Internet and Web Programming

(CSE – 3002)

MID-TERM

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Q5a) Develop and demonstrate, using JavaScript script, a HTML document that contains three short paragraphs of text, stacked on top of each other, with only enough of each showing so that the mouse cursor can be placed over some part of them. When the cursor is placed over the exposed part of any paragraph, it should be completely visible and calculate no. of times it's on top (count update in the same paragraph).

Ans5a)

Aim: To demonstrate, using JavaScript script, a HTML document that contains three short paragraphs of text, stacked on top of each other, along with counter.

Code:

HTML:
```
<html>
<head>
    <title>Stack Ordering</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
<script src="stack.js"></script>
<div id="stack1" onMouseOver=mover('stack1');>This is the last Stack count:<span id="counter1">
</span></div>
<div id="stack2" onMouseOver=mover('stack2');>This is the middle Stack count:<span id="counter2
"></span></div>
<div id="stack3" onMouseOver=mover('stack3');>This is the first Stack count:<span id="counter3"
></span></div>
</body>
</html>
```
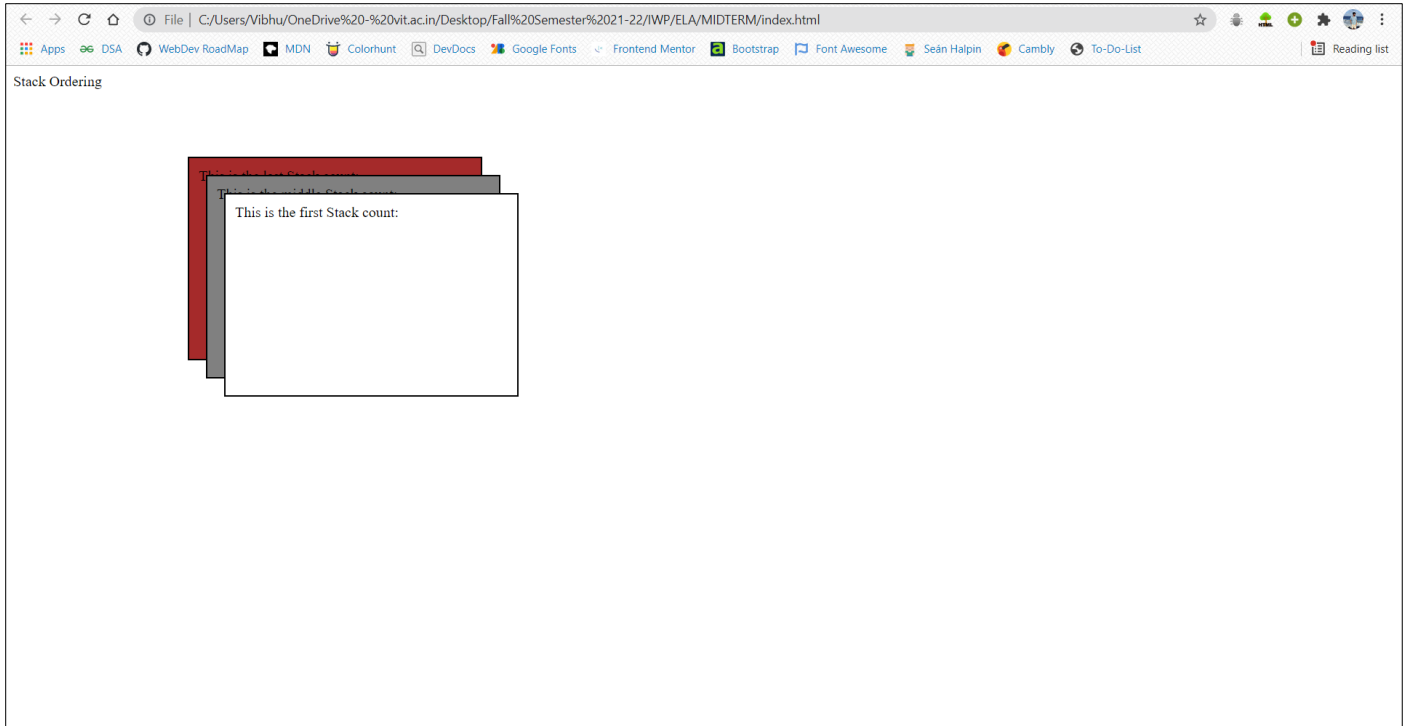
CSS:
```
#stack1 {
  border: solid 2px black;
