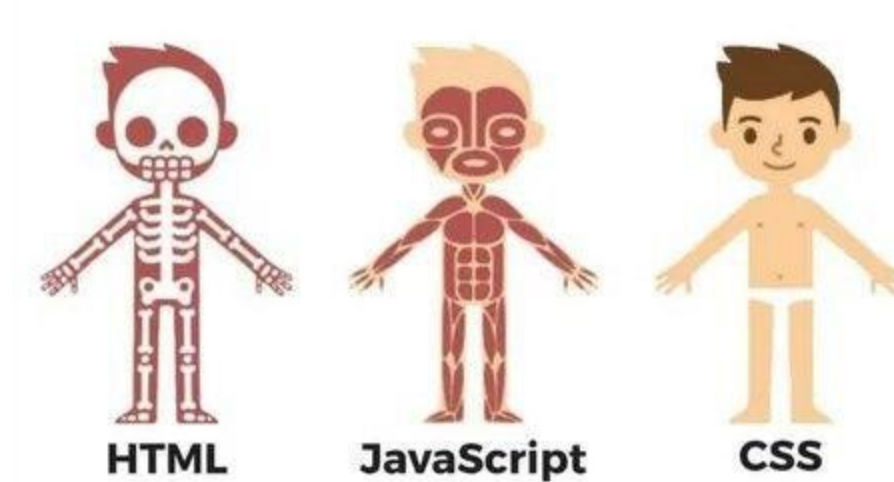
Elixir

Scala

Erlang

Rust

Building Blocks



- **HTML5** – *Structure of the web site*
- **CSS3** – *Look and user interface*
- **JavaScript** – *Functionality of the site*

HTML5 - Hyper-text-markup-language



NOT an
Prog. Language
Its an Markup
Language

Things to learn:-

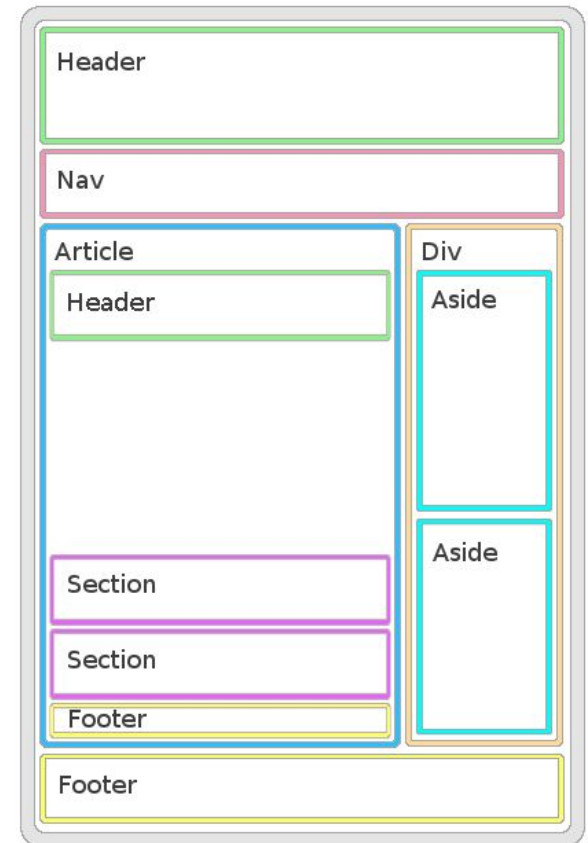
- **Html Tags**
 - <h1> to <h6>
 - <p>
 - <a>
 - , ,
 -
 - <div>
- **Html Semantics**
 - <header> , <footer>
 - <section>
 - <nav>
 - <aside>

HTML5 Basic Code

```
<!DOCTYPE html>
<html>
<head>  <!-- Here is the Head-->
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <title>Here is the title</title>
    <!-- Here is the css linker-->
    <link rel="stylesheet" href="">
</head>

<body>  <!-- Here is the body-->
    <h1> Heading 1 </h1>    <!-- Heading from h1 to h6 -->
    <p> Paragraph </p>    <!-- Paragraph p -->
    <a href="#" title="/"></a>    <!-- Ancor tag a -->
    <form> ... </form>    <!-- Form tag -->
    <br>    <!-- Break br -->

    <!-- Here you link your js -->
    <script type="text/javascript"></script>
</body>
</html>
```



CSS3 - Cascading-style-sheets



Types of CSS

1. *Inline CSS*
2. *Internal CSS*
3. *External CSS*

Things to learn:-

- **Various Selectors**
 - basically selecting classes and ids
- **Styling Attributes**
 - margin , padding , color , font etc
- **Transactions & Animations**
 - key frames and transaction properties
- **CSS Positioning**
 - static
 - relative
 - absolute
 - fixed
 - sticky (Learn **Flexbox** for ease)

