ព្រះរាជាណាចក្រកម្ពុជា

ជាតិ សាសនា ព្រះមហាក្សត្រ

Institute of technology of Cambodia

Department of Information and communication

<<Report TP IP04>>

TP: INTERNET PROGRAM

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URL GIT: VenThon/TP04_IP (github.com)

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Ex1: Tab design following UI to have 3 tabs

TP4 > IndexEx1TP04.html > html > head > style > h1 > p

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Tab</title>
    <style>
        body{
            width: 100%;
            display: flex;
            justify-content: center;
        }
        .container{
            width: 80%;
            background-color: azure;
            border: 2px solid black;
            padding: 15px;
        }
        h1, p{
            display: flex;
            justify-content: center;
        }
        img{
            width: 100%;
        }
        .btn{
            width: 100%;
            background-color: white;
            display: flex;
            justify-content: space-between;
            height: 35px;
        }
        button{
            width: 33.33%;
            height: 100%;
        }
```

TP4 > IndexEx1TP04.html > html > head > style > .container

```
        }
        .content{
            width: 95%;
            background-color: white;
            padding: 15px;

        }
    </style>
</head>
<body>
    <div class="container">
        <div class="header">
            <h1>About</h1>
            <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Maiores rem accusamus.</p>
        </div>
        <div>
            <img src="./flower.png" alt="">
        </div>
        <div class="btn">
            <button id="history" type="button">History</button>
            <button id="vision" type="button">Vision</button>
            <button id="goals" type="button">Goals</button>
        </div>
        <div class="content" id="demo">

        </div>
    </div>
    <script>
        var History = document.getElementById("history")
        var Vision = document.getElementById("vision")
        var Goals = document.getElementById("goals")
        var Demo = document.getElementById("demo")
        function myhistory(){
            History.style.backgroundColor="blue"
            Vision.style.background="white"
            Goals.style.background="white"
            Demo.innerHTML =`
            <div>
```

TP4 > IndexEx1TP04.html > html > head > style > .container

```
            <div>
                <strong>History</strong>
                <p>
                Lorem Ipsum is simply dummy text of the printing and typesetting industry.
                Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown
                printer took a galley of type and scrambled it to make a type specimen book. It has survived not
                only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged.
                It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages,
                and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum hostory.
                </p>
            </div>
            `
        }
        myhistory();
        History.addEventListener("click" , () => {
            myhistory();
        });

        function myvision(){
            History.style.backgroundColor="white"
            Vision.style.background="blue"
            Goals.style.background="white"
            Demo.innerHTML =`
            <div>
                <strong>Vision</strong>
                <p>
                Lorem Ipsum is simply dummy text of the printing and typesetting industry.
                Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown
                printer took a galley of type and scrambled it to make a type specimen book. It has survived not
                only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged.
                It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages,
                and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum vision.
                </p>
            </div>
            `
        }
         myvision();
```

TP4 > IndexEx1TP04.html > html > head > style > .container

```
         myvision();
         Vision.addEventListener("click", () =>{
            myvision();
        });

        function mygoals(){
            History.style.backgroundColor="white"
            Vision.style.background="white"
            Goals.style.background="blue"
            Demo.innerHTML =`
            <div>
                <strong>Goals</strong>
                <p>
                Lorem Ipsum is simply dummy text of the printing and typesetting industry.
                Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown
                printer took a galley of type and scrambled it to make a type specimen book. It has survived not
                only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged.
                It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages,
                and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum goals.
                </p>
            </div>
            `
        }
         mygoals();
         Goals.addEventListener("click", () =>{
            mygoals();
        });
    </script>
</body>
</html>
```

Output:

About

Lorem ipsum dolor sit amet consectetur adipisicing elit. Maiores rem accusamus.

History | Vision | Goals

History

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum hostory.

About

Lorem ipsum dolor sit amet consectetur adipisicing elit. Maiores rem accusamus.

History | Vision | Goals

Vision

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchang and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum vision.

Ex2: Responsive menu design following responsive UI as following

TP4 > Ex2 > index.html > html > body > div#container > div.wrapper > div.content_wrapper > div.hearder_wrapper > div

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <title>Ex2 Tab</title>
</head>
<body>
    <div id="container">
        <div class="header">
            <h1>Our Menu</h1>
        </div>
        <div style="display: flex; justify-content: center; width: 60px; border: 1px solid black;"></div>
        <div style="display: flex; justify-content: center; gap: 50px; margin-top: 30px;">
            <div><button type="text">All</button></div>
            <div><button type="text">Breakfast</button></div>
            <div><button type="text">Lunch</button></div>
            <div><button type="text">Shakes</button></div>
            <div><button type="text">Dinner</button></div>
        </div>
        <div class="wrapper">
            <div class="img">
                <img src="https://source.unsplash.com/random/500x300/?landscape" alt="photo">
            </div>
            <div class="content_wrapper">
                <div class="hearder_wrapper">
                    <!-- <button class="history active">History</button> -->
                    <div><strong><h3>Buttermilk Pancakes</h3></strong></div>
                    <div><p style="color: red;">$15.99</p></div>
                </div>
                <div style="border: 1px solid black; margin-top: 5px;"></div>
                <div class="text_wrapper" style="--transform-x-percen:0%;">
                    <div class="content">
                        <p>
                            Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis,
                            urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem.
                            Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat
                            metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet,
                            urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra
                            dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra
                            est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum.
                            Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis,
                            placerat est. In sed tincidunt risus, ac porta ex.
                        </p>
```

