



Web Dev workshop

Organized by COPS, IIT
(BHU) Varanasi



Timeline

- Why learn web dev?
- Basics of HTML, CSS, JS
- Chrome Dev Tools
- Caesar Cipher
- Intro to APIs, JSON
- IDE's and Environment

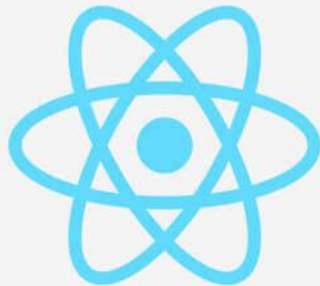


Why Web Dev?

- Internships
- GSoC
- Startups
- Tech Fests
- Native Apps

Why Web Dev?

REACT NATIVE



VS

FLUTTER





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Current Tech



Basics of Web Dev

HTML



CSS



JS



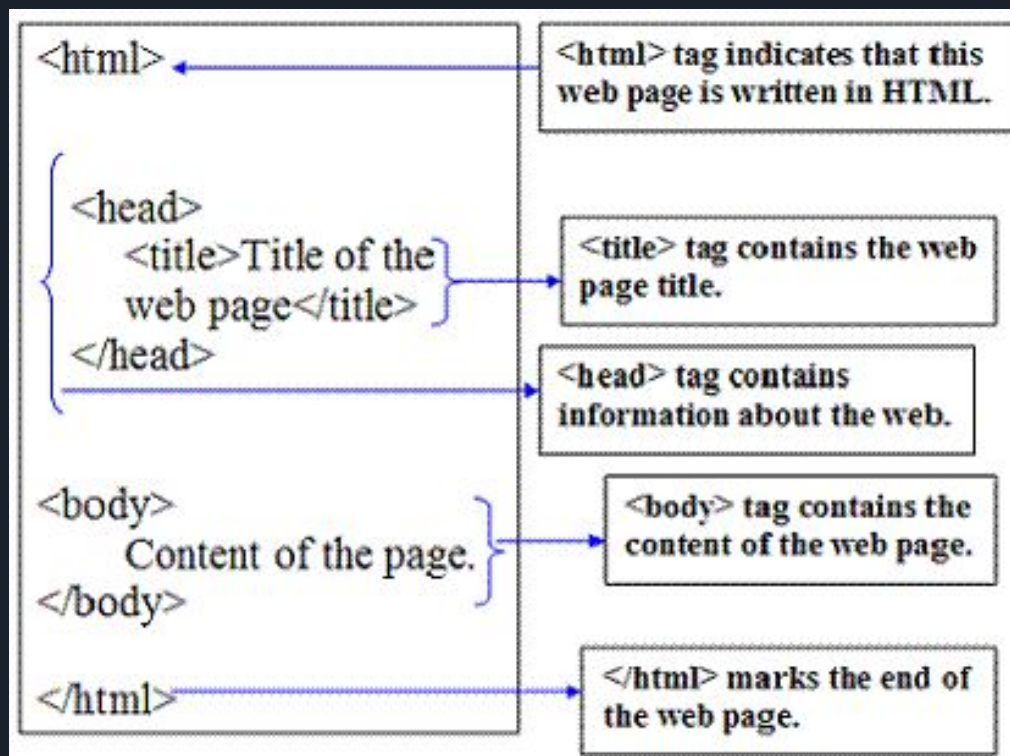


Prerequisites

Notepad
Wordpad
GEdit
Sublime
Atom

Chrome
Firefox
Safari

HTML





HTML

Demo: Hello World

CSS

font-size : 20px;

A CSS declaration

Property

Value

CSS Selector

Styling a selection

h1 {

font-size : 20px;

color : red;

margin-bottom : 15px;

