



Project 2: Building a College Library Website | JavaScript Tutorial In Hindi #33

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Project 2: Building a College Library Website | JavaScript Tutorial In Hindi #33

Let us start our 2nd project, in which we will build the **"College Library Website"**. In this project, we will not only revise the concepts we studied till now, but we will explore some new tips of the VS Code as well.

The website we are going to build in this tutorial looks like the following:

Harry Library

Home

Search

Search

Harry Library

Name

Book Name

Author

Author

Type

☒ Fiction

☐ Computer Programming

☐ Cooking

Add Book

Your books

Name	Author	Type
dsf	sdfsdf	fiction
sdfsdf	sdfsdf	fiction
sdfsdf	sdfsdf	fiction
sdfsdf	sdfsdf	fiction

Setting Up the Project:-

For this project, we will use the VS Code. **Visual Studio Code** is a free and powerful source-code editor that runs on the desktop. If you have not installed the Visual Studio Code yet, then click on the link below for installation guidance:

<https://codewithharry.com/videos/javascript-tutorials-in-hindi-1>

Start by creating a new project folder in VS Code, and inside that project folder, create two empty new files: *index.html* and *index6.js*. The *index.html* file contains the HTML code. In this project, we are also using **Bootstrap**.

Bootstrap:-

Bootstrap is used for applying styling the user interface components. The easiest way to include Bootstrap is to add it from <https://getbootstrap.com/docs/4.0/getting-started/introduction/>.

First add the following in the head section:

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
      integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">
```

Then include the following code in the body section, before the closing `</body>` tag:

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"
      integrity="sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
      crossorigin="anonymous"></script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"
      integrity="sha384-U02eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1cllHTMga3JDZwrnQq4sF86dIHNDz0W1"
      crossorigin="anonymous"></script>

<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"
      integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"
      crossorigin="anonymous"></script>
```

Bootstrap also provides us many components that can be used to provide good user experience and user interactions in a web page like cards, navigation bars, dropdowns, icons, buttons, forms and also sizing options for different DOM elements. So, now we are done with project introduction, now let's start coding!

Code index.html as described/written in the video

```
<!doctype html>
<html lang="en">

<head>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

  <!-- Bootstrap CSS -->
  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
    integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">

  <title>Welcome to Harry Potter Library</title>
</head>

<body>
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <a class="navbar-brand" href="#">Harry Library</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent"
      aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>

    <div class="collapse navbar-collapse" id="navbarSupportedContent">
      <ul class="navbar-nav mr-auto">
        <li class="nav-item active">
          <a class="nav-link" href="#">Home <span class="sr-only">(current)</span></a>
        </li>

      </ul>
      <form class="form-inline my-2 my-lg-0">
        <input class="form-control mr-sm-2" id="searchTxt" type="search" placeholder="Search"
          aria-label="Search">
        <button class="btn btn-outline-success my-2 my-sm-0" type="submit">Search</button>
      </form>
    </div>
  </nav>
```

```
</nav>

<div id="message"></div>

<div class="container my-3">
  <h1>Harry Library</h1>
  <hr>
  <form id="libraryForm">
    <div class="form-group row">
      <label for="bookName" class="col-sm-2 col-form-label">Name</label>
      <div class="col-sm-10">
        <input type="text" class="form-control" id="bookName" placeholder="Book Name">
      </div>
    </div>
    <div class="form-group row">
      <label for="Author" class="col-sm-2 col-form-label">Author</label>
      <div class="col-sm-10">
        <input type="text" class="form-control" id="author" placeholder="Author">
      </div>
    </div>
    <fieldset class="form-group">
      <div class="row">
        <legend class="col-form-label col-sm-2 pt-0">Type</legend>
        <div class="col-sm-10">
          <div class="form-check">
            <input class="form-check-input" type="radio" name="type" id="fiction" value="fiction"
              checked>
            <label class="form-check-label" for="fiction">
              Fiction
            </label>
          </div>
          <div class="form-check">
            <input class="form-check-input" type="radio" name="type" id="programming"
              value="programming">
            <label class="form-check-label" for="programming">
              Computer Programming
            </label>
          </div>
        </div>
      </div>
    </fieldset>
  </form>
</div>
```

```

        </div>
        <div class="form-check disabled">
            <input class="form-check-input" type="radio" name="type" id="cooking" value="cooking">
            <label class="form-check-label" for="cooking">
                Cooking
            </label>
        </div>
    </div>
</div>
</fieldset>

<div class="form-group row">
    <div class="col-sm-10">
        <button type="submit" class="btn btn-primary">Add Book</button>
    </div>
</div>
</form>

<div id="table">
    <h1>Your books</h1>

    <table class="table table-striped">
        <thead>
            <tr>
                <th scope="col">Name</th>
                <th scope="col">Author</th>
                <th scope="col">Type</th>
            </tr>
        </thead>
        <tbody id='tableBody'></tbody>
    </table>
</div>
</div>

<!-- Optional JavaScript -->
<!-- jQuery first, then Popper.js, then Bootstrap JS -->
<!-- <script src="index.js"></script> -->
<script src="indexes6.js"></script>