TP4 > Ex2 > index.html > html > body > div#container > div.wrapper > div.img

```
                    </p>
                </div>
            </div>
        </div>
    </div>
    <div class="wrapper">
        <div class="img">
            <img src="https://source.unsplash.com/random/500x300/?landscape" alt="photo">
        </div>
        <div class="content_wrapper">
            <div class="hearder_wrapper">
                <!-- <button class="history active">History</button> -->
                <div><strong><h3>Diner Double</h3></strong></div>
                <div><p style="color: red;">$20.99</p></div>
            </div>
            <div style="border: 1px solid black; margin-top: 5px;"></div>
            <div class="text_wrapper" style="--transform-x-percen:0%;">
                <div class="content">
                    <!-- <h1>History</h1> -->
                    <p>
                        Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis,
                        urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem.
                        Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat
                        metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet,
                        urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra
                        dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra
                        est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum.
                        Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis,
                        placerat est. In sed tincidunt risus, ac porta ex.
                    </p>
                </div>
            </div>
        </div>
    </div>
    <div class="wrapper">
        <div class="img">
            <img src="https://source.unsplash.com/random/500x300/?landscape" alt="photo">
        </div>
        <div class="content_wrapper">
            <div class="hearder_wrapper">
                <!-- <button class="history active">History</button> -->
                <div><strong><h3>Diner Double</h3></strong></div>
                <div><p style="color: red;">$20.99</p></div>
            </div>
            <div style="border: 1px solid black; margin-top: 5px;"></div>
```

TP4 > Ex2 > index.html > html > body > div#container > div.wrapper > div.content_wrapper > div.text_wrapper

```
            <div style="border: 1px solid black; margin-top: 5px;"></div>
            <div class="text_wrapper" style="--transform-x-percen:0%;">
                <div class="content">
                    <!-- <h1>History</h1> -->
                    <p>
                        Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis,
                        urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem.
                        Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat
                        metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet,
                        urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra
                        dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra
                        est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum.
                        Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis,
                        placerat est. In sed tincidunt risus, ac porta ex.
                    </p>
                </div>
            </div>
        </div>
    </div>


</div>

</body>
</html>
```

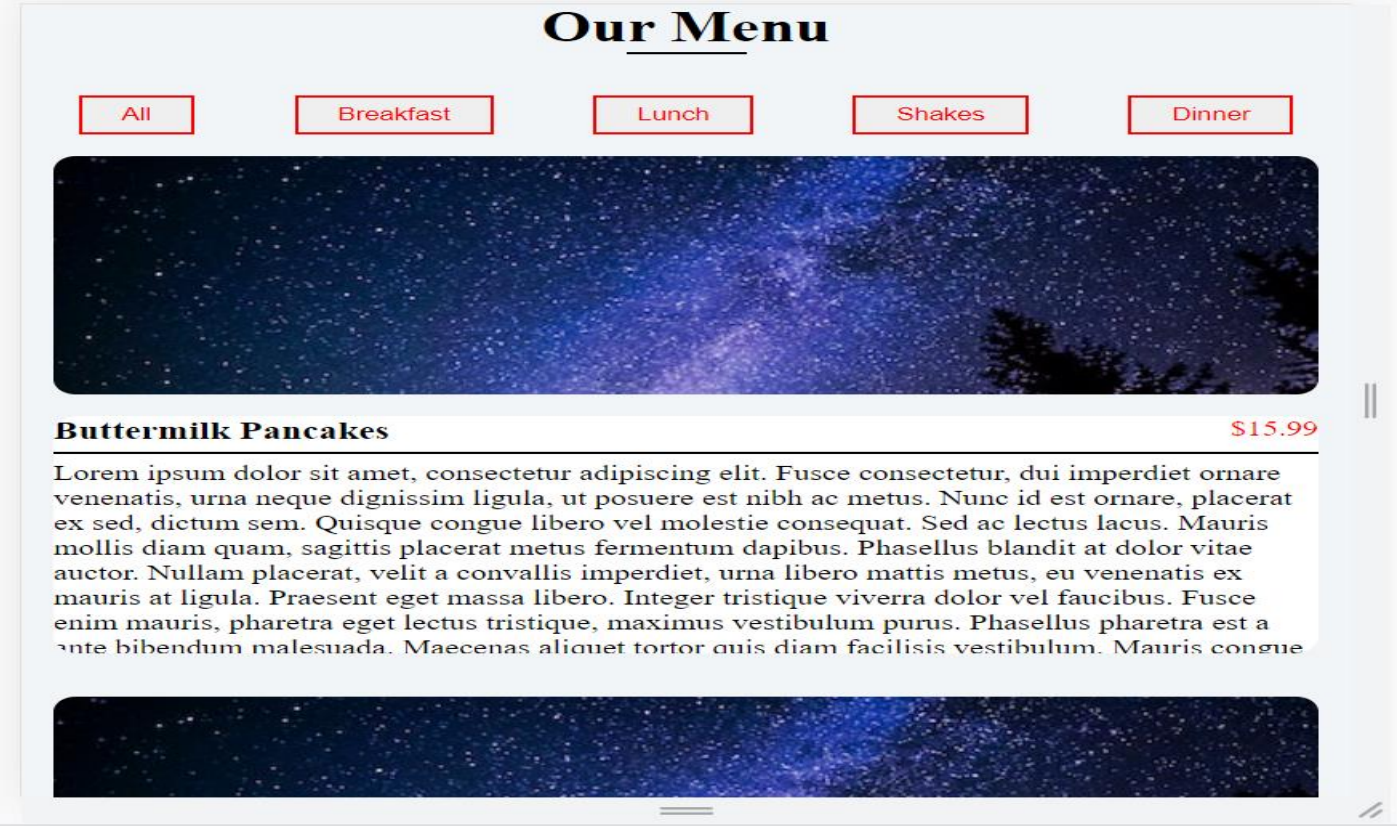
TP4 > Ex2 > style.css > ...