}

Declarations Block



CSS

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <title>Make a link into a CSS button</title>
    <style>
      .btnLink {
        display: inline-block;
        padding: 5px 10px;
        border: 1px solid #006699;
      }
    </style>
  </head>
  <body>
    This is a link
```

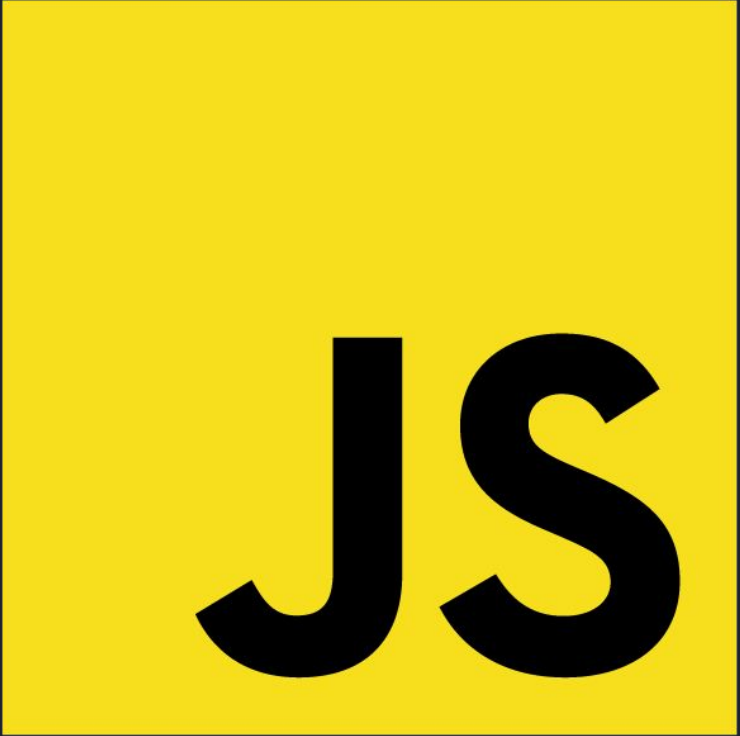


CSS

Demo: Hello World



Javascript



JS

The letters 'JS' are rendered in a large, bold, black sans-serif font, centered within a solid yellow square that occupies the right half of the image.



JS

- **Logic** in Web Apps
- Javascript != Java
- Libraries - JQuery, NodeJS, ReactJS
- JSON - JavaScript Object Notation



JS

- console.log
- **alert**
- document.write



JS

Demo: Hello World



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Chrome Dev Tools

Demo Time

apicops.herokuapp.com/demo



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Caesar Cipher

How are they equivalent?

my name is akshay

pb qdph lv dnvkdb



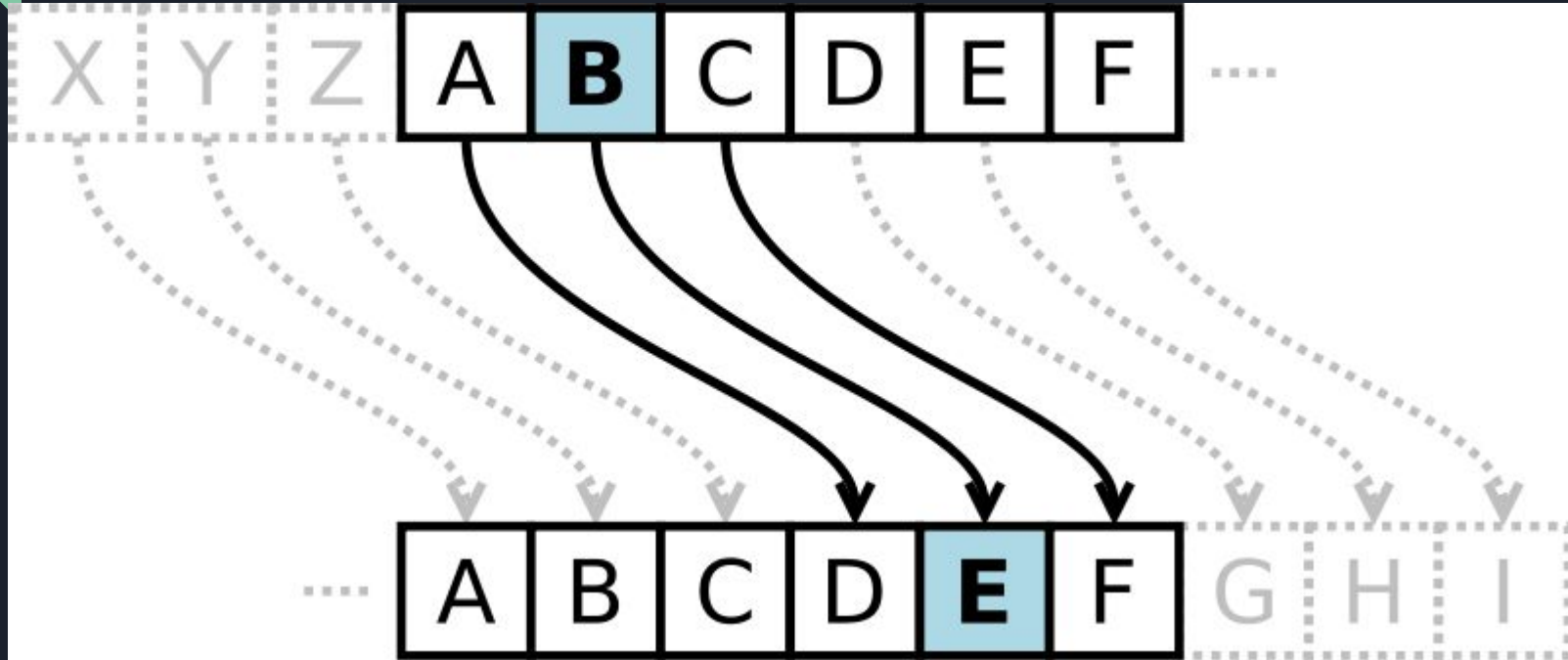
Caesar Cipher

How are they equivalent?

abcde

defgh

Caesar Cipher





Caesar Cipher

Demo: Cipher

