

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8" />
  <title>jQuery DOM elements</title>
  <link rel="stylesheet" href="/assets/css/jass.css" />
  <link rel="stylesheet" href="/assets/css/style.css" />
</head>
<body class="bg-dark text-light text-center">
  <!-- This empty '<div>' will anchor the elements
       we create with jQuery. -->
  <div class="m-5" id="root"></div>

  <!-- Added link to the jQuery library -->
  <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
  <script type="text/javascript" src="/assets/js/script.js"></script>
</body>
</html>

```

```

// Comments show the vanilla JavaScript equivalent statements
// var rootEl = document.getElementById("root");
var rootEl = $('#root');

```

```

// var titleEl = document.createElement("h1");
var titleEl = $('<h1>');

```

```

// titleEl.textContent = "Hello friends";
titleEl.text('Hello friends');

```

```

// titleEl.className = 'fancy';
titleEl.attr('class', 'fancy');

```

```

// titleEl.classList.add('p-5') - ('p-5' is for padding)
titleEl.addClass('p-5');

```

```

// titleEl.style.border = "rgb(122, 242, 242) 3px solid";
titleEl.css('border', 'rgb(122, 242, 242) 5px solid');

```

```

// rootEl.appendChild(titleEl);
rootEl.append(titleEl);

```

```

// titleEl.append("Welcome to jQuery");
rootEl.append('<h2>With jQuery we can:</h2>');
var abilities = [
  'Select',
  'Create',
  'Style',
  'Animate',
  'Traverse',
  'Event Listen',
  'much more',
];

```

## JQuery Elements

```

for (var i = 0; i < abilities.length; i++) {
  // Create a new '<div>' for each ability and its text content
  var abilityEl = $('<li>');

```

```

  // abilityEl.textContent = abilities[i];
  abilityEl.text(abilities[i]);

```

```

  // `my-3` class adds margin on top and bottom
  abilityEl.addClass('my-3');

```

```

  // Alternatively
  // var abilityEl = $('<div>' + abilities[i] + "</div>");
  // Add this new '<div>' to the abilities '<div>' container element.
  rootEl.append(abilityEl);
}
// select all '<div>' elements on the page
// document.querySelectorAll('div');
console.log($('div'));

```

```

//Alternatively use the `$.each` method
$.each(abilities, function (i, ability) {
  var abilityEl = $('<li class="my-3">' + ability + "</li>");
  abilityEl.click(function (e) {
    this.remove();
  });
  rootEl.append(abilityEl);
});

```

# Hello friends

**With jQuery we can:**

- Select
- Create
- Style
- Animate
- Traverse
- Event Listen
- much more

```

.fancy {
  font-size: 60px;
  color: rgb(122, 242, 242);
  background-color: black;
  border-radius: 1rem;
  width: 380px;
  margin: 1rem auto;
}

```

## Click Events

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>jQuery Click Events</title>
  <link rel="stylesheet" type="text/css" href="/assets/css/jass.css" />
  <link rel="stylesheet" type="text/css" href="/assets/css/style.css" />
</head>
<body class="bg-dark text-light">
  <main>
    <h1>Click Events!</h1>
    <hr />
    <p>Click for an alert</p>
    <button id="alert-btn" class="btn btn-danger">Alert</button>
    <hr />
    <p>Click to toggle light theme</p>
    <button id="theme-btn" class="btn btn-info">Toggle Theme</button>
    <hr />
    <p>Click for the next winning lottery number</p>
    <button id="lottery-btn" class="btn btn-primary">Play Lottery</button>
    <span id="lottery-number"></span>
    <hr />
    <p>Click to refresh page</p>
    <button id="refresh-btn" class="btn btn-warning">
      Refresh Page
    </button>
  </main>

  <!-- Added link to the jQuery library -->
  <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
  <script type="text/javascript" src="/assets/js/script.js">
  </script>
</body>
</html>
```

```
var alertButtonEl = $('#alert-btn');
var themeButtonEl = $('#theme-btn');
var lotteryButtonEl = $('#lottery-btn');
var lotteryNumberEl = $('#lottery-number');
var refreshButtonEl = $('#refresh-btn');
```

// light theme state

```
var isDark = true;
```

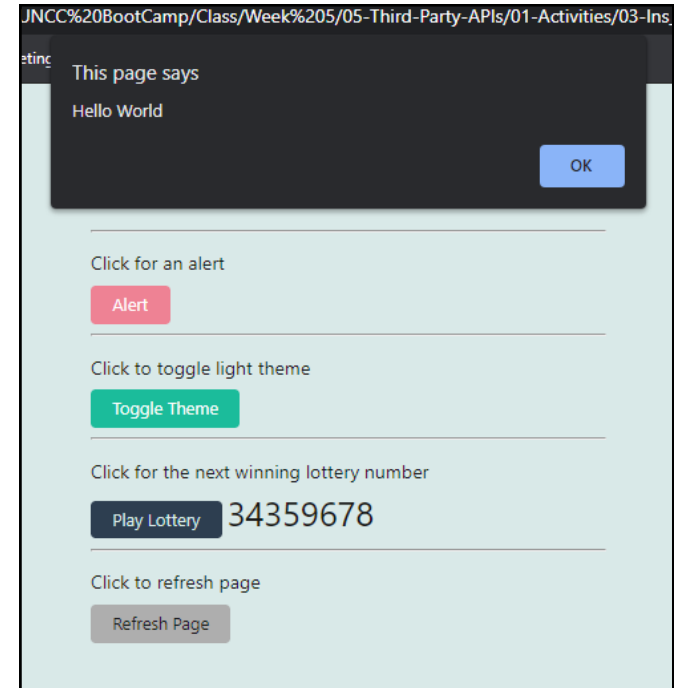
// Click event causes alert "Hello World"

// Vanilla JS equivalent: `addEventListener`

```
alertButtonEl.on('click', function () {
  alert('Hello World');
});
```

// Click event causes alert light theme toggle

```
themeButtonEl.on('click', function () {
  if (isDark) {
    $('body').css({ 'background-color': '#d9e9e8',
      color: '#1a1a1a' });
    isDark = !isDark;
  } else {
    $('body').css({ 'background-color': '#1a1a1a',
      color: '#d9e9e8' });
    isDark = !isDark;
  }
});
```



```
main {
  margin: 3rem auto;
  max-width: 90vw;
  width: 50ch;
}
h1 {
  font-size: 4rem;
}
p {
  margin-top: 1rem;
  margin-bottom: 0.5rem;
}
#lottery-number {
  font-size: 2rem;
}
```

// Click event causes random number

```
lotteryButtonEl.on('click', function () {
  var random = Math.floor(Math.random()
    * 100000000) + 10000000;
  console.log(random);
  lotteryNumberEl.text(random);
});
```

// Click event causes refresh

```
refreshButtonEl.on('click', function () {
  location.reload();
});
```