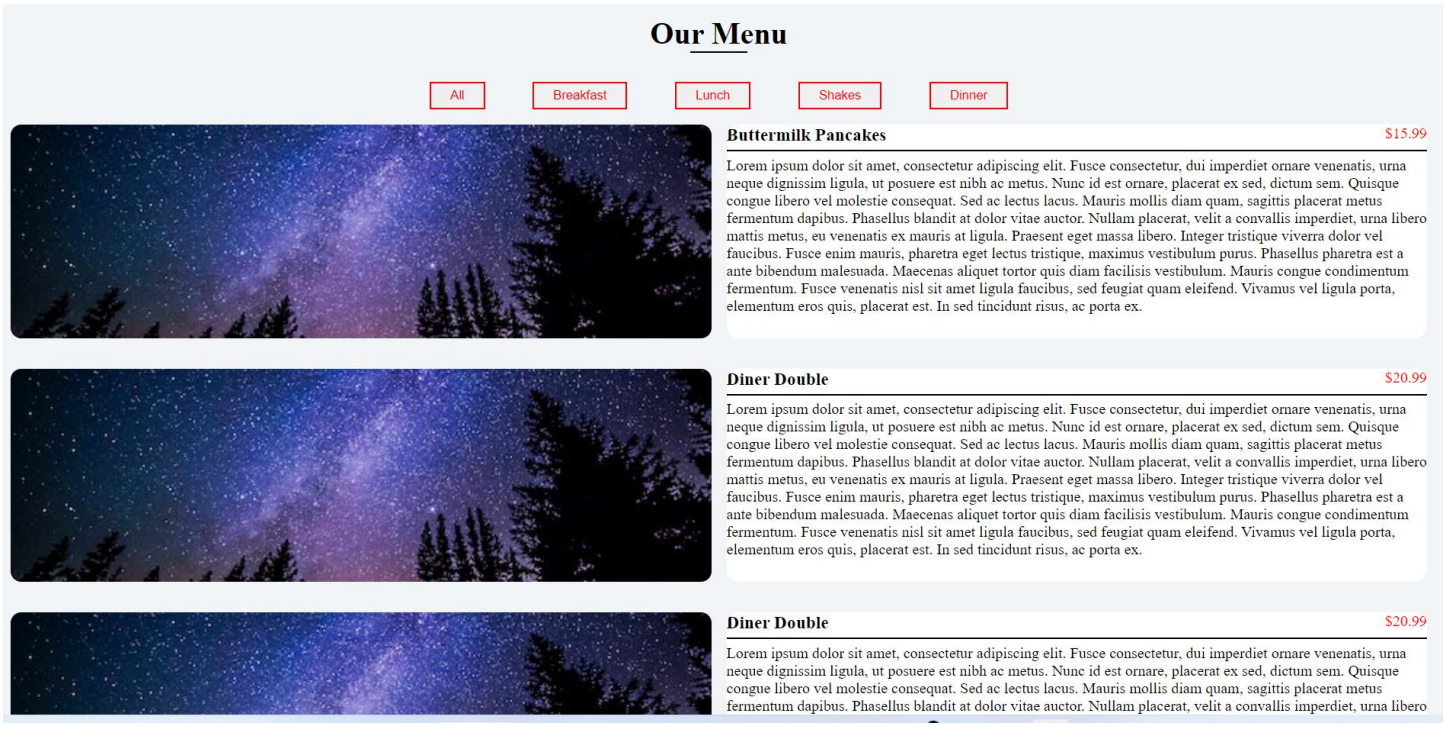
```css
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  width: 100%;
  min-height: 100vh;
}
body #container {
  background-color: #f1f5f8;
  width: 100%;
  min-height: 100vh;
  display: flex;
  flex-direction: column;
  justify-content: space-evenly;
  align-items: center;
  padding: 2rem 0;
}
body #container > div {
  width: 100%;
}
body #container .header {
  text-align: center;
}
body #container .header h1 {
  font-size: 2rem;
}
body #container .header p {
  font-size: 1.2rem;
}
body #container .wrapper {
  padding: 1rem;
  display: flex;
  gap: 1rem;
}
@media only screen and (max-width: 1000px) {
  body #container .wrapper {
    flex-direction: column;
  }
}
body #container .wrapper > div {
  width: 100%;
  max-height: 30vh;
```

TP4 > Ex2 > style.css > ...

```css
body #container .wrapper > div {
  width: 100%;
  max-height: 30vh;
}
body #container .wrapper > div img {
  width: 100%;
  -o-object-fit: cover;
     object-fit: cover;
  height: 100%;
}
body #container .wrapper .img {
  border-radius: 0.7rem;
  overflow: hidden;
}
body #container .wrapper .content_wrapper {
  border-radius: 0.8rem;
  overflow: hidden;
  background-color: white;
}
.hearder_wrapper{
  display: flex;
  justify-content: space-between;
}
.content{
  margin-top: 5px;
}

button{
  padding: 5px 20px 5px 20px;
  color: red;
  border: 2px solid red;
}
```

Output:


Our Menu
All
Breakfast
Lunch
Shakes
Dinner
Buttermilk Pancakes
$15.99
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis, urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem. Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet, urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra est a


Our Menu
All
Breakfast
Lunch
Shakes
Dinner
Buttermilk Pancakes
$15.99
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis, urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem. Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet, urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum. Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis, placerat est. In sed tincidunt risus, ac porta ex.
Diner Double
$20.99
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis, urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem. Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet, urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum. Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis, placerat est. In sed tincidunt risus, ac porta ex.
Diner Double
$20.99
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis, urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem. Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet, urna libero

Ex3: Counter build a number counter app with Class/Object concept and local storage

P4 > IndexEx3TP04.html > html > body > script > Counter > reset

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Counter</title>
    <!-- <link rel="stylesheet" href="./style.css"> -->
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Oswald:wght@200;300;400&family=Roboto:wght@100;500&display=swap" rel="stylesheet">
    <style>
        *{
            margin: 0px;
            padding: 0px;
            font-family: 'Roboto', sans-serif;
        }
        .wrapper{
            display: flex;
            align-items: center;
            justify-content: center;
            margin: auto;
            margin-top: 50px;
            text-align: center;
            border: 1px solid black;
            width: fit-content;
            height: 600px;
            width: 600px;
            background-color: aliceblue;
        }
        .wrapper h1{
            font-size: 40px;
            color: #241e4a;
        }
        #counter{
            margin: 30px;
            font-size: 80px;
            color: #158704;
        }
        button{
            border: 1px solid black;
            border-radius: 3px;
            height: 25px;
            padding-left: 10px;
```

TP4 > IndexEx3TP04.html > html > body > script > Counter > reset

