ព្រះរាជាណាចក្រកម្ពុជា

ជាតិ   សាសនា   ព្រះមហាក្សត្រ

Institute of technology of Cambodia

Department of Information and communication

<u><<Report TP IP04>></u>

TP: INTERNET PROGRAM

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Group: I4-GIC-C

Year: 2023-2024

URL GIT: [VenThon/TP04_IP (github.com)](VenThon/TP04_IP)

Contents

Ex1: Tab design following UI to have 3 tabs

```html
TP4 >  IndexEx1TP04.html >  html >  head >  style >  h1 >  p
 1     <!DOCTYPE html>
 2     <html lang="en">
 3     <head>
 4         <meta charset="UTF-8">
 5         <meta http-equiv="X-UA-Compatible" content="IE=edge">
 6         <meta name="viewport" content="width=device-width, initial-scale=1.0">
 7         <title>Tab</title>
 8         <style>
 9             body{
10                 width: 100%;
11                 display: flex;
12                 justify-content: center;
13             }
14             .container{
15                 width: 80%;
16                 background-color: azure;
17                 border: 2px solid black;
18                 padding: 15px;
19             }
20             h1, p{
21                 display: flex;
22                 justify-content: center;
23             }
24             img{
25                 width: 100%;
26             }
27             .btn{
28                 width: 100%;
29                 background-color: white;
30                 display: flex;
31                 justify-content: space-between;
32                 height: 35px;
33             }
34             button{
35                 width: 33.33%;
36                 height: 100%;
37             }
```

```
37          }
38          .content{
39              width: 95%;
40              background-color: ■white;
41              padding: 15px;
42
43          }
44      </style>
45  </head>
46  <body>
47      <div class="container">
48          <div class="header">
49              <h1>About</h1>
50              <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Maiores rem accusamus.</p>
51          </div>
52          <div>
53              <img src="./flower.png" alt="">
54          </div>
55          <div class="btn">
56              <button id="history" type="button">History</button>
57              <button id="vision" type="button">Vision</button>
58              <button id="goals" type="button">Goals</button>
59          </div>
60          <div class="content" id="demo">
61
62          </div>
63      </div>
64      <script>
65          var History = document.getElementById("history")
66          var Vision = document.getElementById("vision")
67          var Goals = document.getElementById("goals")
68          var Demo = document.getElementById("demo")
69          function myhistory(){
70              History.style.backgroundColor="blue"
71              Vision.style.background="white"
72              Goals.style.background="white"
73              Demo.innerHTML =`
74                  <div>
```

```html
        <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();
```

```html
    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

```html
TP4 > Ex2 > 5 index.html > ⊘ html > ⊘ body > ⊘ div#container > ⊘ div.wrapper > ⊘ div.content_wrapper > ⊘ div.hearder_wrapper > ⊘ div