CSS3 Basic Code

```

*{
  margin: 0;
  padding: 0;
}

h1{
  font-family: sans-serif;
  font-size: 2em;
}

.box{
  width: 100%;
  height: 100vh;
  color: #000;
  border-radius: 4px;
}

#main-box{
  background: linear-gradient(to right bottom, #7ed56f, #28b485);
  overflow: hidden;
  animation: move 10s ease infinite;
}

@keyframes move{
  0% { background-position: 0% 50%; }
  50% { background-position: 100% 50%; }
  100% { background-position: 0% 50%; }
}
```

CSS3 Shake Effect



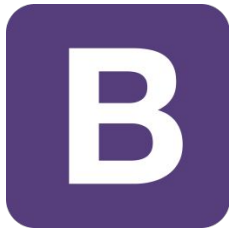
Shake Effect Gif



```
*{
  margin: 100px;
  padding: 0;
}
body{
  height: 100%;
  display: flex;
  justify-content: center;
  align-items: center;
  background: #000;
}
h1{
  text-align: center;
  position: relative;
  font-size: 55px;
  color: white;
  display: inline-block;
  animation: .8s shake infinite alternate;
}
@keyframes shake{
  0% { transform: skewX(-15deg); }
  5% { transform: skewX(15deg); }
  10% { transform: skewX(-15deg); }
  15% { transform: skewX(15deg); }
  100% { transform: skewX(0deg); }
}
```

How to write css easily.

CSS Frameworks



BOOTSTRAP



FOUNDATION



MATERIALIZE

CSS Preprocessor



SASS



LESS

JavaScript – Client Side Language



*JS is a high level
interpreted
prog. Language
that conforms to
the EcmaScript
specification.*

Things to learn:-

- **Basic Syntax and Logics**
 - basically the prog. part like cpp and java
- **Modern JavaScript**
 - Arrow functions , Libraries and all.
- **Web Skill using JS**
 - DOM (Document Object Model)
 - How to Select Object
 - How to Manipulate Object
 - How to Create Object etc.

JavaScript Basic Code



```
//Web Skills using JavaScript
//DOM - Document Object Model
//using or creating HTML by JavaScript

//Select
console.log("Hello World") //for Printing

document.getElementById(#main-head) //select using id
document.getElementsByClassName(.box) //select using className
document.querySelector('p') //Anything you select id, class, h, p, etc

//Manipulate
const myEle = document.querySelector('p') //selecting query
myEle.textContent = "Hello this is Pavan" //change the content of p

//Create
const newEle = document.createElement('p') //creating element
newEle.textContent = "New Paragraph" //filling content in it
document.querySelector('body').appendChild(newEle) //positioning the element
```

Login/signup Form Example

Fully Functional Login / Sign up Form

Login

LOGIN

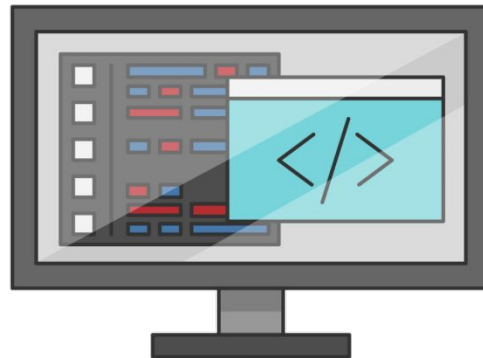
Hello, World!