```
            padding-left: 10px;
            padding-right: 10px;
            margin: 5px;
            background-color: aliceblue;
        }
        #increase{
            background-color: black;
            color: white;
}
    </style>
</head>
<body>
    <div class="wrapper">
        <div>
            <h1>Counter</h1>
            <div id="counter"></div>
            <button type="button" id="decrease">DECREASE</button>
            <button type="button" id="reset">RESET</button>
            <button type="button" id="increase">INCREASE</button>
        </div>
    </div>
    <script>
        class Counter{
        number = 0;
        constructor(){
            document.getElementById("counter").innerHTML = localStorage.getItem("counter");
        }
        decrease(){
            this.number -= 1;
            return this.number;
        }

        increase(){
            this.number += 1;
            return this.number;
        }

        reset(){
            this.number = 0;
            return this.number;
        }
    }

    var counter = new Counter();

```

```
TP4 > IndexEx3TP04.html > html > body > script > Counter > reset
 89
 90      function increase(){
 91          localStorage.setItem("counter",counter.increase());
 92          document.getElementById("counter").innerHTML = localStorage.getItem("counter");
 93      }
 94      function decrease(){
 95          localStorage.setItem("counter",counter.decrease());
 96          document.getElementById("counter").innerHTML = localStorage.getItem("counter");
 97      }
 98      function reset(){
 99          localStorage.setItem("counter",counter.reset());
100          document.getElementById("counter").innerHTML = localStorage.getItem("counter");
101      }
102      document.getElementById("decrease").addEventListener("click", decrease)
103      document.getElementById("reset").addEventListener("click", reset)
104      document.getElementById("increase").addEventListener("click", increase)
105
106      </script>
107  </body>
108
109  </html>
```

Output:

Ex4: Random color generator build a color generator app with Class/Object concept with local storage.

TP4 > IndexEx4TP04.html > html > head > style > .container

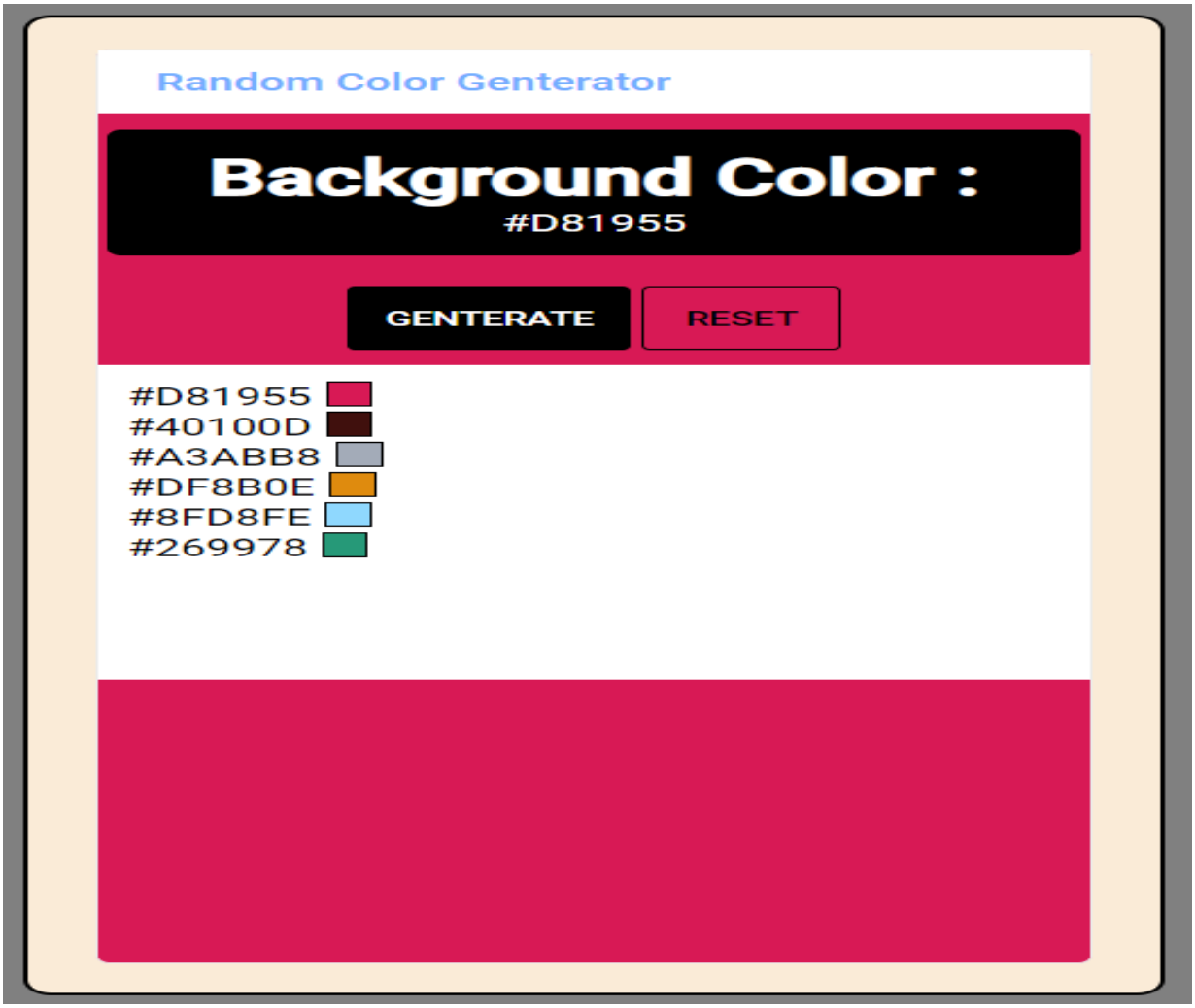
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Random Color Genterator</title>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Oswald:wght@200;300;400&family=Roboto:wght@100;400;500&display=swap" rel="stylesheet">
    <style>
        *{
            margin: 0px;
            padding: 0px;
            font-family: 'Roboto', sans-serif;
        }
        body{
            display: flex;
            justify-content: center;
            background-color: gray;
        }
        .container{
            width: 400px;
            height: 620px;
            margin: 60px;
            border: 2px solid black;
            background-color: antiquewhite;
            border-radius: 10px;
        }
        .wrapper{
            margin: auto;
            margin-top: 20px;
            border: 1px solid #ebebeb;
            width: fit-content;
            background-color: #73adff;
            text-align: center;
            height: 580px;
            border-radius: 5px;
        }
        .header{
            color: #73adff;
            font-weight: 500;
            height: 40px;
            padding-left: 20px;
            background-color: white;
            display: flex;
```