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

```
46                        </p>
47                    </div>
48                </div>
49            </div>
50        </div>
51        <div class="wrapper">
52            <div class="img">
53                <img src="https://source.unsplash.com/random/500x300/?landscape" alt="photo">
54            </div>
55            <div class="content_wrapper">
56                <div class="hearder_wrapper">
57                    <!-- <button class="history active">History</button> -->
58                    <div><strong><h3>Diner Double</h3></strong></div>
59                    <div><p style="color: ▉red;">$20.99</p></div>
60                </div>
61                <div style="border: 1px solid ▢black; margin-top: 5px;"></div>
62                <div class="text_wrapper" style="--transform-x-percen:0%;">
63                    <div class="content">
64                        <!-- <h1>History</h1> -->
65                        <p>
66                            Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis,
67                            urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem.
68                            Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat
69                            metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet,
70                            urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra
71                            dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra
72                            est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum.
73                            Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis,
74                            placerat est. In sed tincidunt risus, ac porta ex.
75                        </p>
76                    </div>
77                </div>
78            </div>
79        </div>
80        <div class="wrapper">
81            <div class="img">
82                <img src="https://source.unsplash.com/random/500x300/?landscape" alt="photo">
83            </div>
84            <div class="content_wrapper">
85                <div class="hearder_wrapper">
86                    <!-- <button class="history active">History</button> -->
87                    <div><strong><h3>Diner Double</h3></strong></div>
88                    <div><p style="color: ▉red;">$20.99</p></div>
89                </div>
90                <div style="border: 1px solid ▢black; margin-top: 5px;"></div>
```

```
90                <div style="border: 1px solid ▢black; margin-top: 5px;"></div>
91                <div class="text_wrapper" style="--transform-x-percen:0%;">
92                    <div class="content">
93                        <!-- <h1>History</h1> -->
94                        <p>
95                            Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce consectetur, dui imperdiet ornare venenatis,
96                            urna neque dignissim ligula, ut posuere est nibh ac metus. Nunc id est ornare, placerat ex sed, dictum sem.
97                            Quisque congue libero vel molestie consequat. Sed ac lectus lacus. Mauris mollis diam quam, sagittis placerat
98                            metus fermentum dapibus. Phasellus blandit at dolor vitae auctor. Nullam placerat, velit a convallis imperdiet,
99                            urna libero mattis metus, eu venenatis ex mauris at ligula. Praesent eget massa libero. Integer tristique viverra
100                           dolor vel faucibus. Fusce enim mauris, pharetra eget lectus tristique, maximus vestibulum purus. Phasellus pharetra
101                           est a ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue condimentum fermentum.
102                           Fusce venenatis nisl sit amet ligula faucibus, sed feugiat quam eleifend. Vivamus vel ligula porta, elementum eros quis,
103                            placerat est. In sed tincidunt risus, ac porta ex.
104                        </p>
105                    </div>
106                </div>
107            </div>
108        </div>
109
110
111    </div>
112
113 </body>
114 </html>
```

```css
2    * {
3        margin: 0;
4        padding: 0;
5        box-sizing: border-box;
6    }
7
8    body {
9        width: 100%;
10       min-height: 100vh;
11   }
12   body #container {
13       background-color: #f1f5f8;
14       width: 100%;
15       min-height: 100vh;
16       display: flex;
17       flex-direction: column;
18       justify-content: space-evenly;
19       align-items: center;
20       padding: 2rem 0;
21   }
22   body #container > div {
23       width: 100%;
24   }
25   body #container .header {
26       text-align: center;
27   }
28   body #container .header h1 {
29       font-size: 2rem;
30   }
31   body #container .header p {
32       font-size: 1.2rem;
33   }
34   body #container .wrapper {
35       padding: 1rem;
36       display: flex;
37       gap: 1rem;
38   }
39   @media only screen and (max-width: 1000px) {
40       body #container .wrapper {
41           flex-direction: column;
42       }
43   }
44   body #container .wrapper > div {
45       width: 100%;
46       max-height: 30vh;
```

```css
44   body #container .wrapper > div {
45       width: 100%;
46       max-height: 30vh;
47   }
48   body #container .wrapper > div img {
49       width: 100%;
50       -o-object-fit: cover;
51       object-fit: cover;
52       height: 100%;
53   }
54   body #container .wrapper .img {
55       border-radius: 0.7rem;
56       overflow: hidden;
57   }
58   body #container .wrapper .content_wrapper {
59       border-radius: 0.8rem;
60       overflow: hidden;
61       background-color: white;
62   }
63   .hearder_wrapper{
64       display: flex;
65       justify-content: space-between;
66   }
67   .content{
68       margin-top: 5px;
69   }
70
71   button{
72       padding: 5px 20px 5px 20px;
73       color: red;
74       border: 2px solid red;
75   }
```

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 ante bibendum malesuada. Maecenas aliquet tortor quis diam facilisis vestibulum. Mauris congue