Enter your personal details and start journey with us

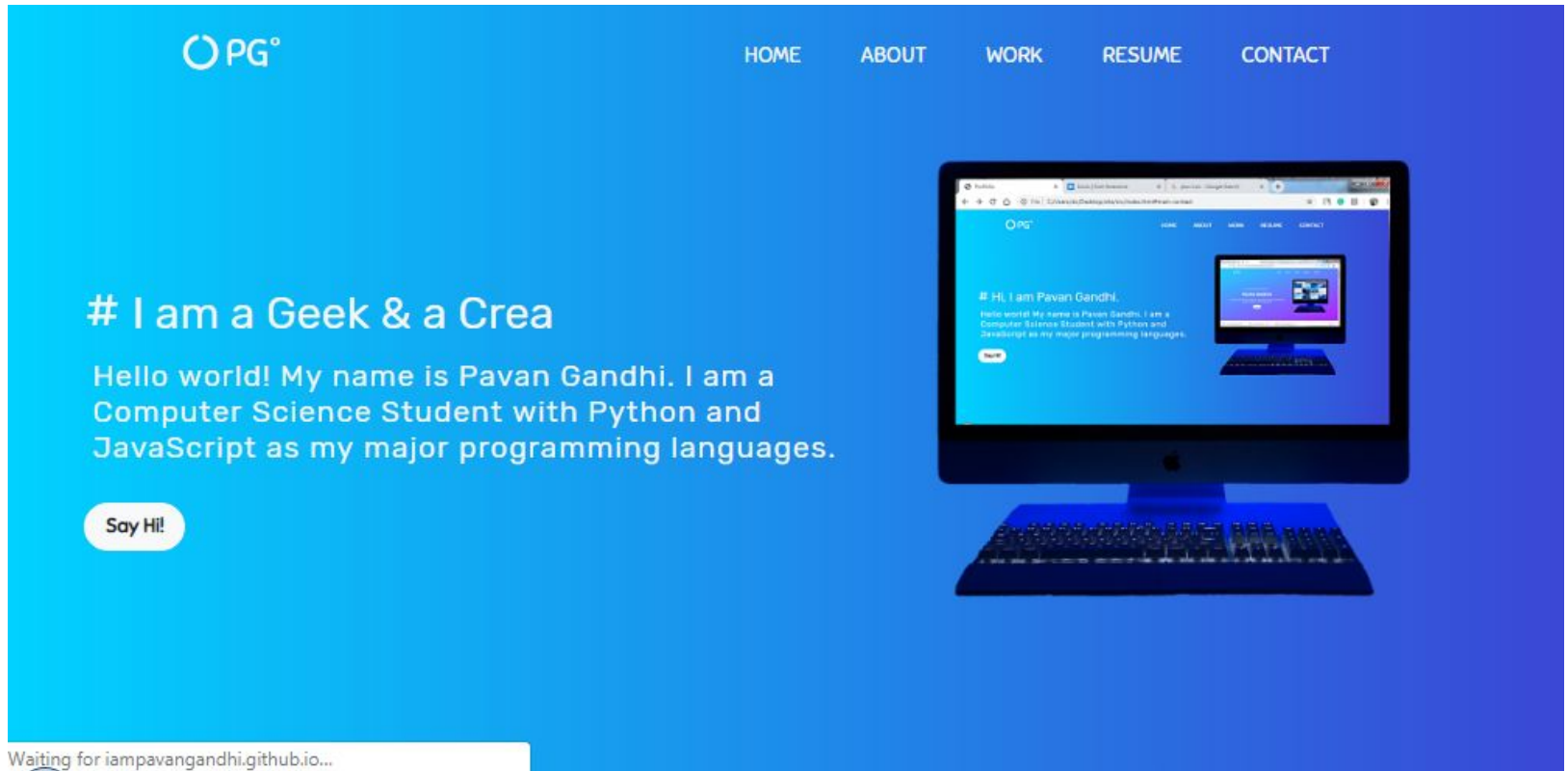
SIGN UP

Github : <https://github.com/iampavangandhi/LoginSignupForm>

Lets See the <CODE/>



Showing : My Website



Website Link : iampavangandhi.github.io

Web Dev. Roadmap / Track

- **Front End**

- *Popular Frameworks*

- *ReactJS*
 - *AngularJS*



- **Back End**

- *We Have Multiple Options / Frameworks*



JavaScript
Framework



Python
Framework



Codignitor
& Laravel



Ruby
Framework

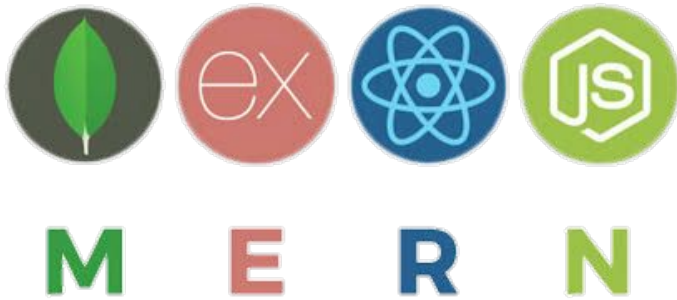


Java
Framework

Web Development Stacks

LAMP STACK

Oldest One



MERN STACK

Most Popular

*MangoDB + ExpressJS
+ ReactJS + NodeJS*

MEAN STACK

Also Popular



Resources to Learn Web Dev.

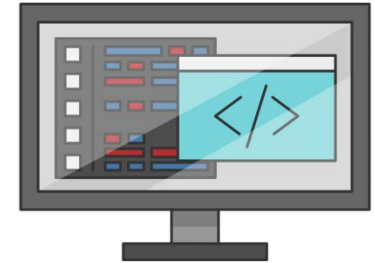
W3School – For Basic HTML, CSS, and JS

FreeCodeCamp – For Learning Every Technology

Traversy Media (Site & Youtube) – Every Topic in One Video

DevED (Youtube) – Topic Explained in One Video

Medium – Various Articles Available for Web Dev.



Conclusion:- Check out some great projects on Github, CodePen etc. get ideas from them and build some amazing projects.

THANK YOU



iampavangandhi.github.io