TP4 > IndexEx4TP04.html > html > head > style > .container

```
            padding-left: 20px;
            background-color: white;
            display: flex;
            align-items: center;
            margin-bottom: 10px;
        }
        .background{
            display: flex;
            flex-direction: column;
            align-items: center;
            justify-content: center;
            background-color: black;
            color: white;
            margin: 3px;
            border-radius: 5px;
            height: 80px;
        }
        .button{
            margin-top: 20px;
            font-size: medium;
            height: 50px;
        }
        .button button{
            width: 100px;
            height: 40px;
            font-weight: 500;
            color: white;
            background-color: black;
            border: 1px solid black;
            border-radius: 3px;
        }
        #reset{
            width: 70px;
            background-color: unset;
            color: black;
        }
        .display{
            width: 330px;
            text-align: left;
            padding: 10px;
            background-color: white;
            height: 180px;
            overflow: auto;
        }
        .text{
        .text{
            display: flex;
        }
        .square{
            width: 15px;
            height: 15px;
            margin-left: 5px;
            border: 1px solid black;
        }
    </style>
</head>
<body onload="color.displayColor()">
<div class="container">
    <div class="wrapper" id="wrapper">
        <div class="header">Random Color Genterator</div>
        <div class="background">
            <h1>Background Color :</h1>
            <div id="code">#112312</div>
        </div>
        <div class="button">
            <button id="generate" onclick="color.generate()">GENTERATE</button>
            <button id="reset" onclick="color.reset()">RESET</button>
        </div>
        <div class="display" id="display"></div>
    </div>
</div>

    <script>
        class Color {
        colorType = "HEX";
        records = [];

        constructor(type){
            this.colorType = type;
            this.getRecords();
        }
        generate() {
            let color = this.getRandomNumber();
            this.records.push(color);
            localStorage.setItem('colorGen', JSON.stringify(this.records));
            this.displayColor();
        }
```

```
        }
        displayColor(){
            document.getElementById("display").innerHTML = "";
            document.getElementById("wrapper").style.backgroundColor = this.records[this.records.length-1];
            document.getElementById("code").innerHTML = this.records[this.records.length-1];

        for(let i=this.records.length-1; i>=0; i--){
                document.getElementById("display").innerHTML += `<div class="text">${this.records[i]}<div class="square" style="background-color: ${this.records[i]};"></div> </div>`
        }

        }
        getRandomNumber(){
            var letters = '0123456789ABCDEF';
            var color = '#';
            for (var i = 0; i < 6; i++) {
            color += letters[Math.floor(Math.random() * 16)];
        }
            return color;
        }
        getRecords(){
            this.records = JSON.parse(localStorage.getItem('colorGen'));

        }
        reset(){
            this.records = [];
            localStorage.setItem('colorGen', JSON.stringify(this.records));
            document.getElementById("display").innerHTML = "";
        }
    }
    var color = new Color("HEX");
    </script>
</body>
</html>
```

Output:



Ex5: Responsive Navigation Bar build a navigation bar to support both wide and mobile screen

TP4 > IndexEx5.html > html > body > script

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Navbar</title>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.7.2/font/bootstrap-icons.css">
    <style>
        *{
            padding: 0;
            margin: 0;
            box-sizing: border-box;
        }
        .container{
            width: 100%;
            height: 80px;
            display: flex;
            justify-content: space-around;
            position: relative;
            align-items: center;
            z-index: 5;
            background-color: rgb(252, 240, 174);
        }
        .logo h2{
            font-size: 2rem;
            color: black;
        }
        .logo h2 span{
            color: rgb(33, 158, 216);
        }
        .nav_list ul{
            display: flex;
        }
        .nav_list ul li{
            margin-left: 40px;
            list-style-type: none;
        }
        .nav_list ul li a{
            text-decoration: none;
            font-size: 1.4rem;
            color: black;

        }
        .nav_list ul li a:hover{
            border-bottom: 2px solid black;
```

TP4 > IndexEx5.html > html > body > script

```
        .nav_list ul li a:hover{
            border-bottom: 2px solid black;
        }
        .nav_icon{
            margin-left: 130px;
        }
        .nav_icon ul{
            display: flex;
        }
        .nav_icon ul li{
            margin-left: 15px;
            list-style-type: none;
        }
        .nav_icon ul li a{
            text-decoration: none;
            font-size: 20px;

        }
        .btn button{
            font-size: 40px;
            display: none;
            background-color: rgb(252, 240, 174);
            border: none;
            color: blue;
            cursor: pointer;
        }
        .top{
            animation-name: rotateTop;
            animation-duration: 1s;
            display: none;
        }
        .hide_list{
            display: none;
            animation-name: rotateBar;
            animation-duration: 1s;

        }

        .hide_list ul li{
            list-style-type: none;
            width: 100%;
            padding-left: 20px;
            background-color: rgb(252, 240, 174);
        }
        .hide_list ul li a:hover{
```

TP4 > IndexEx5.html > html > head > style > .hide_list

```
        .hide_list ul li a:hover{
            color: red;

        }
        .hide_list ul li:hover{
            background-color: rgb(255, 248, 149);

        }
        .hide_list ul li a{
            text-decoration: none;
            font-size: 1.7rem;
            color: rgb(0, 0, 0);

        }
        @keyframes rotateBar {
            from{
                transform: translateY(-120px);
                z-index: -2;

            }
            to{
                transform: translateY(0px);
            }
        }