apicops.herokuapp.com/cipher



Caesar Cipher

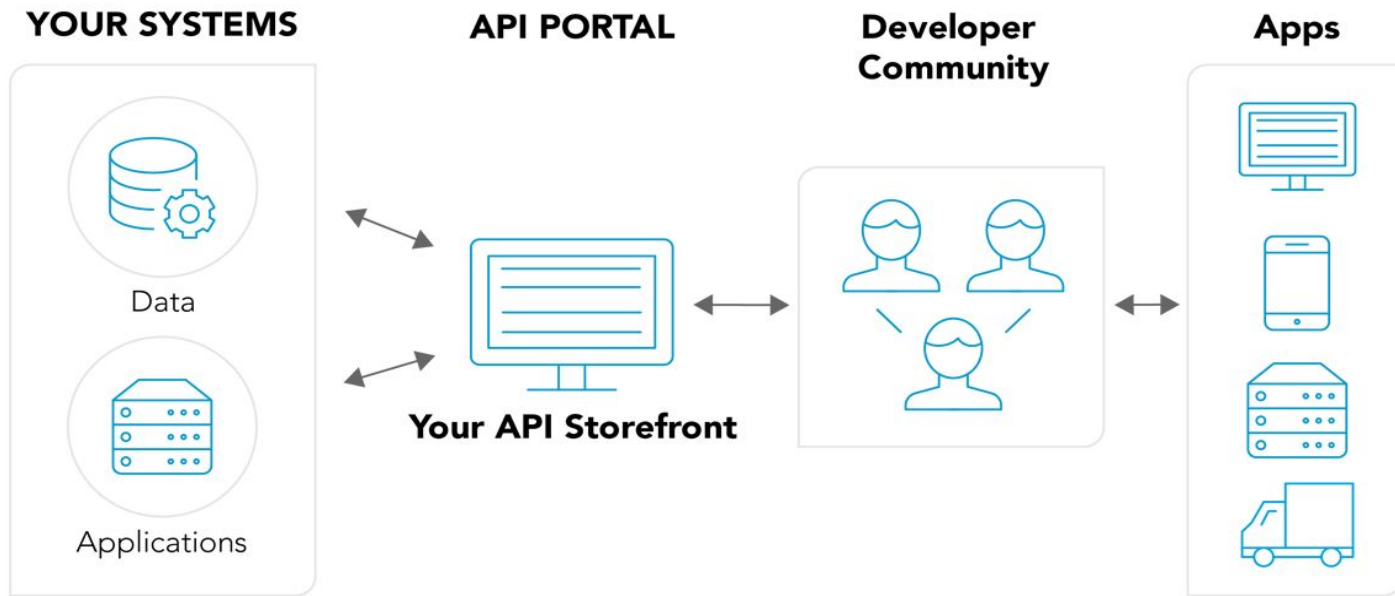
- Notice when its buggy
- Google out what's the bug



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APIs



Get your APIs to market on a portal



APIs

- Application programming interface
- Defines how software communicates
- GET(easy) - POST(secure)



APIs

Demo: GET

apicops.herokuapp.com/hello



APIs

Demo: GET

api.../sum?a=12&b=5



APIs - JSON

```
{
  "todos": [
    {
      "id": 1,
      "title": "Todo 1",
      "completed": false
    },
    {
      "id": 5,
      "title": "Todo 5xxx",
      "completed": false
    }
  ]
}
```

Dictionary
Of Data



APIs

Demo: POST

www.apitester.com
apicops.herokuapp.com/sum_post



APIs

Demo: POST

```
{
```

```
  "a": "12",
```

```
  "b": "5"
```

```
}
```

Add this
in body



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IDEs

- Postman
- Sublime / Atom
- Pycharm / WebStorm



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Key Takeaways

- Develop Websites/ Apps
- Collaborate in startups
- Take online courses
- Google!!



Learn

Udacity

w3schools

Coursera

Stackoverflow

MDN

Scotch.io