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<title>jQuery Pizza</title>
<link rel="stylesheet" type="text/css" href="/assets/css/jass.css">
<link rel="stylesheet" type="text/css" href="/assets/css/style.css">
</head>
<body>
<div class="bg-dark min-100-vh flex-row align-center justify-center">
<div class="col-11 col-sm-8">
<h1 class="text-light">Free Pizza Raffle Sign Up!</h1>
<div class="card rounded bg-light p-3">
<div class="card-body">
<form id="pizza-form">
<div class="row">
<div class="col-12 col-sm-6">
<label for="first-name">First Name</label>
<input type="text" class="form-input"
name="first-name" placeholder="Enter first name" />
</div>
<div class="col-12 col-sm-6">
<label for="last-name">Last Name</label>
<input type="text" class="form-input"
name="last-name" placeholder="Enter last name" />
</div>
</div>
<div class="row">
<div class="col-12 col-sm-6">
<label for="email">Email</label>
<input type="email" class="form-input"
name="email" placeholder="Enter email" />
</div>
<div class="col-12 col-sm-6">
<label for="github">GitHub</label>
<input type="text" class="form-input"
name="github" placeholder="Enter Git Hub" />
</div>
</div>
<fieldset class="group">
<legend>Select standard pizza toppings</legend>
<ul class="checkbox">
<li>
<input type="checkbox" id="cb1" value="pepperoni" />
<label for="cb1">Pepperoni</label>
</li>
<li>
<input type="checkbox" id="cb2" value="sausage" />
<label for="cb2">Sausage</label>
</li>
<li>
<input type="checkbox" id="cb3" value="mushrooms" />
<label for="cb3">Mushrooms</label>
</li>
<li>
<input type="checkbox" id="cb4" value="onions" />
<label for="cb4">Onions</label>
</li>
<li>
<input type="checkbox" id="cb5" value="green peppers" />
<label for="cb5">Green Peppers</label>
</li>
<li>
<input type="checkbox" id="cb6" value="extra cheese" />
<label for="cb6">Extra Cheese</label>
</li>
</ul>
</fieldset>
<button class="btn btn-block btn-danger">Submit Form</button>
</form>
</div>
</div>
</div>
</div>
<!-- Added link to the jQuery library -->
<script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
<script type="text/javascript" src="/assets/js/script.js"></script>
</body>
</html>

```

## Form Elements

First Name: frank	script.js:11
Last Name: poe	script.js:12
Email: ww@gmail.com	script.js:13
GitHub:	script.js:14
Toppings: mushrooms, green peppers	script.js:24

### Free Pizza Raffle Sign Up!

First Name

Enter first name

Last Name

Enter last name

Email

Enter email

GitHub

Enter GitHub

Select standard pizza toppings

☐ Pepperoni
☐ Sausage
☐ Mushrooms
☐ Onions
☐ Green Peppers
☐ Extra Cheese

Submit Form

```

var formEl = $('#pizza-form');
var firstNameEl = $('input[name="first-name"]');
var lastNameEl = $('input[name="last-name"]');
var emailEl = $('input[name="email"]');
var githubEl = $('input[name="github"]');

```

```

function handleFormSubmit(event) {
  // Prevent the default behavior
  event.preventDefault();

```

```

console.log('First Name:', firstNameEl.val());
console.log('Last Name:', lastNameEl.val());
console.log('Email:', emailEl.val());
console.log('GitHub:', githubEl.val());

```

```

// Select all checked options
var checkedEl = $('input:checked');
var selected = [];

// Loop through checked options to store in array
$.each(checkedEl, function () {
  selected.push($(this).val());
});
console.log('Toppings: ', selected.join(', '));

```

```

// Clear input fields
$('input[type="text"]').val("");
$('input[type="email"]').val("");
$('input[type="checkbox"]').prop('checked', false);
}

```

```

// Submit event on the form
formEl.on('submit', handleFormSubmit);

```

```

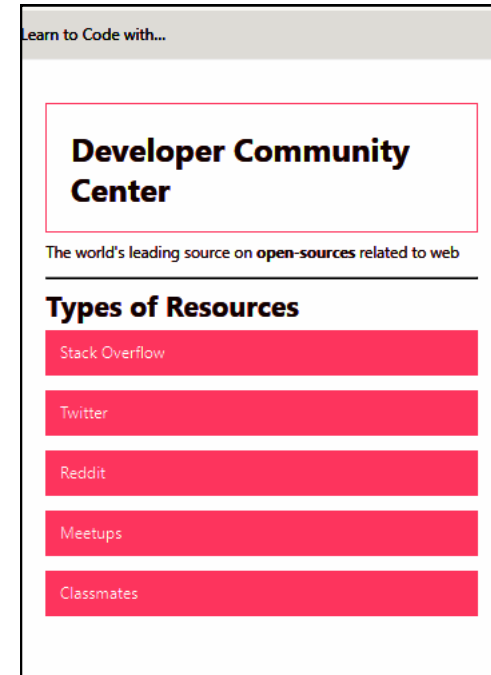
input[type='checkbox'] {
  display: inline-block;
  margin-right: 0.25rem;
}
legend {
  font-weight: bold;
  margin-left: 20px;
}
ul {
  list-style: none;
  padding: 0;
}
li {
  display: inline-block;
  padding: 0.5rem;
}
.group {
  margin-bottom: 1.25rem;
  margin-top: 1.25rem;
  padding: 0.125rem;
}

```

# DOM Traversal

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Traversing the DOM</title>
  <link rel="stylesheet" type="text/css" href="/assets/css/jass.css">
  <link rel="stylesheet" type="text/css" href="/assets/css/style.css">
</head>
<body class="bg-dark text-light">
  <main>
    <div id="top"></div>
    <h1>Developer Community Center</h1>
    <p>The world's leading source on
      <strong>open-sources</strong> related to web </p>
    <hr />
    <h2>Types of Resources</h2>
    <ul>
      <li>Stack Overflow</li>
      <li>Twitter</li>
      <li id="inside">Reddit</li>
      <li>GitHub</li>
    </ul>
    <div id="bottom"></div>
  </main>

  <!-- Added link to the jQuery library -->
  <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
  <script type="text/javascript" src="/assets/js/script.js"></script>
</body>
</html>
```



```
main {
  margin: 3rem auto;
  max-width: 90vw;
  width: 50ch;
}
ul {
  list-style-type: none;
  padding: 0;
}
```

```
// Select elements in the document programmatically

// Starting from the `<div id="top">` element, place a blue border around the title of the website, Develop Community Center
$('#top').siblings().first().addClass('p-5').css('border', '#1bbc9b solid 2px');

// Starting from the `<div id="bottom">` element, get a list of its sibling elements and target the fifth one (the `<ul>` element),
// then change the text on the last item on the list to say "Meetups", not "GitHub"
$('#bottom').siblings().eq(5).children().last().text('Meetups');

// Starting from `<div id="top">`, get a list of its sibling elements and target the fourth one (the `<ul>` element),
// and append an `<li>` to add "Classmates" to bottom of the list as a new resource.
$('#top').siblings().eq(4).append($('<li>Classmates</li>'));

// Starting from the `<li id="inside">` element, find the closest parent `<ul>` element and add the classes to all of its child `<li>` elements
$('#inside')
  .closest('ul')
  .children('li')
  .addClass('bg-info text-dark mb-3 p-3');
```