        @media screen and (max-width: 678px){
            .nav_icon{
                display: none;
            }
            .nav_list{
                display: none;
            }
            .btn button{
                display: flex;
            }
            .container{
                display: flex;
                justify-content: space-between;
                padding: 0px 20px;
            }
        }
        #my_btn_hide{
            position: absolute;
            right: 20px;
            font-size: 30px;
```

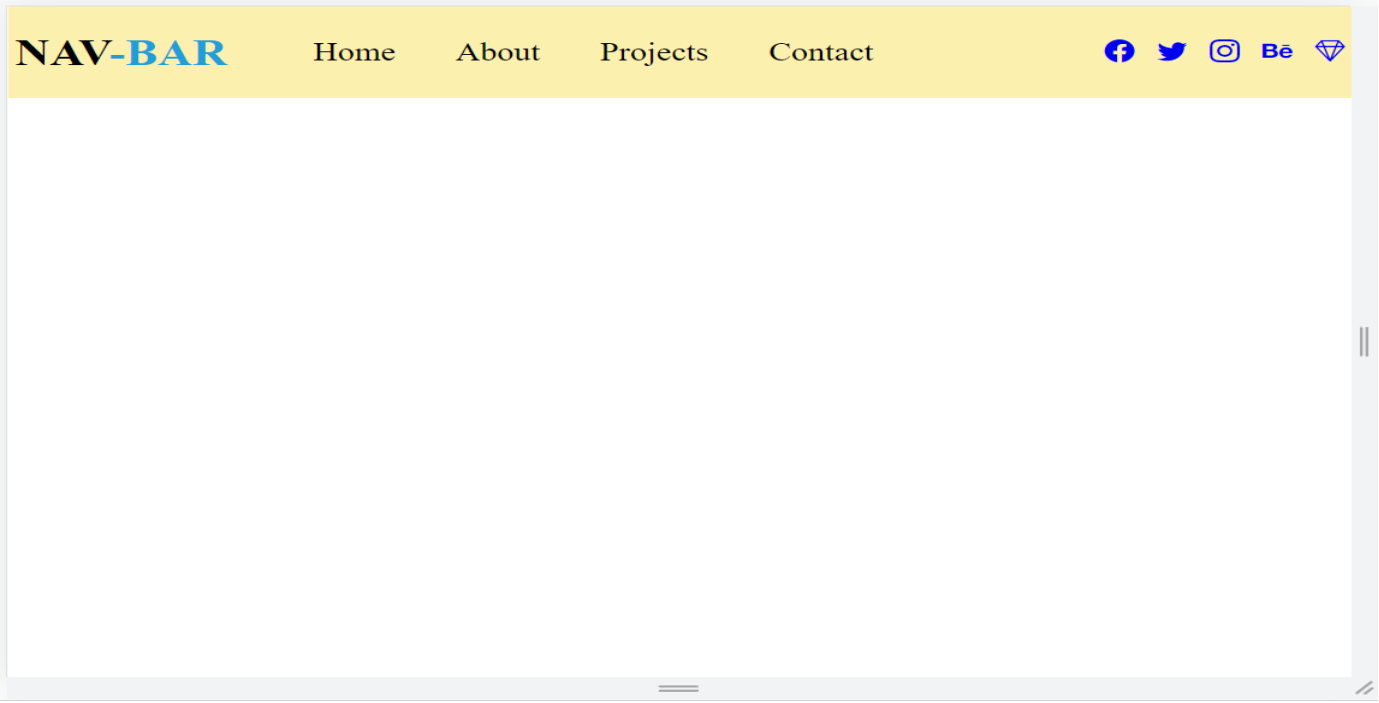
a

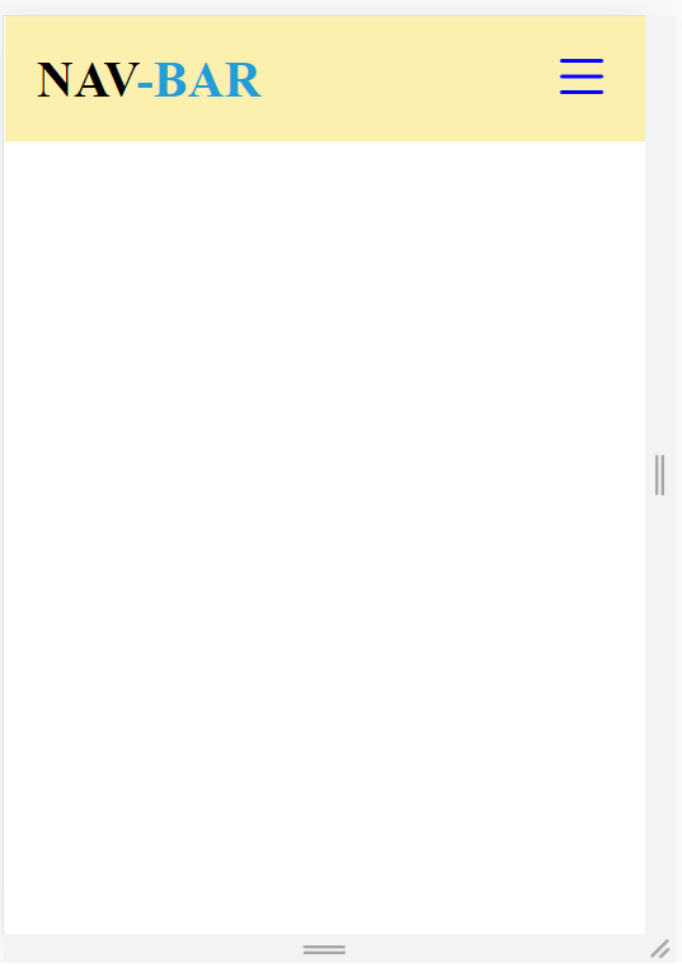
TP4 > IndexEx5.html > html > head > style > .hide_list

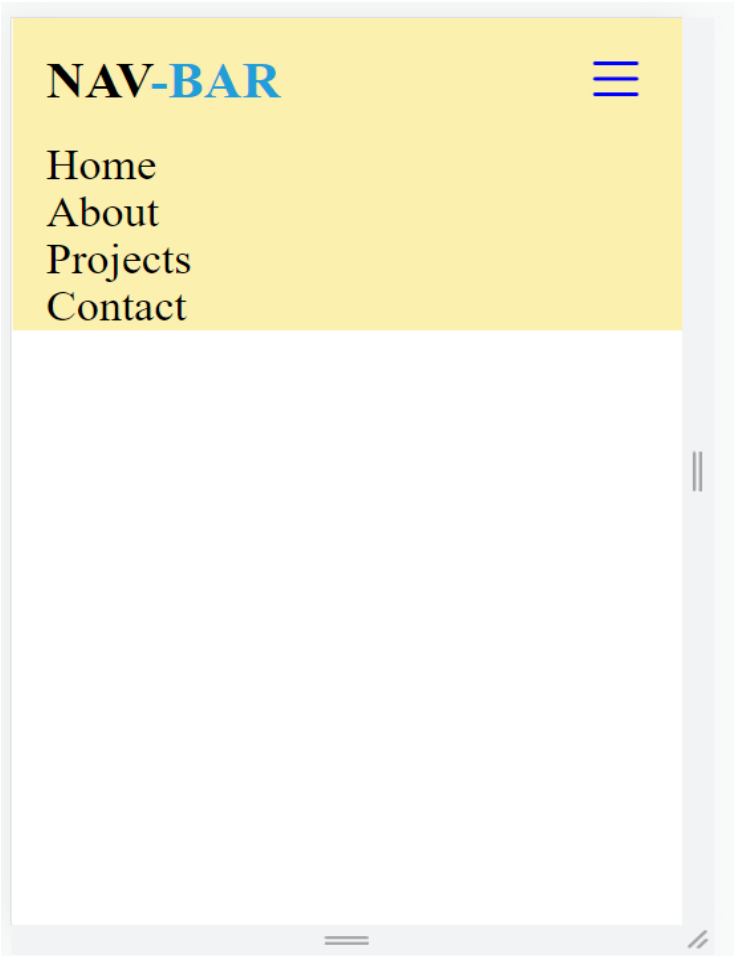
```
            right: 20px;
            font-size: 30px;
            border: none;
            color: blue;
            margin-top: -63px;
            z-index: 8;
            background-color: rgb(252, 240, 174);
            font-size: 40px;