```

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"
  integrity="sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
  crossorigin="anonymous"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"
  integrity="sha384-U02eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
  crossorigin="anonymous"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"
  integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/njGzIxFDs4fx0xIM+B07jRM"
  crossorigin="anonymous"></script>
</body>

</html>
```

Code index.js as described/written in the video

```
console.log("This is index.js");
// Todos
// 1. Store all the data to the localStorage
// 2. Give another column as an option to delete the book
// 3. Add a scroll bar to the view

// Constructor
function Book(name, author, type) {
  this.name = name;
  this.author = author;
  this.type = type;
}

// Display Constructor
function Display() {

}

// Add methods to display prototype
Display.prototype.add = function (book) {
  console.log("Adding to UI");
  tableBody = document.getElementById('tableBody');
```

```
    let uiString = `|
        <td>${book.name}</td>
        <td>${book.author}</td>
        <td>${book.type}</td>
    </tr>`;
    tableBody.innerHTML += uiString;
}

// Implement the clear function
Display.prototype.clear = function () {
    let libraryForm = document.getElementById('libraryForm');
    libraryForm.reset();
}

// Implement the validate function
Display.prototype.validate = function (book) {
    if (book.name.length < 2 || book.author.length < 2) {
        return false
    }
    else {
        return true;
    }
}

Display.prototype.show = function (type, displayMessage) {
    let message = document.getElementById('message');
    message.innerHTML = `

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|  |

```

```
// Add submit event listener to libraryForm
let libraryForm = document.getElementById('libraryForm');
libraryForm.addEventListener('submit', libraryFormSubmit);

function libraryFormSubmit(e) {
  console.log('YOU have submitted library form');
  let name = document.getElementById('bookName').value;
  let author = document.getElementById('author').value;
  let type;
  let fiction = document.getElementById('fiction');
  let programming = document.getElementById('programming');
  let cooking = document.getElementById('cooking');

  if (fiction.checked) {
    type = fiction.value;
  }
  else if (programming.checked) {
    type = programming.value;
  }
  else if (cooking.checked) {
    type = cooking.value;
  }

  let book = new Book(name, author, type);
  console.log(book);

  let display = new Display();

  if (display.validate(book)) {

    display.add(book);
    display.clear();
    display.show('success', 'Your book has been successfully added')
  }
  else {
    // Show error to the user
    display.show('danger', 'Sorry you cannot add this book');
  }
}
```



```
    e.preventDefault();  
  }
```

Code indexes6.js as described/written in the video

```
console.log('This is ES6 version of Project 2');  
class Book {  
  constructor(name, author, type) {  
    this.name = name;  
    this.author = author;  
    this.type = type;  
  }  
}  
  
class Display {  
  add(book) {  
    console.log("Adding to UI");  
    let tableBody = document.getElementById('tableBody');  
    let uiString = `|  
                        <td>${book.name}</td>  
                        <td>${book.author}</td>  
                        <td>${book.type}</td>  
                      </tr>`;  
    tableBody.innerHTML += uiString;  
  }  
  
  clear() {  
    let libraryForm = document.getElementById('libraryForm');  
    libraryForm.reset();  
  }  
  
  validate(book) {  
    if (book.name.length < 2 || book.author.length < 2) {  
      return false  
    }  
    else {  
      return true;  
    }  
  }  
}

```

```
    }  
  }  
  
  show(type, displayMessage) {  
    let message = document.getElementById('message');  
    let boldText;  
    if(type==='success'){  
      boldText = 'Success';  
    }  
    else{  
      boldText = 'Error!';  
    }  
    message.innerHTML = `

<strong>${boldText}</strong> ${displayMessage}  
      <button type="button" class="close" data-dismiss="alert" aria-label="Close">  
        <span aria-hidden="true">x</span>  
      </button>  
    </div>`;  
    setTimeout(function () {  
      message.innerHTML = ''  
    }, 5000);  
  }  
}  
  
// Add submit event listener to libraryForm  
let libraryForm = document.getElementById('libraryForm');  
libraryForm.addEventListener('submit', libraryFormSubmit);  
  
function libraryFormSubmit(e) {  
  console.log('YOU have submitted library form');  
  let name = document.getElementById('bookName').value;  
  let author = document.getElementById('author').value;  
  let type;  
  let fiction = document.getElementById('fiction');  
  let programming = document.getElementById('programming');  
  let cooking = document.getElementById('cooking');


```

```
    if (fiction.checked) {
        type = fiction.value;
    }
    else if (programming.checked) {
        type = programming.value;
    }
    else if (cooking.checked) {
        type = cooking.value;
    }

    let book = new Book(name, author, type);
    console.log(book);

    let display = new Display();

    if (display.validate(book)) {

        display.add(book);
        display.clear();
        display.show('success', 'Your book has been successfully added')
    }
    else {
        // Show error to the user
        display.show('danger', 'Sorry you cannot add this book');
    }

    e.preventDefault();
}
```

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