  background-color: brown;
  padding: 10px;
  width: 300px;
  height: 200px;
  position: absolute;
  top: 100px;
  left: 200px;
  z-index: 0;
}
#stack2 {
  border: solid 2px black;
  background-color: gray;
  padding: 10px;
  width: 300px;
  height: 200px;
  position: absolute;
  top: 120px;
  left: 220px;
  z-index: 0;
}
#stack3 {
```

```css
  border: solid 2px black;
  background-color: white;
  padding: 10px;
  width: 300px;
  height: 200px;
  position: absolute;
  top: 140px;
  left: 240px;
  z-index: 0;
}
```
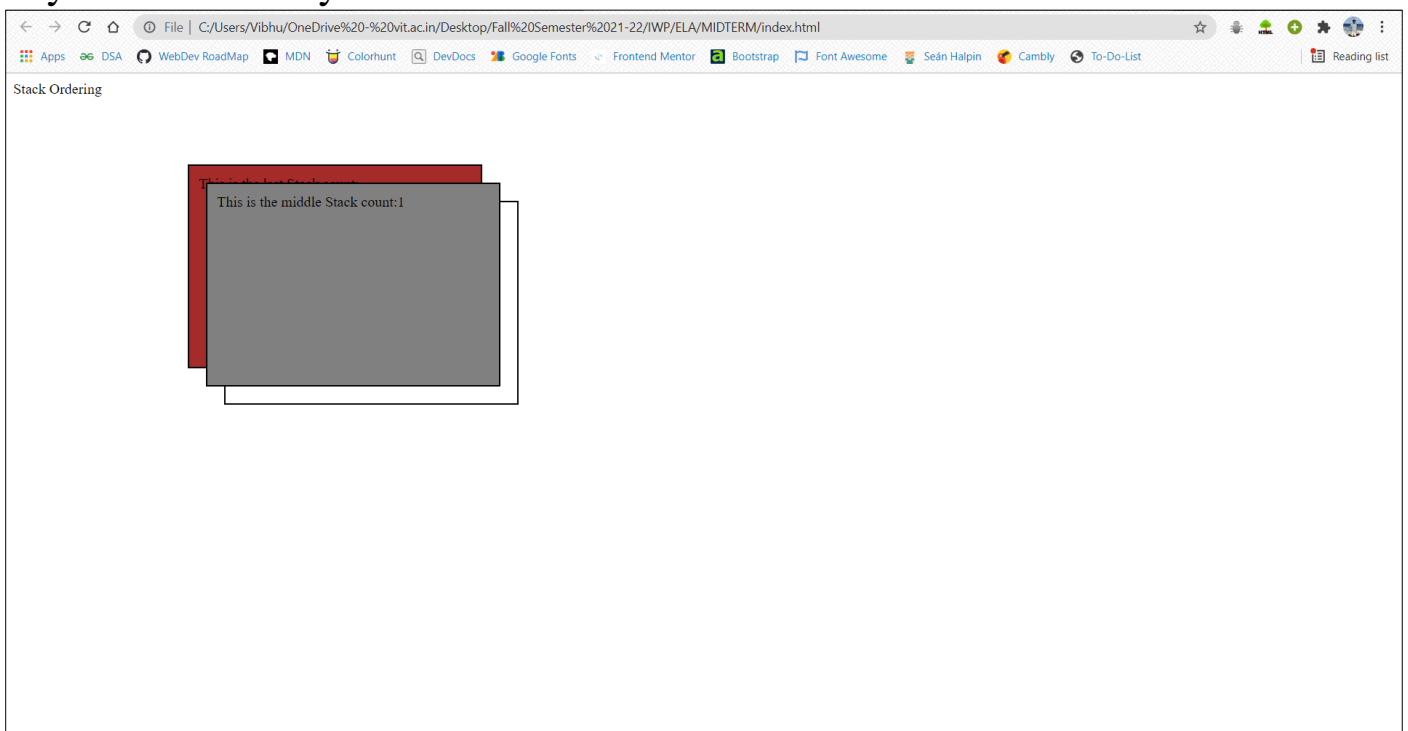
Stack.js
```javascript
var topLayer = "stack3";
var counter1 = 0;
var counter2 = 0;
var counter3 = 1;
function mover(toTop) {
  document.getElementById(topLayer).style.zIndex = "0";
  document.getElementById(toTop).style.zIndex = "1";
  topLayer = toTop;
  var child = document.getElementById(topLayer).children[0];
  var id = child.id;
  var render = 0;
  switch (id) {
    case "counter1":
      counter1++;
      render = counter1;
      break;
    case "counter2":
      counter2++;
      render = counter2;
      break;
    case "counter3":
      counter3++;
      render = counter3;
      break;
  }
  child.innerHTML = render;
}
```
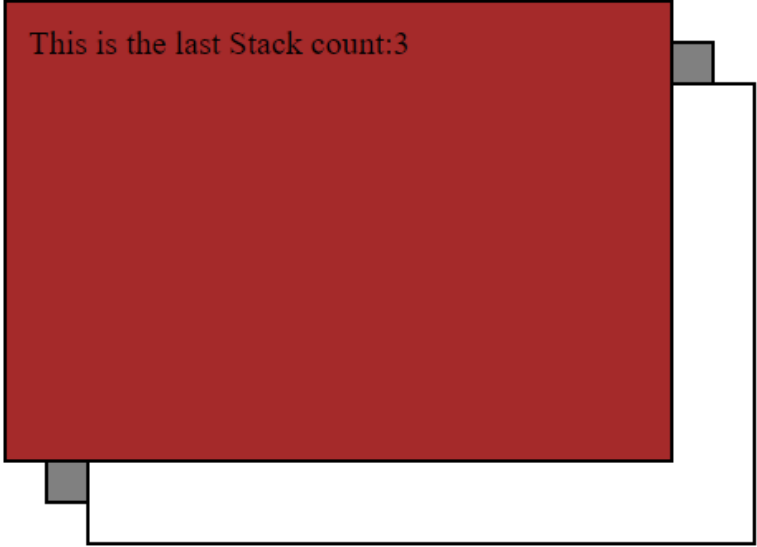
Output:

This is the last Stack count:

This is the middle Stack count:

This is the first Stack count:

Layer Functionality:

This is the last Stack count:

This is the middle Stack count:1

Counter Functionality:

Stack Ordering

This is the last Stack count:3

Q5b) Get username, phone-no, birthdate from the user and validate each field appropriately. Assume that date has (DD-MM-YY) format, Phone Number has STD Code (+##),No (########) format. Validate using JSregular expressions.

Ans5b)

     Aim: To validate form input using JS Regular Expressions.

     Code:

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></title>
  </head>
  <body>
    <script src="validate.js"></script>
    <label>Username</label>
    <br />
    <input type="text" name="" id="username" />
    <br />
    <label>Birthday</label>
    <br />
    <input type="text" name="" id="birthday" />
```

```html
    <br />
    <label>Phone Number</label>
    <br />
    <input type="text" name="" id="phone" />
    <br />
    <button onmousedown="submit();">Submit</button>
  </body>
</html>
```

Validate.js:

```js
const validateUsername = (username) => {
  var regex = /.*/;
  return regex.test(username);
};
const validateBirthday = (birthday) => {
  var regex = /[0-9]{2}[-|\/]{1}[0-9]{2}[-|\/]{1}[0-9]{2}/;
  return regex.test(birthday);
};
const validatePhone = (phone) => {
  var regex = /^\+?([0-9]{2})\)?[-. ]?([0-9]{10})$/;
  return regex.test(phone);
};

const submit = () => {
  var username = document.getElementById("username").value;
  var birthday = document.getElementById("birthday").value;
  var phone = document.getElementById("phone").value;