## Event Delegation

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>Message Board</title>
  <link rel="stylesheet" type="text/css" href="/assets/css/jass.css">
  <link rel="stylesheet" type="text/css" href="/assets/css/style.css">
</head>
<body class="bg-dark text-light">
  <main>
    <h1>Write your message.</h1>
    <hr/>
    <!-- Message board -->
    <div id="display" class="my-5 bg-light text-dark p-5"></div>
    <!-- Show Letters button -->
    <button class="btn btn-lg" id="show-letters-btn">Show Letters</button>
    <!-- Alphabet letter buttons -->
    <div id="buttons" class="my-5"></div>
    <!-- Clear button -->
    <button id="clear" class="btn btn-block d-block btn-danger">Clear</button>
  </main>
  <!-- Added link to the jQuery library -->
  <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
  <script type="text/javascript" src="/assets/js/script.js"></script>
</body>
</html>
```

```
main {
  margin: 3rem auto;
  max-width: 90vw;
  width: 50ch;
}
.letter {
  width: 30px;
  height: 30px;
  border-style: solid;
  padding: 2px;
  margin: 2px;
  display: inline-block;
}
.letter-button {
  margin: 0.25rem;
  font-size: 1.25rem;
}
```

```
var displayEl = $('#display');
var showLettersBtnEl = $('#show-letters-btn');
var buttonListEl = $('#buttons');
var clearEl = $('#clear');
```

```
// Immediately hide the clear button
clearEl.hide();
function renderLetters() {
  var letters = ['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z', '_', ''];
}
```

```
// Dynamically create buttons
// Create a for-loop to iterate through the letters array.
for (var i = 0; i < letters.length; i++) {
```

```
  // Create button
  var letterBtn = $('<button>');
  // Assign style to the button
  letterBtn.addClass('letter-button btn btn-info');
  // Assign the letter to the data-letter attribute
  letterBtn.attr('data-letter', letters[i]);
  // Display the letter
  letterBtn.text(letters[i]);
  // Attach the letter element
  buttonListEl.append(letterBtn);
}
```

Write your message.

Show Letters

Write your message.

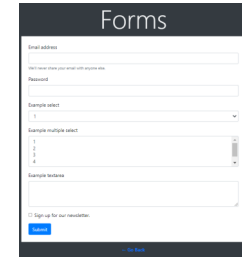
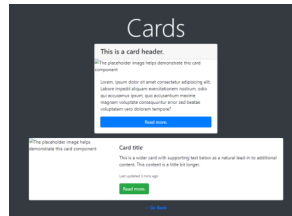
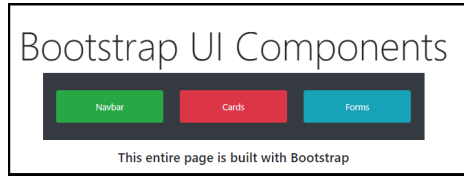
R Y A N

A B C D E F G  
H I J K L M N O  
P Q R S T U V  
W X Y Z \_

Clear

```
// Delegate event listener to the parent element, <div id="buttons">
buttonListEl.on('click', '.letter-button', function (event) {
  var displayLetterEl = $('<div>');
  displayLetterEl.addClass('letter');
  // get letter from clicked letter button's
  // `data-letter` attribute and use it for display
  displayLetterEl.text($(event.target).attr('data-letter'));
  displayEl.append(displayLetterEl);
});
// Renders the letter buttons on click
showLettersBtnEl.on('click', function () {
  // render letters
  renderLetters();
  // hide show letters button
  showLettersBtnEl.hide();
  // display clear button
  clearEl.show();
});
// Clears the message board of letters on click
clearEl.on('click', function () {
  displayEl.empty();
});
```

# Bootstrap Components



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
    content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-
Compatible" content="ie=edge">
  <meta name="Description"
    content="Enter your description here" />
  <link rel="stylesheet"
    href="https://cdnjs.cloudflare.com/ajax/libs/
twitter-bootstrap/4.5.0/css/bootstrap.min.css">
<title>Bootstrap UI Components</title>
</head>
<body>
  <main class="d-flex min-vh-100">
    <div class="container-fluid my-auto">
      <h1 class="display-3 text-center">
        Bootstrap UI Components</h1>
      <div class="row justify-content-center">
        <div class="col-12 col-md-9 p-4 bg-dark">
          <div class="row">
            <div class="col-12 col-md-4 ">
              <a href="/component-navbar.html"
                class="btn btn-block p-3 my-2 btn-success">
                Navbar</a>
            </div>
            <div class="col-12 col-md-4 ">
              <a href="/component-card.html"
                class="btn btn-block p-3 my-2 btn-danger">
                Cards</a>
            </div>
            <div class="col-12 col-md-4 ">
              <a href="/component-form.html"
                class="btn btn-block p-3 my-2 btn-info">
                Forms</a>
            </div>
          </div>
          <div class="col-12 mt-3 text-center">
            <h4>This entire page is built with Bootstrap
            </h4>
          </div>
        </div>
      </div>
    </main>
  </body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <!-- Link to Bootstrap's CDN -->
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/
twitter-bootstrap/4.5.0/css/bootstrap.min.css">
<title>Cards // Bootstrap UI Components</title>
</head>
<body>
  <!-- Bootstrap provides ready to use classes to style elements -->
  <main class="d-flex min-vh-100 bg-dark">
    <div class="container-fluid my-auto">
      <h1 class="display-2 text-center text-light">Cards</h1>
      <div class="row justify-content-center">
        <div class="col-12 col-sm-6 col-md-3 mb-3">
          <div class="card">
            <h4 class="card-header">This is a card header.</h4>
            
            <div class="card-body">
              <p class="card-text">
                Lorem, ipsum dolor sit do lorem tempore?
              </p>
              <button class="btn btn-primary btn-block">Read more.</button>
            </div>
          </div>
          <div class="w-100"></div>
          <div class="col-12 col-sm-6 mb-3">
            <div class="card">
              <div class="row no-gutters">
                <div class="col-12 col-md-4">
                  
                </div>
                <div class="col-12 col-md-8">
                  <div class="card-body">
                    <h5 class="card-title">Card title</h5>
                    <p class="card-text">
                      This is a wider card with supporting text below as a natural lead-in to
                      additional content. This content is a little bit longer.</p>
                    <p class="card-text"><small class="text-muted">
                      Last updated 3 mins ago</small></p>
                    <button class="btn btn-success">Read more.</button>
                  </div>
                </div>
              </div>
            </div>
          </div>
          <div class="col-12 text-center">
            <!-- back btn -->
            <h6><a href="/index.html">&larr; Go Back</a></h6>
          </div>
        </div>
      </div>
    </main>
  </body>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.slim.min.js">
  </script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.1/umd/popper.min.js">
  </script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
js/bootstrap.min.js"></script>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <!-- Link to Bootstrap's CDN -->
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/
twitter-bootstrap/4.5.0/css/bootstrap.min.css">
<title>Forms // Bootstrap UI Components</title>
</head>
<body>
  <!-- Bootstrap provides ready to use classes to style elements -->
  <main class="d-flex min-vh-100 bg-dark">
    <div class="container-fluid my-auto">
      <h1 class="display-2 text-center text-light">Forms</h1>
      <div class="row justify-content-center">
        <!-- Default Form -->
        <div class="col-12 col-md-10 mb-3 p-4 bg-white">
          <form>
            <div class="form-group">
              <label for="email-input">Email address</label>
              <input type="email" class="form-control"
                id="email-input" aria-describedby="emailHelp">
              <small id="emailHelp" class="form-text text-muted">
                We'll never share your email with anyone
              </small>
            </div>
            <div class="form-group">
              <label for="password-input">Password</label>
              <input type="password" class="form-control" id="password-input">
            </div>
            <div class="form-group">
              <label for="exampleFormControlSelect1">Example select</label>
              <select class="form-control" id="exampleFormControlSelect1">
                <option>1</option>
                <option>2</option>
                <option>3</option>
                <option>4</option>
                <option>5</option>
              </select>
            </div>
            <div class="form-group">
              <label for="exampleFormControlSelect2">
                Example multiple select</label>
              <select multiple class="form-control"
                id="exampleFormControlSelect2">
                <option>1</option>
                <option>2</option>
                <option>3</option>
                <option>4</option>
                <option>5</option>
              </select>
            </div>
            <div class="form-group">
              <label for="exampleFormControlTextarea1">Example textarea</label>
              <textarea class="form-control"
                id="exampleFormControlTextarea1" rows="3"></textarea>
            </div>
            <div class="form-group form-check">
              <input type="checkbox" class="form-check-input"
                id="newsletter-input">
              <label class="form-check-label" for="newsletter0input">
                Sign up for our newsletter.</label>
            </div>
            <button type="submit" class="btn btn-primary">Submit</button>
          </form>
        </div>
      </div>
    </main>
```