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 > 5 IndexEx3TP04.html > ⊘ html > ⊘ body > ⊘ script > 🛠 Counter > ⊘ reset
  1
  2    <!DOCTYPE html>
  3    <html lang="en">
  4    <head>
  5        <meta charset="UTF-8">
  6        <meta http-equiv="X-UA-Compatible" content="IE=edge">
  7        <meta name="viewport" content="width=device-width, initial-scale=1.0">
  8        <title>Counter</title>
  9        <!-- <link rel="stylesheet" href="./style.css"> -->
 10        <link rel="preconnect" href="https://fonts.googleapis.com">
 11        <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
 12        <link href="https://fonts.googleapis.com/css2?family=Oswald:wght@200;300;400&family=Roboto:wght@100;500&display=swap" rel="stylesheet">
 13        <style>
 14            *{
 15                margin: 0px;
 16                padding: 0px;
 17                font-family: 'Roboto', sans-serif;
 18            }
 19            .wrapper{
 20                display: flex;
 21                align-items: center;
 22                justify-content: center;
 23                margin: auto;
 24                margin-top: 50px;
 25                text-align: center;
 26                border: 1px solid □black;
 27                width: fit-content;
 28                height: 600px;
 29                width: 600px;
 30                background-color: ■aliceblue;
 31            }
 32            .wrapper h1{
 33                font-size: 40px;
 34                color: □#241e4a;
 35            }
 36            #counter{
 37                margin: 30px;
 38                font-size: 80px;
 39                color: ■#158704;
 40            }
 41            button{
 42                border: 1px solid □black;
 43                border-radius: 3px;
 44                height: 25px;
 45                padding-left: 10px;
 46                padding-right: 10px;
```

```
45              padding-left: 10px;
46              padding-right: 10px;
47              margin: 5px;
48              background-color: ▪aliceblue;
49          }
50          #increase{
51              background-color: ▫black;
52              color: ▪white;
53  }
54      </style>
55  </head>
56  <body>
57      <div class="wrapper">
58          <div>
59              <h1>Counter</h1>
60              <div id="counter"></div>
61              <button type="button" id="decrease">DECREASE</button>
62              <button type="button" id="reset">RESET</button>
63              <button type="button" id="increase">INCREASE</button>
64          </div>
65      </div>
66      <script>
67          class Counter{
68          number = 0;
69          constructor(){
70              document.getElementById("counter").innerHTML = localStorage.getItem("counter");
71          }
72          decrease(){
73              this.number -= 1;
74              return this.number;
75          }
76
77          increase(){
78              this.number += 1;
79              return this.number;
80          }
81
82          reset(){
83              this.number = 0;
84              return this.number;
85          }
86      }
87
88      var counter = new Counter();
89
```
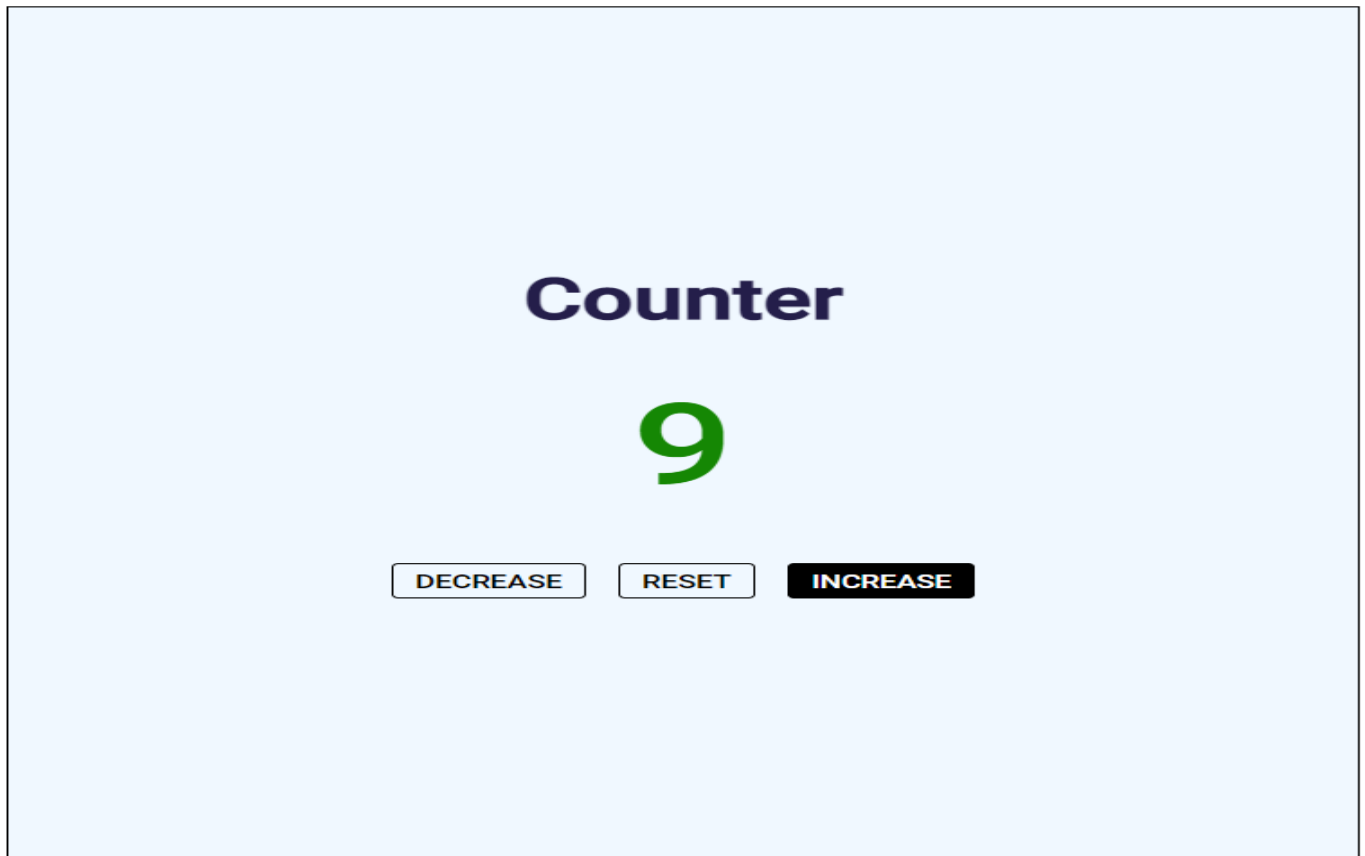
```
89
90        function increase(){
91            localStorage.setItem("counter",counter.increase());
92            document.getElementById("counter").innerHTML = localStorage.getItem("counter");
93        }
94        function decrease(){
95            localStorage.setItem("counter",counter.decrease());
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:

Counter

9

DECREASE   RESET   INCREASE

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

```
TP4 > 5 IndexEx4TP04.html > ⬡ html > ⬡ head > ⬡ style > ⭹ .container
  1    <!DOCTYPE html>
  2    <html lang="en">
  3    <head>
  4        <meta charset="UTF-8">
  5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
  6        <meta name="viewport" content="width=device-width, initial-scale=1.0">
  7        <title>Random Color Genterator</title>
  8        <link rel="preconnect" href="https://fonts.googleapis.com">
  9        <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
 10        <link href="https://fonts.googleapis.com/css2?family=Oswald:wght@200;300;400&family=Roboto:wght@100;400;500&display=swap" rel="stylesheet">
 11        <style>
 12            *{
 13                margin: 0px;
 14                padding: 0px;
 15                font-family: 'Roboto', sans-serif;
 16            }
 17            body{
 18                display: flex;
 19                justify-content: center;
 20                background-color: ⬛gray;
 21            }
 22            .container{
 23                width: 400px;
 24                height: 620px;
 25                margin: 60px;
 26                border: 2px solid ⬜black;
 27                background-color: ⬜antiquewhite;
 28                border-radius: 10px;
 29            }
 30            .wrapper{
 31                margin: auto;
 32                margin-top: 20px;
 33                border: 1px solid ⬜#ebebeb;
 34                width: fit-content;
 35                background-color: ⬛#73adff;
 36                text-align: center;
 37                height: 580px;
 38                border-radius: 5px;
 39            }
 40            .header{
 41                color: ⬛#73adff;
 42                font-weight: 500;
 43                height: 40px;
 44                padding-left: 20px;
 45                background-color: ⬜white;
                 display: flex;
```

```css
44              padding-left: 20px;
45              background-color: white;
46              display: flex;
47              align-items: center;
48              margin-bottom: 10px;
49          }
50          .background{
51              display: flex;
52              flex-direction: column;
53              align-items: center;
54              justify-content: center;
55              background-color: black;
56              color: white;
57              margin: 3px;
58              border-radius: 5px;
59              height: 80px;
60          }
61          .button{
62              margin-top: 20px;
63              font-size: medium;
64              height: 50px;
65          }
66          .button button{
67              width: 100px;
68              height: 40px;
69              font-weight: 500;
70              color: white;
71              background-color: black;
72              border: 1px solid black;
73              border-radius: 3px;
74          }
75          #reset{
76              width: 70px;
77              background-color: unset;
78              color: black;
79          }
80          .display{
81              width: 330px;
82              text-align: left;
83              padding: 10px;
84              background-color: white;
85              height: 180px;
86              overflow: auto;
87          }
88          .text{
```

```css
88          .text{
89              display: flex;
90          }
91          .square{
92              width: 15px;
93              height: 15px;
94              margin-left: 5px;
95              border: 1px solid black;
96          }
97      </style>
98  </head>
99  <body onload="color.displayColor()">
100 <div class="container">
101     <div class="wrapper" id="wrapper">
102         <div class="header">Random Color Genterator</div>
103         <div class="background">
104             <h1>Background Color :</h1>
105             <div id="code">#112312</div>
106         </div>
107         <div class="button">
108             <button id="generate" onclick="color.generate()">GENTERATE</button>
109             <button id="reset" onclick="color.reset()">RESET</button>
110         </div>
111         <div class="display" id="display"></div>
112     </div>
113 </div>
114
115     <script>
116         class Color {
117         colorType = "HEX";
118         records = [];
119
120         constructor(type){
121             this.colorType = type;
122             this.getRecords();
123         }
124         generate() {
125             let color = this.getRandomNumber();
126             this.records.push(color);
127             localStorage.setItem('colorGen', JSON.stringify(this.records));
128             this.displayColor();
129         }
```
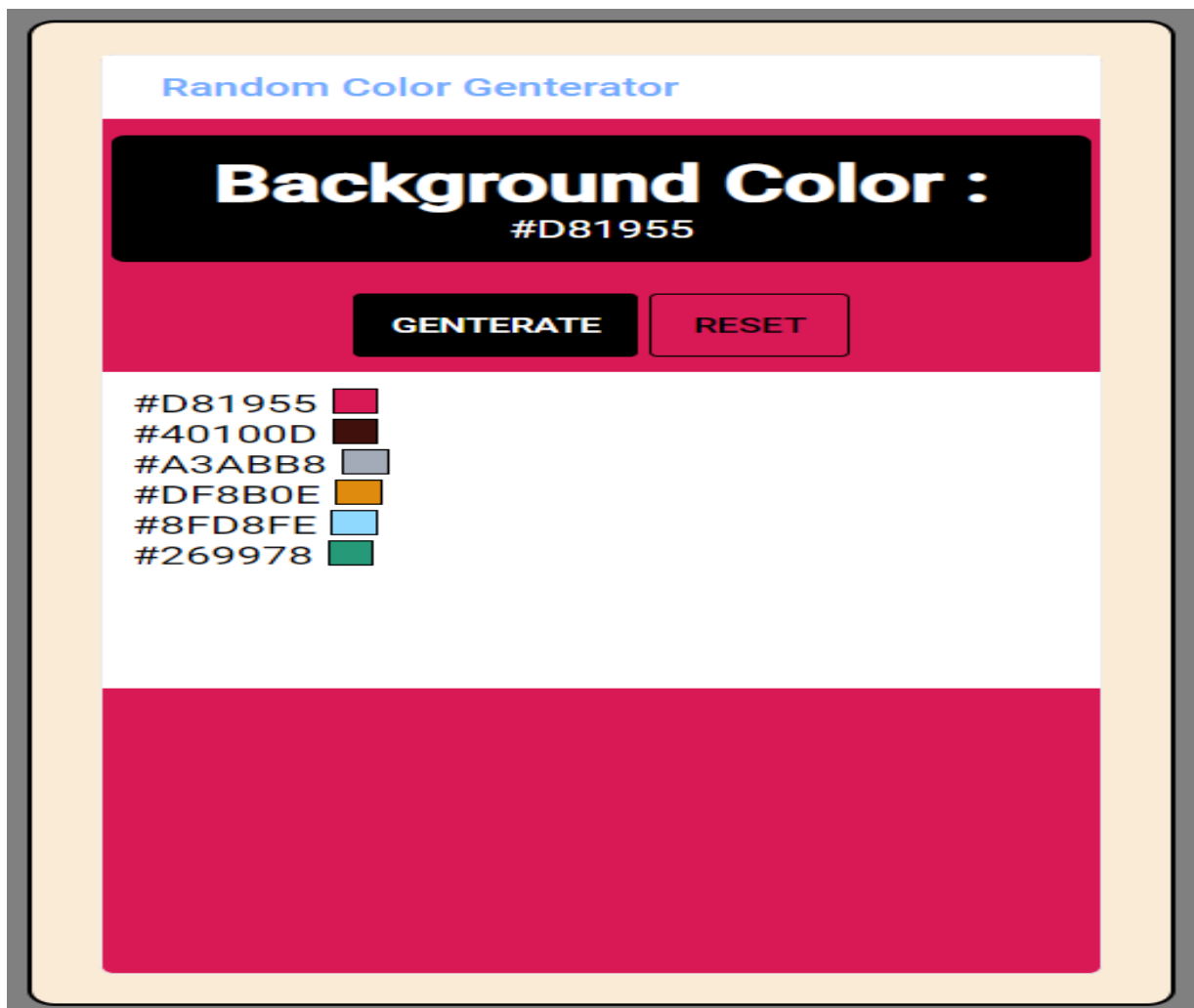
```
129        }
130        displayColor(){
131            document.getElementById("display").innerHTML = "";
132            document.getElementById("wrapper").style.backgroundColor = this.records[this.records.length-1];
133            document.getElementById("code").innerHTML = this.records[this.records.length-1];
134
135            for(let i=this.records.length-1; i>=0; i--){
136                document.getElementById("display").innerHTML += `<div class="text">${this.records[i]}<div class="square" style="background-color: ${this.records[i]};"></div> </div>`
137            }
138
139        }
140        getRandomNumber(){
141            var letters = '0123456789ABCDEF';
142            var color = '#';
143            for (var i = 0; i < 6; i++) {
144            color += letters[Math.floor(Math.random() * 16)];
145        }
146            return color;
147        }
148        getRecords(){
149            this.records = JSON.parse(localStorage.getItem('colorGen'));
150
151        }
152        reset(){
153            this.records = [];
154            localStorage.setItem('colorGen', JSON.stringify(this.records));
155            document.getElementById("display").innerHTML = "";
156        }
157    }
158    var color = new Color("HEX");
159    </script>
160  </body>
161  </html>
```

Output:

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

```html
TP4 > 🔶 IndexEx5.html > ⬦ html > ⬦ body > ⬦ script
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <meta charset="UTF-8">
5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
6        <meta name="viewport" content="width=device-width, initial-scale=1.0">
7        <title>Navbar</title>
8        <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.7.2/font/bootstrap-icons.css">
9        <style>
10           *{
11               padding: 0;
12               margin: 0;
13               box-sizing: border-box;
14           }
15           .container{
16               width: 100%;
17               height: 80px;
18               display: flex;
19               justify-content: space-around;
20               position: relative;
21               align-items: center;
22               z-index: 5;
23               background-color: ■rgb(252, 240, 174);
24           }
25           .logo h2{
26               font-size: 2rem;
27               color: □black;
28           }
29           .logo h2 span{
30               color: ■rgb(33, 158, 216);
31           }
32           .nav_list ul{
33               display: flex;
34           }
35           .nav_list ul li{
36               margin-left: 40px;
37               list-style-type: none;
38           }
39           .nav_list ul li a{
40               text-decoration: none;
41               font-size: 1.4rem;
42               color: □black;
43
44           }
45           .nav_list ul li a:hover{
46               border-bottom: 2px solid □black;
```

```css
45          .nav_list ul li a:hover{
46              border-bottom: 2px solid ⬜black;
47          }
48          .nav_icon{
49              margin-left: 130px;
50          }
51          .nav_icon ul{
52              display: flex;
53          }
54          .nav_icon ul li{
55              margin-left: 15px;
56              list-style-type: none;
57          }
58          .nav_icon ul li a{
59              text-decoration: none;
60              font-size: 20px;
61
62          }
63          .btn button{
64              font-size: 40px;
65              display: none;
66              background-color: ⬜rgb(252, 240, 174);
67              border: none;
68              color: 🟦blue;
69              cursor: pointer;
70          }
71          .top{
72              animation-name: rotateTop;
73              animation-duration: 1s;
74              display: none;
75          }
76          .hide_list{
77              display: none;
78              animation-name: rotateBar;
79              animation-duration: 1s;
80
81          }
82
83          .hide_list ul li{
84              list-style-type: none;
85              width: 100%;
86              padding-left: 20px;
87              background-color: ⬜rgb(252, 240, 174);
88          }
89          .hide_list ul li a:hover{
```

```css
89          .hide_list ul li a:hover{
90              color: 🟥red;
91
92          }
93          .hide_list ul li:hover{
94              background-color: ⬜rgb(255, 248, 149);
95
96          }
97          .hide_list ul li a{
98              text-decoration: none;
99              font-size: 1.7rem;
100             color: ⬜rgb(0, 0, 0);
101
102         }
103     @keyframes rotateBar {
104         from{
105             transform: translateY(-120px);
106             z-index: -2;
107
108         }
109         to{
110             transform: translateY(0px);
111         }
112     }
113
114     @media screen and (max-width: 678px){
115         .nav_icon{
116             display: none;
117         }
118         .nav_list{
119             display: none;
120         }
121         .btn button{
122             display: flex;
123         }
124         .container{
125             display: flex;
126             justify-content: space-between;
127             padding: 0px 20px;
128         }
129     }
130     #my_btn_hide{
131         position: absolute;
132         right: 20px;
133         font-size: 30px;
```

```
TP4 > 5 IndexEx5.html > ⬡ html > ⬡ head > ⬡ style > 🔧 .hide_list
```

```css
132             right: 20px;
133             font-size: 30px;
134             border: none;
135             color: blue;
136             margin-top: -63px;
137             z-index: 8;
138             background-color: rgb(252, 240, 174);
139             font-size: 40px;
140
141         }
142         @media screen and (min-width: 700px){
143             .hide_list{
144                 display: none;
145             }
146
147         }
148         @keyframes rotateTop {
149             from{
150                 transform: translateY(0px);
151                 z-index: -2;
152
153             }
154             to{
155                 transform: translateY(-120px);
156             }
157         }
158     </style>
159 </head>
160 <body>
161     <div class="container">
162         <div class="logo">
163             <h2>NAV<span>-BAR</span></h2>
164         </div>
165         <div class="btn">
166             <button id="nav_btn"><i class="bi bi-list"></i>
167             </button>
168         </div>
169         <div class="nav_list">
170             <ul>
171                 <li><a href="#home">Home</a></li>
172                 <li><a href="#about">About</a></li>
173                 <li><a href="#project">Projects</a></li>
174                 <li><a href="#contact">Contact</a></li>
175             </ul>
176         </div>
177         <div class="nav_icon">
```

```
TP4 > 5 IndexEx5.html > ⬡ html > ⬡ body > ⬡ script
```

```html
177         <div class="nav_icon">
178             <ul>
179                 <li><a href="#facebook"><i class="bi bi-facebook"></i>
180                 </a></li>
181                 <li><a href="#twitter"><i class="bi bi-twitter"></i>
182                 </a></li>
183                 <li><a href="#instagram"><i class="bi bi-instagram"></i>
184                 </a></li>
185                 <li><a href="#behance"><i class="bi bi-behance"></i>
186                 </a></li>
187                 <li><a href="#gem"><i class="bi bi-gem"></i>
188                 </a></li>
189             </ul>
190         </div>
191     </div>
192     <div >
193         <div class="hide_list top">
194             <ul >
195                 <li><a href="#home">Home</a> <button id="my_btn_hide"><i class="bi bi-list"></i>
196                 </button></li>
197                 <li><a href="#about">About</a></li>
198                 <li><a href="#project">Projects</a></li>
199                 <li><a href="#contact">Contact</a></li>
200             </ul>
201         </div>
202     </div>
203     <script>
204         const btn = document.getElementById('nav_btn');
205         const show = document.querySelector('.hide_list');
206         const toTOp = document.getElementById('my_btn_hide');
207         const showTop = document.querySelector('.top');
208
209         btn.addEventListener("click", function(){
210             show.style.display= "block";
211         });
212
213         toTOp.addEventListener("click", function(){
214
215             showTop.style.display = "none";
216
217         })
218
219     </script>
220 </body>
221 </html>
```