  if (!validateUsername(username)) {
    alert("Invalid Username!");
  } else if (!validateBirthday(birthday)) {
    alert("Invalid Birthday!");
  } else if (!validatePhone(phone)) {
    alert("Invalid Phone!");
  } else {
    alert("Sucess!");
  }
};
```

Output:

Username
Vibhukumar7

Birthday
12-12-12

Phone Number
+91-9091020129

Submit

When Birthday is invalid:

Username
Vibhukumar7
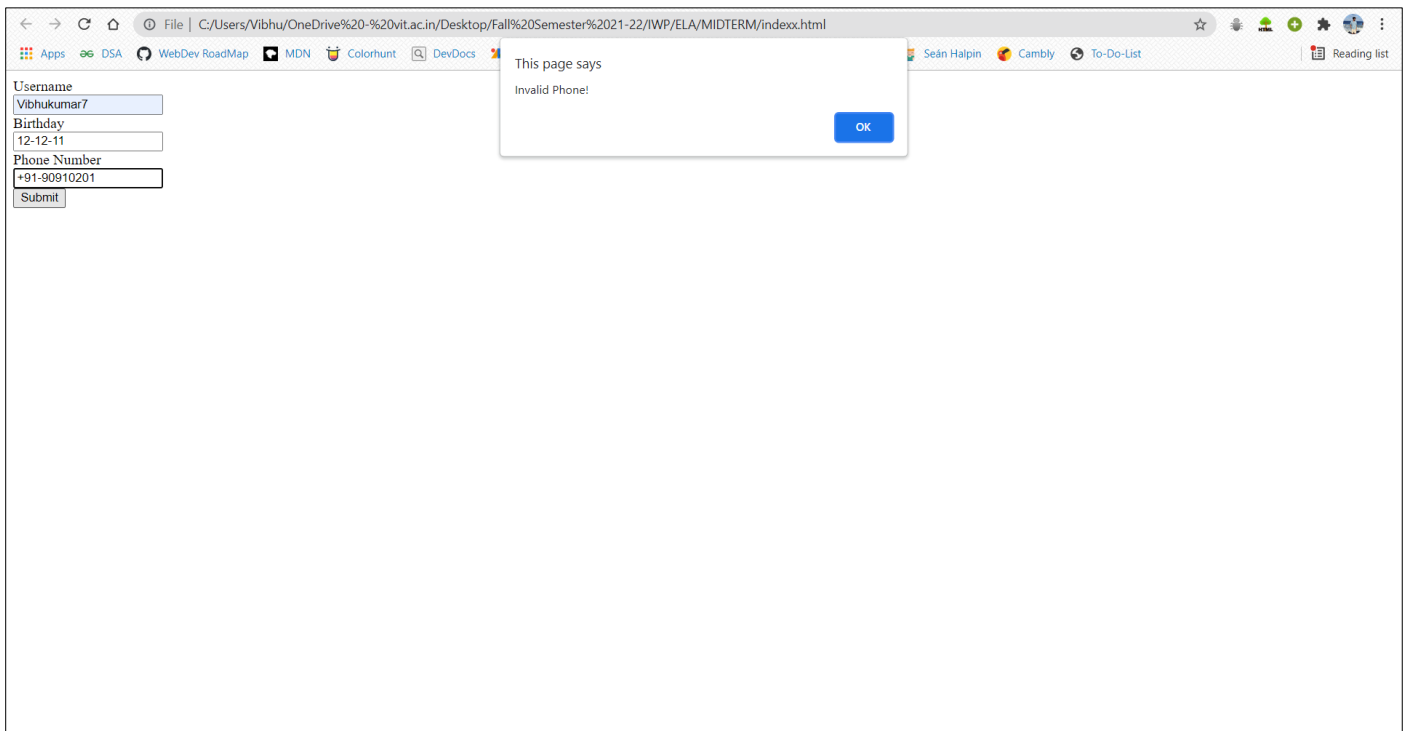
Birthday
12-12-1

Phone Number
+91-9091020129

Submit

This page says

Invalid Birthday!

OK

When Phone Number is invalid:
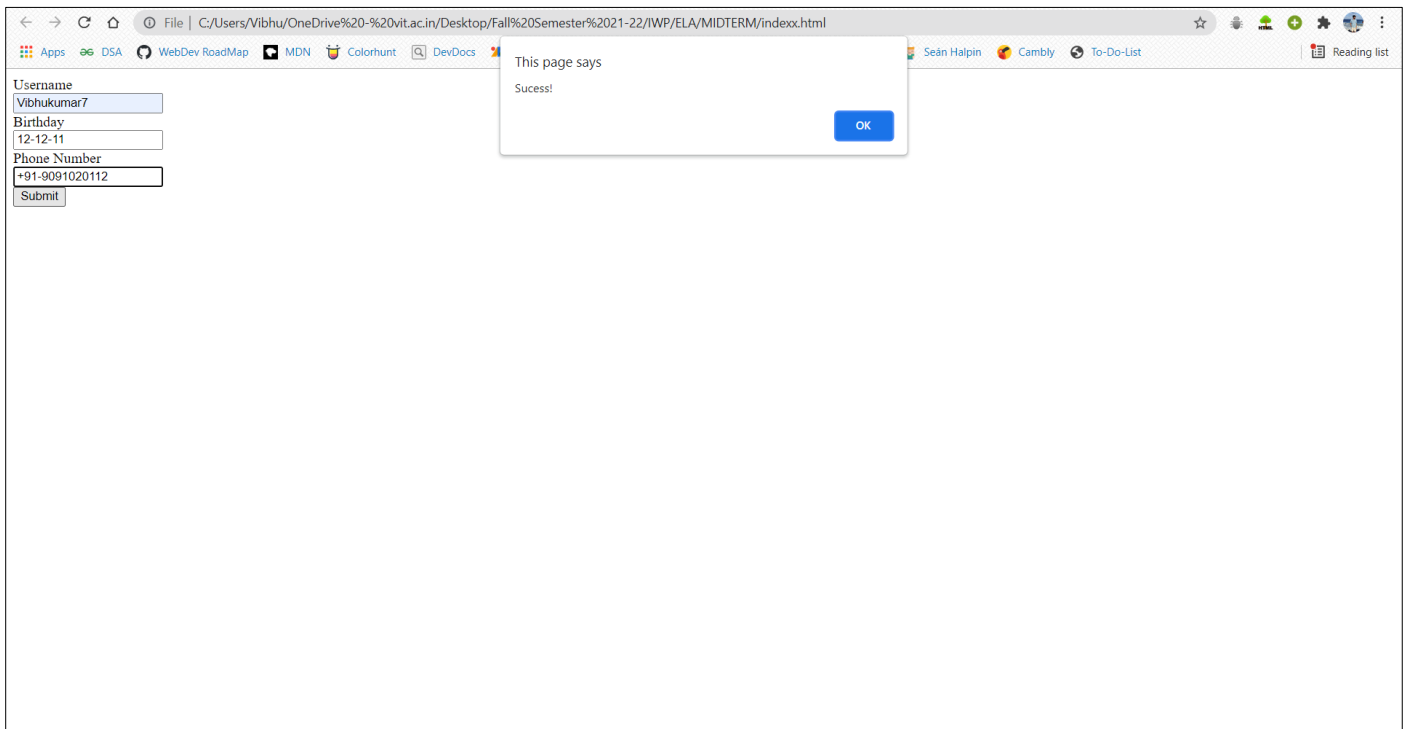

When every input is valid: (success!)