        }
        @media screen and (min-width: 700px){
            .hide_list{
                display: none;
            }

        }
        @keyframes rotateTop {
            from{
                transform: translateY(0px);
                z-index: -2;

            }
            to{
                transform: translateY(-120px);
            }
        }
    </style>
</head>
<body>
    <div class="container">
        <div class="logo">
            <h2>NAV<span>-BAR</span></h2>
        </div>
          <div class="btn">
            <button id="nav_btn"><i class="bi bi-list"></i>
            </button>
        </div>
        <div class="nav_list">
            <ul>
                <li><a href="#home">Home</a></li>
                <li><a href="#about">About</a></li>
                <li><a href="#project">Projects</a></li>
                <li><a href="#contact">Contact</a></li>
            </ul>
        </div>
        <div class="nav_icon">
```

TP4 > IndexEx5.html > html > body > script

```
        <div class="nav_icon">
            <ul>
                <li><a href="#facebook"><i class="bi bi-facebook"></i>
                </a></li>
                <li><a href="#twitter"><i class="bi bi-twitter"></i>
                </a></li>
                <li><a href="#instagram"><i class="bi bi-instagram"></i>
                </a></li>
                <li><a href="#behance"><i class="bi bi-behance"></i>
                </a></li>
                <li><a href="#gem"><i class="bi bi-gem"></i>
                </a></li>
            </ul>
        </div>
    </div>
    <div >
        <div class="hide_list top">
            <ul >
                <li><a href="#home">Home</a> <button id="my_btn_hide"><i class="bi bi-list"></i>
                </button></li>
                <li><a href="#about">About</a></li>
                <li><a href="#project">Projects</a></li>
                <li><a href="#contact">Contact</a></li>
            </ul>
        </div>
    </div>
    <script>
        const btn = document.getElementById('nav_btn');
        const show = document.querySelector('.hide_list');
        const toTOp = document.getElementById('my_btn_hide');
        const showTop = document.querySelector('.top');

        btn.addEventListener("click", function(){
            show.style.display= "block";
        });

        toTOp.addEventListener("click", function(){

            showTop.style.display = "none";


        })

    </script>
</body>
</html>
```


NAV-BAR
Home
About
Projects
Contact
Bē


NAV-BAR


NAV-BAR
Home
About
Projects
Contact

Ex6: Side Bar Build an app with a slide bar

TP4 > IndexEx6TP04.html > html > head > style > {} @media screen and (min-width: 676px) > .sidebar

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Sidebar</title>
    <!-- font-awesome -->
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.14.0/css/all.min.css"
    />

    <style>
        body {
          line-height: 1.5;
          font-size: 0.875rem;
          background-color: cadetblue;
        }
        ul {
          list-style-type: none;
        }
        a {
          text-decoration: none;
        }

        .sidebar-toggle {
          position: fixed;
          top: 2rem;
          right: 3rem;
          font-size: 2rem;
          background: transparent;
          border-color: transparent;
          cursor: pointer;
          animation: bounce 2s ease-in-out infinite;
        }

        .sidebar-header {
          display: flex;
          justify-content: space-between;
          align-items: center;
          padding: 1rem 1.5rem;
        }
        .close-btn {
          font-size: 1.75rem;
          background: transparent;
```