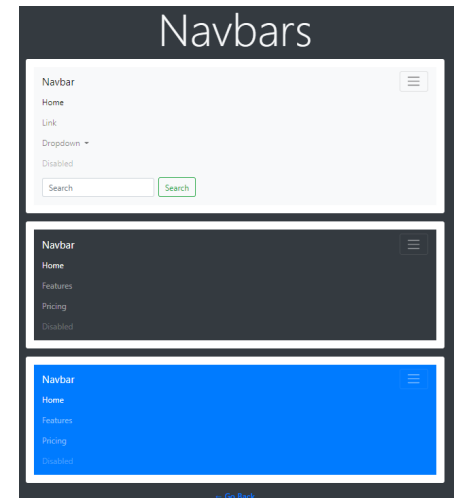
```
<div class="col-12 text-center">
  <!-- back btn -->
  <h6><a href="/index.html">&larr; Go Back</a></h6>
</div>
</div>
</div>
</main>
</body>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/
jquery.slim.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.1/
umd/popper.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
js/bootstrap.min.js"></script>
</html>
```

## Bootstrap Components 2

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
    content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <!-- Link to Bootstrap's CDN -->
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/
    twitter-bootstrap/4.5.0/css/bootstrap.min.css">
  <title>Navbar // Bootstrap UI Components</title>
</head>
<body>
  <!-- Bootstrap provides ready to use classes to style elements -->
  <main class="d-flex min-vh-100 bg-dark">
    <div class="container-fluid my-auto">
      <h1 class="display-2 text-center text-light">Navbars</h1>
      <div class="row justify-content-center">
        <!-- Default Navbar -->
        <div class="col-12 col-md-10 mb-3 p-3 bg-white rounded">
          <nav class="navbar navbar-expand-lg navbar-light bg-light">
            <a class="navbar-brand" href="#">Navbar</a>
            <button class="navbar-toggler" type="button"
              data-toggle="collapse" data-target="#navbar-default"
              aria-controls="navbar-default" aria-expanded="false"
              aria-label="Toggle navigation">
              <span class="navbar-toggler-icon"></span>
            </button>
            <div class="collapse navbar-collapse" id="navbar-default">
              <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>
                <li class="nav-item">
                  <a class="nav-link" href="#">Link</a>
                </li>
                <li class="nav-item dropdown">
                  <a class="nav-link dropdown-toggle"
                    href="#" id="navbarDropdown" role="button"
                    data-toggle="dropdown"
                    aria-haspopup="true" aria-expanded="false">
                    Dropdown
                  </a>
                  <div class="dropdown-menu"
                    aria-labelledby="navbarDropdown">
                    <a class="dropdown-item" href="#">Action</a>
                    <a class="dropdown-item" href="#">Another action</a>
                    <div class="dropdown-divider"></div>
                    <a class="dropdown-item"
                      href="#">Something else here</a>
                  </div>
                </li>
                <li class="nav-item">
                  <a class="nav-link disabled" href="#" tabindex="-1"
                    aria-disabled="true">Disabled</a>
                </li>
              </ul>
            </div>
          </nav>
        </div>
        <!-- Blue Navbar - right justified -->
        <div class="col-12 col-md-10 mb-3 p-3 bg-white rounded">
          <nav class="navbar navbar-expand-lg navbar-dark bg-primary">
            <a class="navbar-brand" href="#">Navbar</a>
            <button class="navbar-toggler" type="button"
              data-toggle="collapse" data-target="#blue-nav"
              aria-controls="blue-nav" aria-expanded="false"
              aria-label="Toggle navigation">
              <span class="navbar-toggler-icon"></span>
            </button>
            <div class="collapse navbar-collapse" id="blue-nav">
              <ul class="navbar-nav ml-auto">
                <li class="nav-item active">
                  <a class="nav-link" href="#">Home
                    <span class="sr-only">(current)</span></a>
                </li>
              </ul>
            </div>
          </nav>
        </div>
      </div>
    </div>
  </main>
</body>
</html>
```

```
</ul>
<form class="form-inline my-2 my-lg-0">
  <input class="form-control mr-sm-2" 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>
</div>
<!-- Simplified Nav with Dark Theme -->
<div class="col-12 col-md-10 mb-3 p-3 bg-white rounded">
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button"
      data-toggle="collapse" data-target="#dark-nav"
      aria-controls="dark-nav" aria-expanded="false"
      aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="dark-nav">
      <ul class="navbar-nav">
        <li class="nav-item active">
          <a class="nav-link" href="#">Home
            <span class="sr-only">(current)</span></a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Features</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Pricing</a>
        </li>
        <li class="nav-item">
          <a class="nav-link disabled" href="#" tabindex="-1"
            aria-disabled="true">Disabled</a>
        </li>
      </ul>
    </div>
  </nav>
</div>
<!-- Blue Navbar - right justified -->
<div class="col-12 col-md-10 mb-3 p-3 bg-white rounded">
  <nav class="navbar navbar-expand-lg navbar-dark bg-primary">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button"
      data-toggle="collapse" data-target="#blue-nav"
      aria-controls="blue-nav" aria-expanded="false"
      aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="blue-nav">
      <ul class="navbar-nav ml-auto">
        <li class="nav-item active">
          <a class="nav-link" href="#">Home
            <span class="sr-only">(current)</span></a>
        </li>
      </ul>
    </div>
  </nav>
</div>
```

```
<li class="nav-item">
  <a class="nav-link" href="#">Features</a>
</li>
<li class="nav-item">
  <a class="nav-link" href="#">Pricing</a>
</li>
<li class="nav-item">
  <a class="nav-link disabled" href="#" tabindex="-1"
    aria-disabled="true">Disabled</a>
</li>
</ul>
</div>
</nav>
</div>
<div class="col-12 text-center">
  <!-- back btn -->
  <h6><a href="/index.html">&larr; Go Back</a></h6>
</div>
</div>
</div>
</main>
</body>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/
  jquery.slim.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.1/
  umd/popper.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
  js/bootstrap.min.js"></script>
</html>
```





# Bootstrap Layout

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
css/bootstrap.min.css">
</head>
<body>
  <!-- Page margins are created using the container and container-fluid classes -->
  <header class="container-fluid bg-dark text-light mb-5 p-3">
    <div class="d-flex align-items-center">
      <h1>Layouts with Bootstrap</h1>
      <h3 class="ml-auto">
        Even this is a layout
      </h3>
    </div>
  </header>
  <!-- Two column layout -->
  <section class="container my-5">
    <!-- Use row class to create row in the container -->
    <div class="row">
      <!-- Use col-* classes for different column sizes on different screens -->
      <div class="col-12 col-md-8 col-xl-9">
        <h3>Main Content</h3>
        <h5>9/12 columns on large screens, 8/12 columns on medium screens, 12/12 (full-width) on small
        screens</h5>
        <p>
          Lorem, ipsum dolor sit amet consectetur adipisicing elit. Maiores blanditiis temporibus facilis cumque
          corporis illum, in dolorum? </p>
      </div>
      <div class="col-12 col-md-4 col-xl-3">
        <h3>Sidebar Content</h3>
        <ul>
          <li>Spans 3 / 12 columns on large screens</li>
          <li>Spans 4 / 12 columns on medium screens</li>
          <li>Spans 12 / 12 (full-width) on smaller screens</li>
        </ul>
      </div>
    </div>
  </section>
  <!-- Four column layout -->
  <section class="container my-5 bg-dark text-light">
    <div class="row">
      <div class="col-12 col-md-6 col-lg-3">
        <h3>Title</h3>
        <h5>3/12 columns on large, 6/12 columns on medium, full-width on small</h5>
        <p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Fugiat, debitis a perferendis error
        quaerat, nulla minus, quam libero in ab obcaecati voluptate modicius?</p>
      </div>
      <div class="col-12 col-md-6 col-lg-3">
        <h3>Title</h3>
        <h5>3/12 columns on large, 6/12 columns on medium, full-width on small</h5>
        <p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Fugiat, debitis a perferendis error
        quaerat, nulla minus, quam libero in ab obcaecati praesentium hic ipsum
        possimus voluptate modeius?</p>
      </div>
      <div class="col-12 col-md-6 col-lg-3">
        <h3>Title</h3>
        <h5>3/12 columns on large, 6/12 columns on medium, full-width on small</h5>
        <p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Fugiat, debitis a perferendis error
        quaerat, nulla minus, quam libero in ab obcaecati praesentium hic ipsum
        possimus voluptate modeius?</p>
      </div>
      <div class="col-12 col-md-6 col-lg-3">
        <h3>Title</h3>
        <h5>3/12 columns on large, 6/12 columns on medium, full-width on small</h5>
        <p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Fugiat, debitis a perferendis error
        quaerat, nulla minus, quam libero in ab obcaecati praesentium hic ipsum
        possimus voluptate modeius?</p>
      </div>
    </div>
  </section>
  <!-- Centered one column layout -->
  <section class="container my-5">
    <div class="row justify-content-center">
      <div class="col-12 col-sm-8 col-lg-6">
        <h3>Centered Content</h3>
        <h5>6/12 columns on large, 8/12 columns on smaller screens, 12/12 on phone</h5>
        <p>
          Lorem ipsum dolor sit amet similique unde eos autem laboriosam. Deleniti dolorum,
          provident minima autem debitis a soluta blanditiis reprehenderit velit?
        </p>
      </div>
    </div>
  </section>
```

```
<!-- Two column layout with a grid in the left column -->
<section class="container my-5 bg-dark text-light">
  <div class="row">
    <div class="col-12 col-md-8 col-xl-9">
      <h3>Main Content</h3>
      <h5>9/12 columns on large screens, 8/12 columns on medium screens, 12/12 (full-width) on small
      screens</h5>
      <div class="row">
        <div class="col-12 col-md-6 col-lg-4">
          <p>
            Lorem, ipsum dolor sit amet, sed nulla adipisci vel repellendus facere hic rerum veritatis
            quia reprehenderit velit?
          </p>
        </div>
        <div class="col-12 col-md-6 col-lg-4">
          <p>
            Lorem, ipsum dolor sit amet, sed nulla adipisci vel repellendus facere hic rerum veritatis
            quia reprehenderit velit?
          </p>
        </div>
      </div>
    </div>
    <div class="col-12 col-md-6 col-lg-4">
      <p>
        Lorem, ipsum dolor sit amet facilis cumque corporis illum, in dolorum? Ad,
        sed nulla hic rerum veritatis quia reprehenderit velit?
      </p>
    </div>
  </div>
  <div class="col-12 col-md-6 col-lg-4">
    <p>
      Lorem, ipsum dolor sit amet, sed nulla adipisci vel repellendus facere hic rerum
      veritatis quia reprehenderit velit?
    </p>
  </div>
  <div class="col-12 col-md-4 col-xl-3">
    <h3>Sidebar Content</h3>
    <ul>
      <li>Spans 3 / 12 columns on large screens</li>
      <li>Spans 4 / 12 columns on medium screens</li>
      <li>Spans 12 / 12 (full-width) on smaller screens</li>
    </ul>
  </div>
</div>
</body>
</html>
```





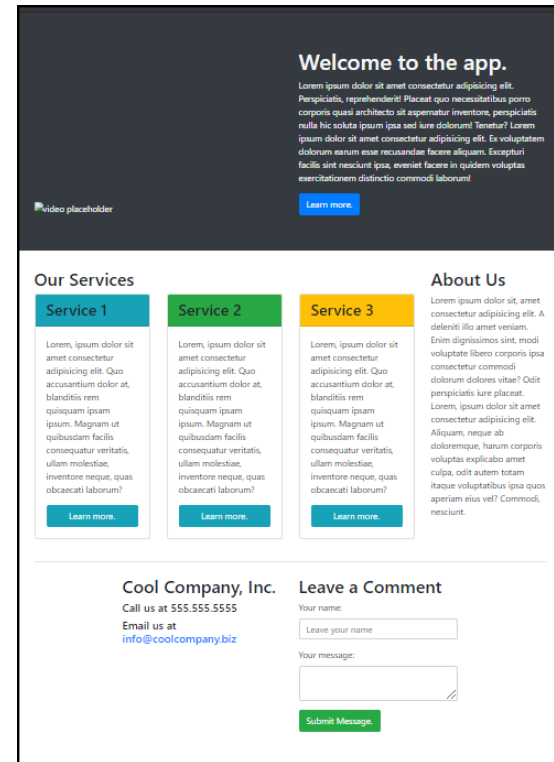
# Bootstrap Utilities

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<meta http-equiv="X-UA-Compatible" content="ie=edge">
<meta name="Description" content="Enter your description here" />
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
css/bootstrap.min.css">

<title>Bootstrap Utilities</title>
</head>
<body>
<!-- Bootstrap uses color utility classes to set colors for text and background colors -->
<header class="jumbotron jumbotron-fluid bg-dark text-light">
<div class="container">
<!-- Use align-items utilities on flexbox containers
to align to start, end, center, baseline, or stretch -->
<div class="row align-items-end">
<div class="col-12 col-md-6">

</div>
<div class="col-12 col-md-6">
<h1>Welcome to the app.</h1>
<p>Lorem ipsum dolor sit amet consectetur Excepturi facilis sint nesciunt ipsa, eveniet
facere in quidem exercitationem distinctio commodi laborum!</p>
<button class="btn btn-primary">Learn more.</button>
</div>
</div>
</div>
</header>
<main class="container">
<!-- Bootstrap spacing utilities use m- for margin and p- for padding -->
<section class="row my-4">
<div class="col-12 col-md-9">
<h2>Our Services</h2>
<!-- Use justify-content utilities to change alignment of flex items on the main axis -->
<section class="row justify-content-around">
<div class="col-12 col-sm-6 col-lg-4 mb-3">
<div class="card">
<h3 class="card-header bg-info">
Service 1
</h3>
<div class="card-body">
<p class="card-text">
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Quo accusantium dolor at,
Ipsam molestiae, Inventore laborum?
</p>
<button class="btn btn-block btn-info">Learn more.</button>
</div>
</div>
</div>
</div>
<div class="col-12 col-sm-6 col-lg-4 mb-3">
<div class="card">
<h3 class="card-header bg-success">
Service 2
</h3>
<div class="card-body">
<p class="card-text">
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Quo accusantium ullam
molestiae, obcaecati laborum?
</p>
<button class="btn btn-block btn-info">Learn more.</button>
</div>
</div>
</div>
<div class="col-12 col-sm-6 col-lg-4 mb-3">
<div class="card">
<h3 class="card-header bg-warning">
Service 3
</h3>
<div class="card-body">
<p class="card-text">
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Quo accusantium
dolor at, ipsam ipsum. Magnam ut quibusdam facilis consequatur veritatis, ullam
molestiae, inventore obcaecati laborum?
</p>
</div>
</div>
</div>
</section>
</main>
</body>
</html>
```

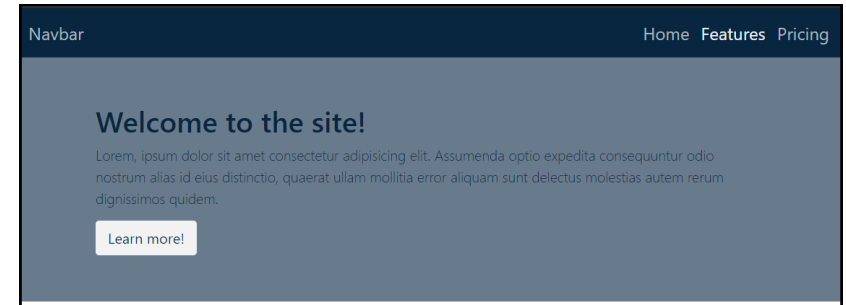
```
<button class="btn btn-block btn-info">Learn more.</button>
</div>
</div>
</section>
</div>
<div class="col-12 col-md-3">
<h2>About Us</h2>
<p>
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Quo accusantium
dolor at, ipsam ipsum. Magnam ut quibusdam facilis consequatur veritatis, ullam
molestiae, inventore obcaecati laborum?
</p>
<p>
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Quo accusantium
dolor at, ipsam ipsum. Magnam ut quibusdam facilis consequatur veritatis, ullam
molestiae, inventore obcaecati laborum?
</p>
</div>
</div>
</section>
<hr />
<section class="row justify-content-center my-4">
<div class="col-12 col-sm-6 col-md-4">
<address>
<h2>Cool Company, Inc.</h2>
<h5>
Call us at <a href="tel:555.555.5555"><a>555.555.5555</a>
</h5>
<h5>
Email us at <a href="mailto:info@coolcompany.biz">info@coolcompany.biz</a>
</h5>
</address>
</div>
<div class="col-12 col-sm-6 col-md-4">
<h2>Leave a Comment</h2>
<form>
<div class="form-group">
<label for="name-input">Your name:</label>
<input type="text" class="form-control" id="name-input"
placeholder="Leave your name" />
</div>
<div class="form-group">
<label for="comment-input">Your message:</label>
<textarea name="comment" id="comment-input" class="form-control"></textarea>
</div>
<button class="btn btn-success">Submit Message.</button>
</form>
</div>
</div>
</section>
</main>
</body>
</html>
```



# Bootstrap Extend

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/
    css/bootstrap.min.css">
  <link rel="stylesheet" href="/assets/css/style.css">
  <title>Extending Bootstrap</title>
</head>
<body>
  <!-- create and apply a custom class name "custom-navbar" -->
  <nav class="navbar navbar-expand-lg custom-navbar">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse"
      data-target="#navbar" aria-controls="navbar"
      aria-expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbar">
      <div class="navbar-nav ml-auto">
        <a class="nav-item nav-link" href="#">Home</a>
        <a class="nav-item nav-link" href="#">Features</a>
        <a class="nav-item nav-link" href="#">Pricing</a>
      </div>
    </div>
  </nav>
  <!-- create an apply a custom class name "custom-jumbotron" -->
  <section class="jumbotron jumbotron-fluid custom-jumbotron">
    <div class="container">
      <h1>
        Welcome to the site!
      </h1>
      <p class="lead">
        Lorem, ipsum dolor sit amet consectetur adipisicing elit. Assumenda optio expedita
        consequuntur odio eius distinctio, quaerat molestias autem rerum .
      </p>
      <button class="btn btn-lg custom-btn">
        Learn more!
      </button>
    </div>
  </section>

</body>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.slim.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.1/umd/popper.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/js/bootstrap.min.js"></script>
</html>
```



```
:root {
  --blue: #0c3559;
  --darkblue: #092640;
  --seablue: #687b8c;
  --lightseablue: #aab9bf;
  --light: #f2f2f2;
}
.custom-navbar {
  background-color: var(--darkblue);
}
.custom-navbar a {
  font-size: 1.5rem;
  color: var(--lightseablue);
}
.custom-navbar a:hover {
  color: var(--light);
}
.custom-jumbotron {
  background-color: var(--seablue);
  color: var(--darkblue);
}
.custom-btn {
  background-color: var(--light);
  color: var(--blue);
}
.custom-btn:hover {
  background-color: var(--darkblue);
  color: var(--light);
}
```

## Google Font

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <meta name="Description" content="Enter your description here" />
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/css/bootstrap.min.css">
  <link href="https://fonts.googleapis.com/css2?family=Titillium+Web:ital,wght@0,400;0,700;1,200&display=swap"
        rel="stylesheet">
  <link rel="stylesheet" href="./assets/css/style.css">
  <title>Google Fonts</title>
</head>
<body>
  <div class="jumbotron jumbotron-fluid bg-dark text-light">
    <div class="container text-center">
      <h1>
        Header with a custom font.
      </h1>
    </div>
  </div>
  <div class="container my-4">
    <div class="row justify-content-center">
      <div class="col-12 col-sm-10 col-md-6">
        <h2>Subheader with the same custom font.</h2>
        <h4 class="byline">This is a byline.</h4>
        <p>
          Lorem ipsum dolor sit amet consectetur adipisicing elit. Officiis fuga animi
          numquam. Omnis placeat officia numquam ullam nemo at deserunt.
        </p>
      </div>
    </div>
  </div>
</body>
</html>
```

### Header with a custom font.

#### Subheader with the same custom font.

*This is a byline.*

Lorem ipsum dolor sit amet consectetur adipisicing elit. Officiis fuga animi numquam. Omnis voluptates ad fugiat mollitia placeat officia numquam ullam molestias illum porro, qui, ratione, cumque nemo at deserunt.

```
body {
  font-family: 'Titillium Web', sans-serif;
  font-size: 16px;
}
h1,
h2,
h3,
h4,
h5,
h6 {
  font-weight: 700;
}
.byline {
  font-weight: 200;
  font-style: italic;
}
```

# jQuery UI Widgets

```
<!DOCTYPE html>
<!-- Resulting code after Instructor Demo -->
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <!-- Changed to our own stylesheet -->
    <link rel="stylesheet" href="/assets/css/style.css" />
    <!-- Added Bootstrap -->
    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/css/bootstrap.min.css"
    />
    <link
      rel="stylesheet"
      href="https://code.jquery.com/ui/1.12.1/themes/base/jquery-ui.css"
    />
    <!-- Changed title -->
    <title>jQuery UI Widgets</title>
  </head>
  <body>
    <!-- Added body content -->
    <div class="jumbotron jumbotron-fluid bg-info text-light">
      <div class="container text-center">
        <h1>
          jQuery UI Widgets
        </h1>
      </div>
    </div>
    <div class="container my-4">
      <div class="row justify-content-center">
        <div class="col-12 col-sm-10 col-md-6">
          <h2>Basic Dialog Widget</h2>
          <h4 class="byline">Open content in an interactive overlay.</h4>
          <p>
            The basic dialog window is an overlay positioned within the viewport
            and is protected from page content (like select elements) shining
            through with an iframe. It has a title bar and a content area, and
            can be moved, resized and closed with the 'x' icon by default.
          </p>
          <p>
            To learn more, visit
            <a href="https://jqueryui.com/dialog/">https://jqueryui.com/dialog/</a>
          </p>
        </div>
      </div>
    </div>
    <div id="dialog" title="Dialog">
      <p>
        This is the default dialog which is useful for displaying information.
        The dialog window can be moved, resized and closed with the 'x' icon.
      </p>
    </div>
  </body>
</html>
<!-- Moved jQuery <script> tags -->
<script src="https://code.jquery.com/jquery-1.12.4.js"></script>
<script src="https://code.jquery.com/ui/1.12.1/jquery-ui.js"></script>
<script>
$(function () {
  $('#dialog').dialog();
});
</script>
</html>
```

```
<!DOCTYPE html>
<!-- From the jQuery UI Dialog Docs. To be used as starter code -->
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <!-- Change the title -->
    <title>jQuery UI Dialog - Default functionality</title>
    <link
      rel="stylesheet"
      href="https://code.jquery.com/ui/1.12.1/themes/base/jquery-ui.css"
    />
    <!-- Change to our own stylesheet -->
    <link rel="stylesheet" href="/resources/demos/style.css" />
    <!-- Add Bootstrap -->
    <!-- Move the jQuery <script> tags to the bottom -->
    <script src="https://code.jquery.com/jquery-1.12.4.js"></script>
    <script src="https://code.jquery.com/ui/1.12.1/jquery-ui.js"></script>
    <script>
      $(function () {
        $('#dialog').dialog();
      });
    </script>
  </head>
  <body>
    <!-- Change body content -->
    <div id="dialog" title="Basic dialog">
      <p>
        This is the default dialog which is useful for displaying information.
        The dialog window can be moved, resized and closed with the 'x' icon.
      </p>
    </div>
  </body>
</html>
<!-- See index.html file for the resulting code -->
```

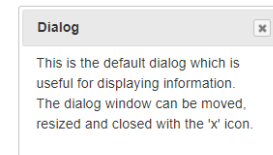
## jQuery UI Widgets

### Basic Dialog Widget

*Open content in an interactive overlay.*

The basic dialog window is an overlay positioned within the viewport and is protected from page content (like select elements) shining through with an iframe. It has a title bar and a content area, and can be moved, resized and closed with the 'x' icon by default.

To learn more, visit <https://jqueryui.com/dialog/>



```
body {
  font-family: 'Titillium Web', sans-serif;
  font-size: 16px;
}
h1,
h2,
h3,
h4,
h5,
h6 {
  font-weight: 700;
  text-align: center;
}
.byline {
  font-weight: 200;
  font-style: italic;
}
```

# jQuery UI Interactions

```
<!DOCTYPE html>
<!-- Resulting code after Instructor Demo -->
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <!-- Changed title -->
    <title>jQuery UI Sortable</title>
    <link
      rel="stylesheet"
      href="https://code.jquery.com/ui/1.12.1/themes/base/jquery-ui.css"
    />
    <!-- Imported our own custom stylesheet -->
    <link rel="stylesheet" href="/assets/css/style.css" />
  </head>
  <body>
    <!-- Added body content -->
    <h1>jQuery UI Interactions - Sortable</h1>
    <h2>What are you most excited to learn more about?</h2>
    <div>
      <ul id="sortable">
        <!-- Ask the class for skills and use them to populate this list -->
        <li class="ui-state-default">
          Node.js
        </li>
        <li class="ui-state-default">
          HTML
        </li>
        <li class="ui-state-default">
          MySQL
        </li>
        <li class="ui-state-default">
          Express.js
        </li>
        <li class="ui-state-default">
          NoSQL
        </li>
        <li class="ui-state-default">
          React
        </li>
        <li class="ui-state-default">
          JavaScript
        </li>
      </ul>
    </div>
  </body>
<!-- Moved jQuery <script> tags -->
<script src="https://code.jquery.com/jquery-1.12.4.js"></script>
<script src="https://code.jquery.com/ui/1.12.1/jquery-ui.js"></script>
<script>
  $(function () {
    $('#sortable').sortable();
    $('#sortable').disableSelection();
  });
</script>
</html>
```

```
<!DOCTYPE html>
<!-- From the jQuery UI Sortable Docs. To be used as starter code -->
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <!-- Change the title -->
    <title>jQuery UI Sortable - Default functionality</title>
    <link
      rel="stylesheet"
      href="https://code.jquery.com/ui/1.12.1/themes/base/jquery-ui.css"
    />
    <!-- Change to our own custom stylesheet -->
    <link rel="stylesheet" href="/resources/demos/style.css" />
    <!-- Add this <style> code to the custom stylesheet -->
    <style>
      #sortable {
        list-style-type: none;
        margin: 0;
        padding: 0;
        width: 60%;
      }
      #sortable li {
        margin: 0 3px 3px 3px;
        padding: 0.4em;
        padding-left: 1.5em;
        font-size: 1.4em;
        height: 18px;
      }
      #sortable li span {
        position: absolute;
        margin-left: -1.3em;
      }
    </style>
    <!-- Move the jQuery <script> tags to the bottom -->
    <script src="https://code.jquery.com/jquery-1.12.4.js"></script>
    <script src="https://code.jquery.com/ui/1.12.1/jquery-ui.js"></script>
    <script>
      $(function () {
        $('#sortable').sortable();
        $('#sortable').disableSelection();
      });
    </script>
  </head>
  <body>
    <!-- Change body content -->
    <ul id="sortable">
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 1
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 2
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 3
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 4
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 5
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 6
      </li>
      <li class="ui-state-default">
        <span class="ui-icon ui-icon-arrowthick-2-n-s"></span>Item 7
      </li>
    </ul>
  </body>
<!-- See index.html file for the resulting code -->
</html>
```

## jQuery UI Interactions - Sortable

What are you most excited to learn more about?

Node.js

HTML

MySQL

Express.js

NoSQL

React

JavaScript

```
body {
  font-family: 'Titillium Web', sans-serif;
  font-size: 16px;
}
h1,h2,h3,h4,h5,h6 {
  font-weight: 700;
  text-align: center;
}
.byline {
  font-weight: 200;
  font-style: italic;
}
div {
  text-align: center;
}
ul {
  display: inline-block;
}
#sortable {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 20%;
}
#sortable li {
  margin: 0 3px 3px 3px;
  padding: 0.4em;
  padding-left: 1.5em;
  font-size: 1.4em;
  height: 18px;
}
```

## Moment Format

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Moment Functions</title>
  <link
    href="https://fonts.googleapis.com/css2?family=Krona+One
      &family=Pacifico&family=Roboto:wght@700&display=swap"
    rel="stylesheet"
  />
  <link rel="stylesheet" href="/assets/css/style.css" />
  <script
    type="text/javascript"
    src="https://cdnjs.cloudflare.com/ajax/libs/moment.js/2.27.0/moment.min.js"
  ></script>
  <script
    src="https://code.jquery.com/jquery-3.5.1.min.js"
    integrity="sha256-9/aliU8dGd2tb6OSsuzixeV4y/faTqgFtohetphbbj0="
    crossorigin="anonymous"
  ></script>
</head>
<body>
  <main>
    <section class="jumbotron">
      <h1 class="title">Moment Quiz</h1>
      <p>Answer the following questions</p>
    </section>
    <section>
      <p class="question">
        1. What is today's date in the following format: Jan 1st, 1999?
        <p id="1a" class="answer"></p>
      </p>
      <p class="question">
        2. What is the day of the week today?
        <p id="2a" class="answer"></p>
      </p>
      <p class="question">
        3. Parse the following date, 11/3/2020, and convert it into
          the following format: Sunday, February 14th 2010, 3:25:50 pm.
          <p id="3a" class="answer"></p>
      </p>
      <p class="question">
        4. I need to place my recycling bin on the curb on every odd week of the year
          for collection. Do I need to put out my recycling bin out this week?
          <p id="4a" class="answer"></p>
      </p>
    </section>
  </main>
  <script src="/assets/js/script.js"></script>
</body>
</html>
```

**Moment Quiz**  
Answer the following questions

1. What is today's date in the following format: Jan 1st, 1999?

May 18th, 2021

2. What is the day of the week today?

Today is Tuesday

3. Parse the following date, 11/3/2020, and convert it into the following format: Sunday, February 14th 2010, 3:25:50 pm.

Tuesday, November 3rd 2020, 12:00:00 am

4. I need to place my recycling bin on the curb on every odd week of the year for collection. Do I need to put out my recycling bin out this week?

true, because it's currently week 21

CSS– see attached

```
// Use Moment.js to format the following variables:
// 1. What is today's date in the following format: Jan 1st, 1999?
var today = moment();
$("#1a").text(today.format("MMM Do, YYYY"));
// 2. What is the day of the week today?
var dayWeek = today.format("[Today is] dddd")
$("#2a").text(dayWeek);
// 3. Parse the following date, 11/3/2020, and convert it into the following format:
    Sunday, February 14th 2010, 3:25:50 pm.
var reformatDate = moment("11/3/20", "MM-DD-YY").format
("dddd, MMMM Do YYYY, h:mm:ss a");
$("#3a").text(reformatDate);
// 4. I need to place my recycling bin on the curb on every odd week of the year for collection.
    Do I need to put out my recycling bin out this week?
var weekNum = today.format("w");
var takeOut;
// Check odd, then assign boolean
if(weekNum % 2) {
  takeOut = true;
} else {
  takeOut = false;
}
$("#4a").text(takeOut + ", because it's currently week " + weekNum);
```

# Git Revert

## # Git Revert

In this activity, you will use `git revert` to undo a commit made earlier while keeping the commit history.

### ## Instructions

\* In the command line, create a new directory called

```
`git_revert_demo`:  
``bash  
mkdir git_revert_demo  
``
```

\* `cd` into that directory and initialize an empty git repo:

```
``bash  
cd git_revert_demo  
git init  
``
```

\* Open the `git\_revert\_demo` directory in your IDE and copy the [script.js](.script.js) file into it. You'll notice that it is the code from our previous activity on jQuery UI Interactions.

\* Make the initial commit:

```
``bash  
git add -A  
git commit -m 'initial commit'  
``
```

\* In the `git\_revert\_demo/script.js` file, add the code for the `Autocomplete` widget and save the file.

\* In your terminal, add and commit the changes:

```
``bash  
git add -A  
git commit -m 'added Autocomplete widget'  
``
```

\* Add and commit the changes:

```
``bash  
git add -A  
git commit -m 'added DatePicker widget'  
``
```

\* Lastly, Add and commit the changes:

```
``bash  
git add -A  
git commit -m 'added Sortable interaction'  
``
```

\* In your terminal, run `git log` to see the commit history. You should see all four commits.

\* Now imagine that the `Sortable` interaction was a mistake and you want to revert back to before you made that commit. You can use the git command `git revert`.

\* `git revert` requires a commit reference and will not execute without one. You can choose which commit to revert to by using the commit hash. A **commit hash** is the unique string of letters and numbers assigned to each commit. You can find the commit hash associated with the `Sortable` interaction in the `git log`.

\* Once you find the correct commit hash, copy it and use it in the git command, `git revert <commit hash>`.

\* This will create a new commit, which will open the commit message editor and prompt for a new commit message. Press `esc`, `Shift + Z`, and `Shift + Z` to exit out of the message editor.

\* Use `git log` to see that there is a new commit added, which reverted the `added Sortable interaction` commit.

\* Check the `script.js` file to see if the `Sortable` interaction is no longer there.

\* If you look at the [Git Revert Docs] ([https://git-scm.com/docs/git-revert#\\_options](https://git-scm.com/docs/git-revert#_options)), you'll see various options that you can also use. One useful option is to pass in the `HEAD`, which will revert the latest commit:

```
``bash  
git revert HEAD  
``
```

\* To test this, imagine that you changed your mind again and want to add the `Sortable` interaction back into your code.

\* In your terminal, run `git revert HEAD`. This action creates another new commit, which will again open the commit message editor prompting for a new commit message. Press `esc`, `Shift + Z`, and `Shift + Z` to exit out of the message editor.

\* When you run `git log`, you can see the automatically generated commit messages for both of your revert commands.

\* Check the `script.js` file to see if the `Sortable` interaction has been added back into your code.

\* For more information, review the [Git documentation on revert] (<https://git-scm.com/docs/git-revert>).



HTML

Chapter

Js

CSS

HTML

Chapter

Js

CSS

HTML

Chapter

Js

CSS