NAV-BAR Home   About   Projects   Contact

NAV-BAR

NAV-BAR

Home
About
Projects
Contact

Ex6: Side Bar Build an app with a slide bar

```html
1   <!DOCTYPE html>
2   <html lang="en">
3     <head>
4       <meta charset="UTF-8" />
5       <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6       <title>Sidebar</title>
7       <!-- font-awesome -->
8       <link
9         rel="stylesheet"
10        href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.14.0/css/all.min.css"
11      />
12
13      <style>
14          body {
15            line-height: 1.5;
16            font-size: 0.875rem;
17            background-color: cadetblue;
18          }
19          ul {
20            list-style-type: none;
21          }
22          a {
23            text-decoration: none;
24          }
25
26          .sidebar-toggle {
27            position: fixed;
28            top: 2rem;
29            right: 3rem;
30            font-size: 2rem;
31            background: transparent;
32            border-color: transparent;
33            cursor: pointer;
34            animation: bounce 2s ease-in-out infinite;
35          }
36
37          .sidebar-header {
38            display: flex;
39            justify-content: space-between;
40            align-items: center;
41            padding: 1rem 1.5rem;
42          }
43          .close-btn {
44            font-size: 1.75rem;
45            background: transparent;
46            border-color: transparent;
```

```
45          background: transparent;
46          border-color: transparent;
47          color: ■red;
48          cursor: pointer;
49        }
50        .close-btn:hover {
51          transform: rotate(360deg);
52        }
53        .logo {
54          justify-self: center;
55          height: 40px;
56        }
57        .links a {
58          isplay: block;
59          font-size: 1.5rem;
60          text-transform: capitalize;
61          padding: 1rem 1.5rem;
62          color: ■gray;
63        }
64        .links a:hover {
65          padding-left: 1.75rem;
66        }
67        .social-icons {
68          justify-self: center;
69          display: flex;
70          padding-bottom: 2rem;
71        }
72        .social-icons a {
73          font-size: 1.5rem;
74          margin: 0 0.5rem;
75        }
76        .sidebar {
77          position: fixed;
78          top: 0;
79          left: 0;
80          width: 100%;
81          height: 100%;
82          display: grid;
83          grid-template-rows: auto 1fr auto;
84          row-gap: 1rem;
85          transform: translate(-100%);
86          background-color: ■bisque;
87        }
88        .show-sidebar {
89          transform: translate(0);
```

```
88          .show-sidebar {
89            transform: translate(0);
90          }
91          @media screen and (min-width: 676px) {
92            .sidebar {
93              width: 400px;
94            }
95          }
96        </style>
97      </head>
98      <body>
99        <button class="sidebar-toggle">
100         <i class="fas fa-bars"></i>
101       </button>
102       <aside class="sidebar">
103         <div class="sidebar-header">
104           <h3>SIDE-BAR</h3>
105           <button class="close-btn">
106             <i class="fas fa-times"></i>
107           </button>
108         </div>
109         <ul class="links">
110           <li>
111             <a href="#">home</a>
112           </li>
113           <li>
114             <a href="#">about</a>
115           </li>
116           <li>
117             <a href="#">projects</a>
118           </li>
119           <li>
120             <a href="#">contact</a>
121           </li>
122         </ul>
123         <ul class="social-icons">
124           <li>
125             <a href="https://www.twitter.com">
126               <i class="fab fa-facebook"></i>
127             </a>
128           </li>
129           <li>
130             <a href="https://www.twitter.com">
131               <i class="fab fa-twitter"></i>
132             </a>
```

```html
131                    <i class="fab fa-twitter"></i>
132                </a>
133            </li>
134            <li>
135                <a href="https://www.twitter.com">
136                    <i class="fab fa-behance"></i>
137                </a>
138            </li>
139            <li>
140                <a href="https://www.twitter.com">
141                    <i class="fab fa-linkedin"></i>
142                </a>
143            </li>
144            <li>
145                <a href="https://www.twitter.com">
146                    <i class="fab fa-sketch"></i>
147                </a>
148            </li>
149        </ul>
150    </aside>
151
152    <script>
153        const toggleBtn = document.querySelector(".sidebar-toggle");
154        const closeBtn = document.querySelector(".close-btn");
155        const sidebar = document.querySelector(".sidebar");
156
157        toggleBtn.addEventListener("click", function () {
158
159        sidebar.classList.toggle("show-sidebar");
160        });
161
162        closeBtn.addEventListener("click", function () {
163        sidebar.classList.remove("show-sidebar");
164        });
165    </script>
166    </body>
167 </html>
```