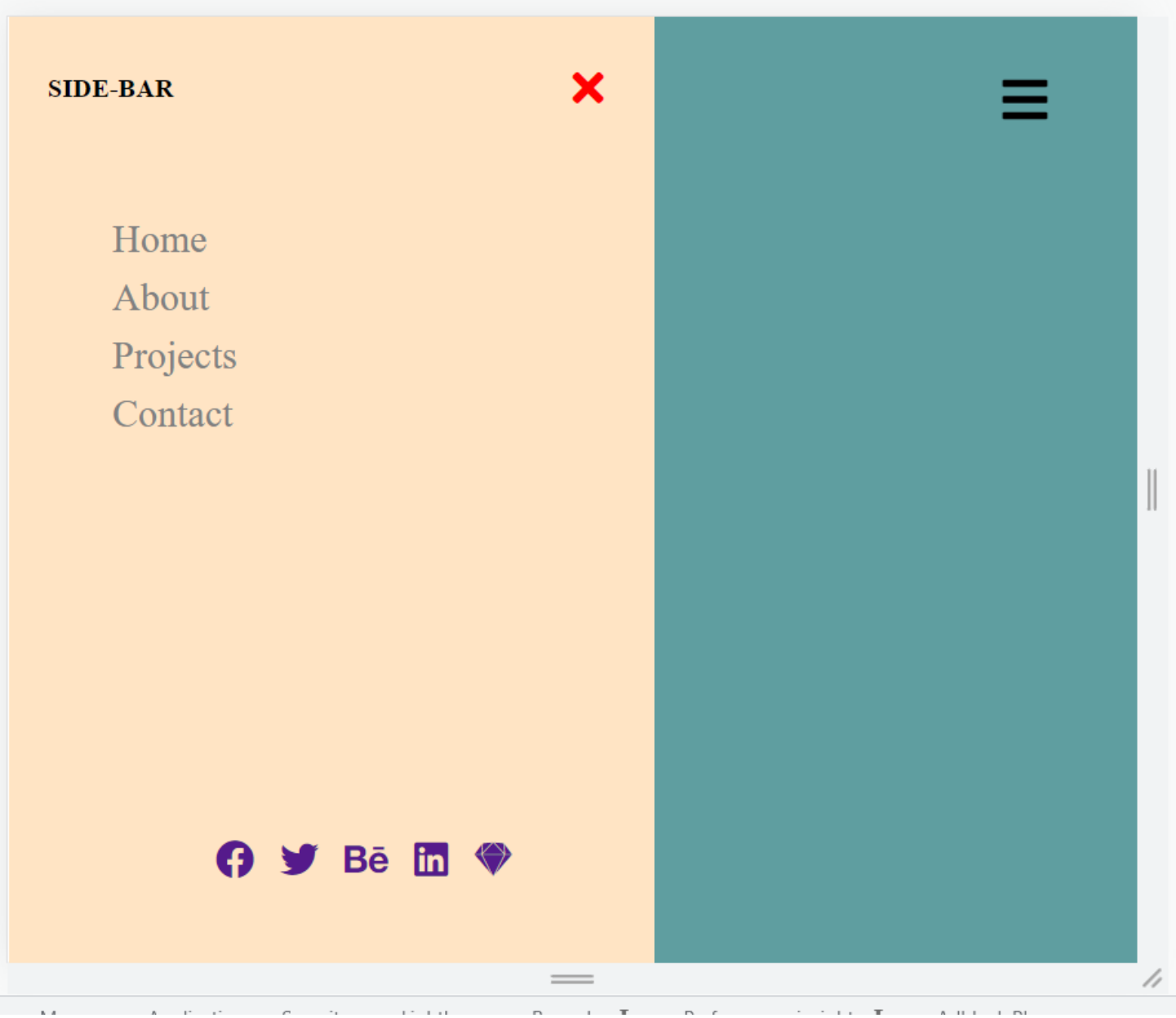
TP4 > IndexEx6TP04.html > html > head > style > {} @media

```
            background: transparent;
            border-color: transparent;
            color: red;
            cursor: pointer;
          }
          .close-btn:hover {
            transform: rotate(360deg);
          }
          .logo {
            justify-self: center;
            height: 40px;
          }
          .links a {
            isplay: block;
            font-size: 1.5rem;
            text-transform: capitalize;
            padding: 1rem 1.5rem;
            color: gray;
          }
          .links a:hover {
            padding-left: 1.75rem;
          }
          .social-icons {
            justify-self: center;
            display: flex;
            padding-bottom: 2rem;
          }
          .social-icons a {
            font-size: 1.5rem;
            margin: 0 0.5rem;
          }
          .sidebar {
            position: fixed;
            top: 0;
            left: 0;
            width: 100%;
            height: 100%;
            display: grid;
            grid-template-rows: auto 1fr auto;
            row-gap: 1rem;
            transform: translate(-100%);
            background-color: bisque;
          }
          .show-sidebar {
            transform: translate(0);
```

TP4 > IndexEx6TP04.html > html > body > aside.sidebar > ul.links

```
          .show-sidebar {
            transform: translate(0);
          }
          @media screen and (min-width: 676px) {
            .sidebar {
              width: 400px;
            }
          }
        </style>
      </head>
      <body>
        <button class="sidebar-toggle">
          <i class="fas fa-bars"></i>
        </button>
        <aside class="sidebar">
          <div class="sidebar-header">
            <h3>SIDE-BAR</h3>
            <button class="close-btn">
              <i class="fas fa-times"></i>
            </button>
          </div>
          <ul class="links">
            <li>
              <a href="#">home</a>
            </li>
            <li>
              <a href="#">about</a>
            </li>
            <li>
              <a href="#">projects</a>
            </li>
            <li>
              <a href="#">contact</a>
            </li>
          </ul>
          <ul class="social-icons">
            <li>
              <a href="https://www.twitter.com">
                <i class="fab fa-facebook"></i>
              </a>
            </li>
            <li>
              <a href="https://www.twitter.com">
                <i class="fab fa-twitter"></i>
              </a>
```

TP4 > IndexEx6TP04.html > html > body > aside.sidebar > ul.links

```
                <i class="fab fa-twitter"></i>
              </a>
            </li>
            <li>
              <a href="https://www.twitter.com">
                <i class="fab fa-behance"></i>
              </a>
            </li>
            <li>
              <a href="https://www.twitter.com">
                <i class="fab fa-linkedin"></i>
              </a>
            </li>
            <li>
              <a href="https://www.twitter.com">
                <i class="fab fa-sketch"></i>
              </a>
            </li>
          </ul>
        </aside>

        <script>
          const toggleBtn = document.querySelector(".sidebar-toggle");
          const closeBtn = document.querySelector(".close-btn");
          const sidebar = document.querySelector(".sidebar");

          toggleBtn.addEventListener("click", function () {

          sidebar.classList.toggle("show-sidebar");
          });

          closeBtn.addEventListener("click", function () {
          sidebar.classList.remove("show-sidebar");
          });
        </script>
      </body>
    </html>
```

Output: