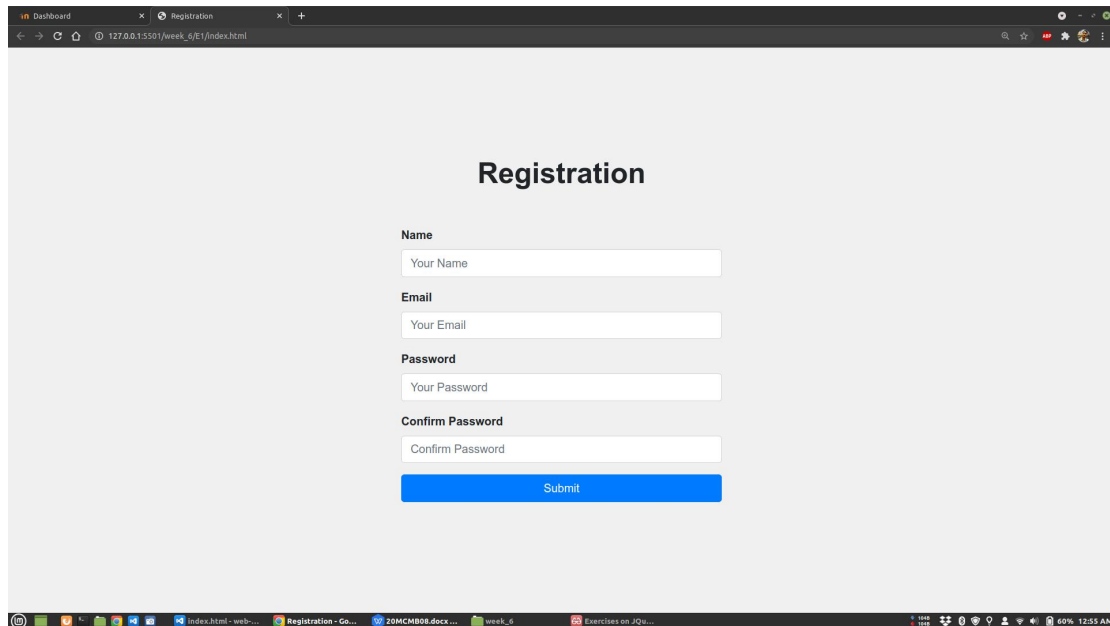


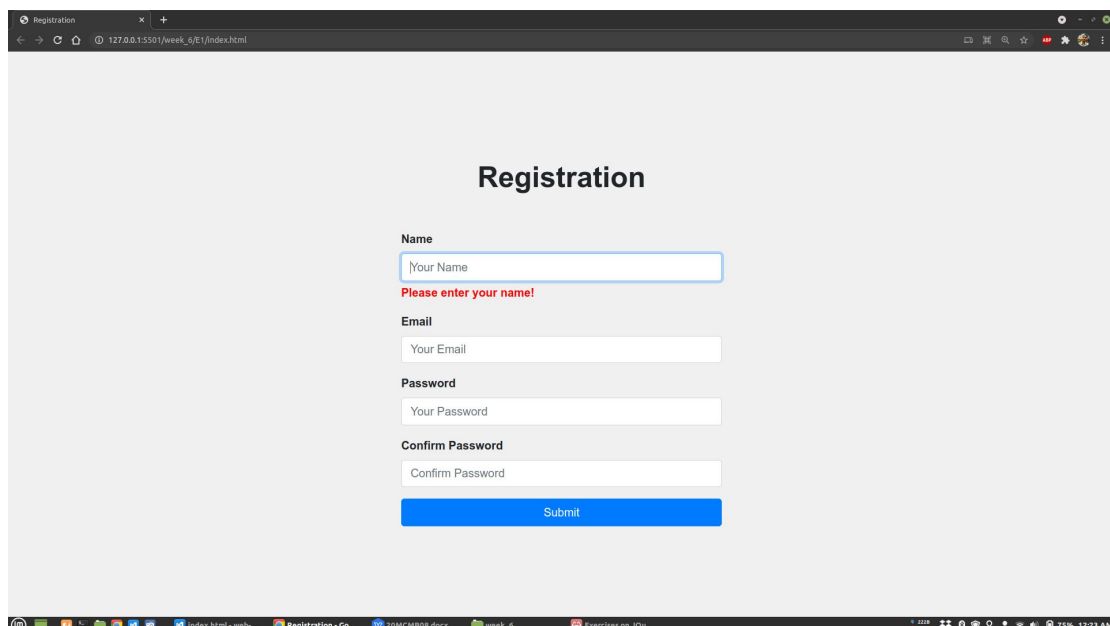
# Exercises on jQuery and Ajax

Suvam Basak  
MTech IT  
20MCMB08

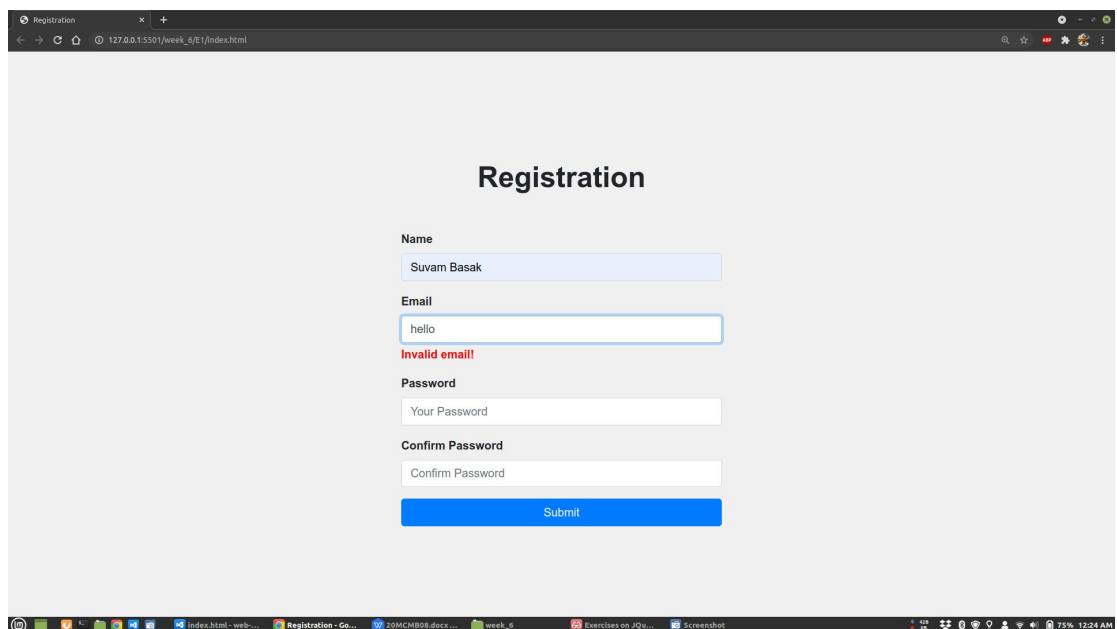
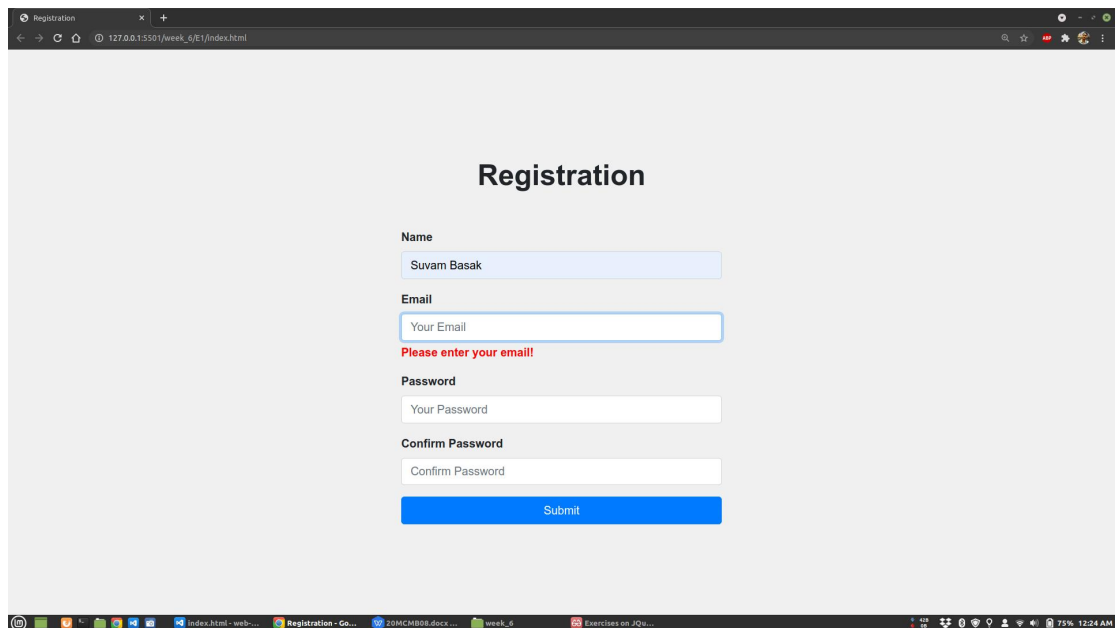
## Exercise 1

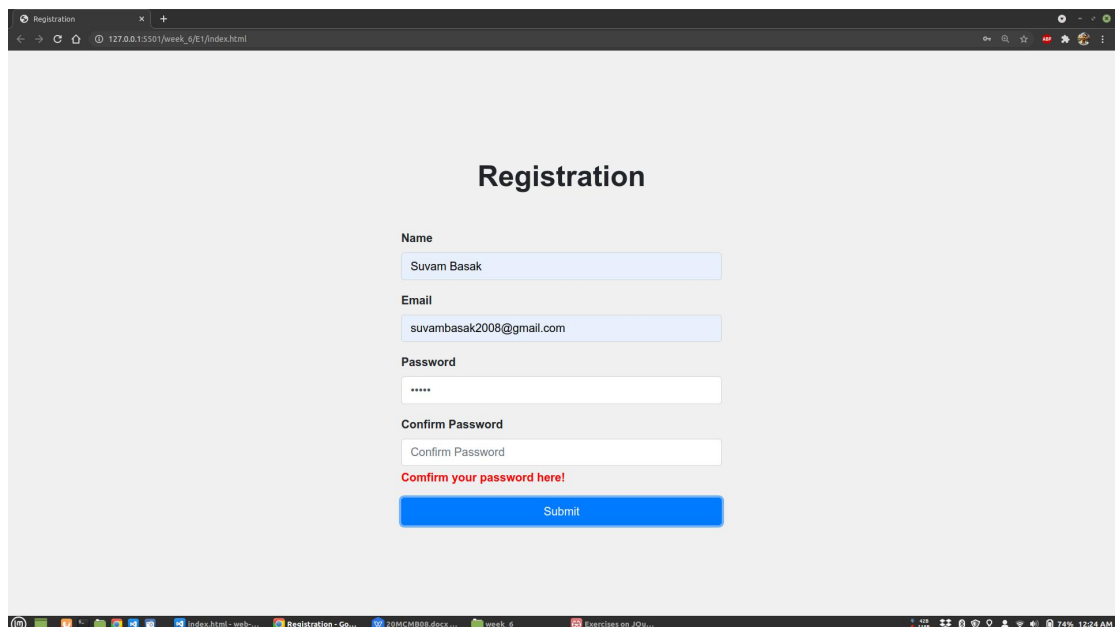
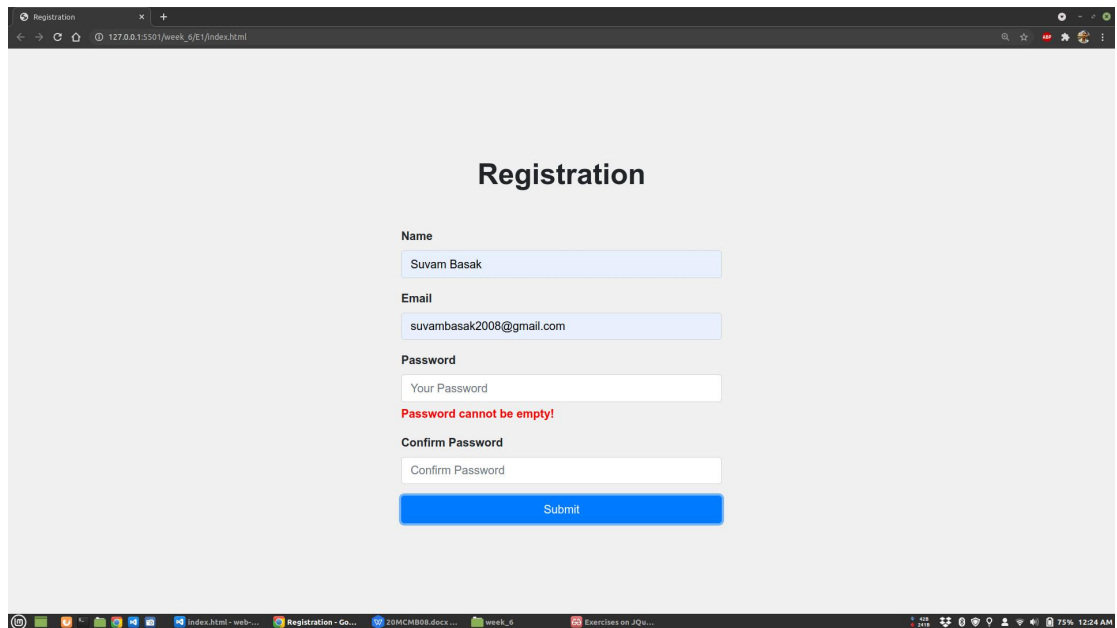


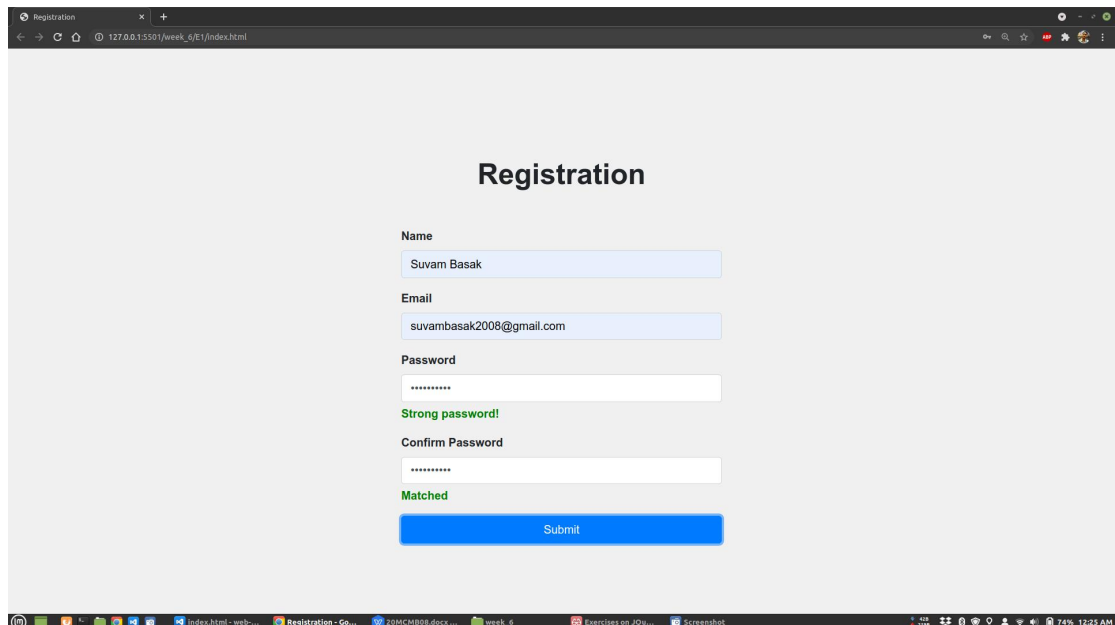
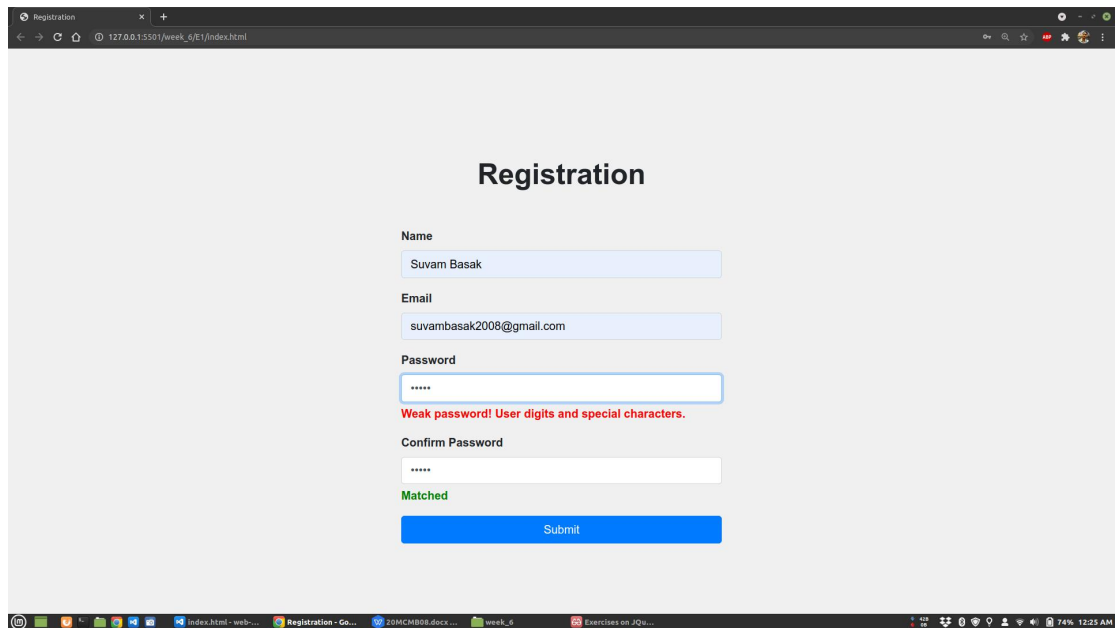
A screenshot of a web browser window displaying a registration form. The browser's address bar shows the URL "127.0.0.1:5501/week\_0/E1/index.html". The form is titled "Registration" and contains four input fields: "Name" (placeholder "Your Name"), "Email" (placeholder "Your Email"), "Password" (placeholder "Your Password"), and "Confirm Password" (placeholder "Confirm Password"). A blue "Submit" button is located at the bottom of the form. The browser's taskbar at the bottom shows several open applications, including "Index.html - web...", "Registration - Go...", "20MCMB08.docx", "week\_0", and "Exercises on jQuery...". The system tray on the right indicates a battery level of 60% and the time 12:55 AM.



A screenshot of the same web browser window showing the registration form. The "Name" input field now has a red border and a red error message "Please enter your name!" displayed below it. The other fields and the "Submit" button remain the same. The browser's taskbar and system tray are identical to the previous screenshot, but the battery level is now 75% and the time is 12:23 AM.







## Source Code

index.html

```
<!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://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/boot
strap.min.css"

integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFc
JlSAwiGgFAW/dAiS6JXm" crossorigin="anonymous">

    <title>Registration</title>

    <!-- Style -->
    <style>
        body {
            margin-top: 100px;
            background-color: rgb(240, 240, 240);
        }

        h1 {
            text-align: center;
            margin: 50px;
        }

        .success {
            color: green;
            font-weight: bold;
            font-size: medium;
        }

        .fail {
            color: red;
            font-weight: bold;
            font-size: medium;
        }
    </style>
</head>

<body>
    <div class="container">
        <div class="row d-flex justify-content-center">
            <div class="col-5">
                <!-- Registration form -->
                <h1><b>Registration</b></h1>
                <form onsubmit="return false">
                    <div class="form-group">
                        <label for="name"><b>Name</b></label>
                        <input type="text" class="form-control"
name="name" id="name" aria-describedby="name_help"
placeholder="Your Name">

```

```

        <small id="name_help"
class="form-text"></small>
    </div>
    <div class="form-group">
        <label for="email"><b>Email</b></label>
        <input type="email" class="form-control"
name="email" id="email" aria-describedby="email_help"
        placeholder="Your Email">
        <small id="email_help"
class="form-text"></small>
    </div>
    <div class="form-group">
        <label for="pwd"><b>Password</b></label>
        <input type="password"
class="form-control" name="pwd" id="pwd"
aria-describedby="pwd_help"
        placeholder="Your Password">
        <small id="pwd_help"
class="form-text"></small>
    </div>
    <div class="form-group">
        <label for="cnf_pwd"><b>Confirm
Password</b></label>
        <input type="password"
class="form-control" name="cnf_pwd" id="cnf_pwd"
        aria-describedby="cnf_pwd_help"
placeholder="Confirm Password">
        <small id="cnf_pwd_help"
class="form-text"></small>
    </div>
    <button type="submit" class="btn btn-primary
btn-block" id="submit">Submit</button>
</form>
</div>
</div>
<!-- jQuery -->
<script
src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFD
MVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>

<!-- Validation with jQuery -->
<script>
    $(document).ready(function () {

```

```

// on submit button click.
$("#submit").click(function () {
    // Log
    console.log("Submit clicked");

    // Retrieve the values from form.
    var name = $("#name").val();
    var email = $("#email").val();
    var password = $("#pwd").val();
    var confirmPassword = $("#cnf_pwd").val();

    // Log.
    console.log(`Name : ${name}`);
    console.log(`Email : ${email}`);
    console.log(`Password : ${password}`);
    console.log(`Confirm Password :
${confirmPassword}`);

    // Regular expression for email.
    const emailRegx =
/^[a-z0-9\.-]+@([a-z0-9-]+).([a-z]+)(.[a-z]+)?$/;

    // Regular expression for password strength.
    const alphaRegx = /[a-zA-Z]+/;
    const numRegx = /[0-9]+/;
    const specialRegx = /[!@#$-%^&*()_+=`~]+/;

    // Name validation.
    if (" " == name) {
        $("#name_help").text("Please enter your
name!").addClass("fail");
        $("#name").focus();
        return false;
    } else {
        $("#name_help").empty();
    }

    // Email Validation.
    if (" " == email) {
        $("#email_help").text("Please enter your
email!").addClass("fail");
        $("#email").focus();
        return false;
    } else if (!emailRegx.test(email)) {
        $("#email_help").text("Invalid
email!").addClass("fail");
        $("#email").focus();
        return false;
    }

```

```

    } else {
        $("#email_help").empty();
    }

    // Password validation.
    if (" " == password) {
        $("#pwd_help").text("Password cannot be empty!").addClass("fail");
        $("#cnf_pwd_help").empty();
        return false;
    } else {
        $("#pwd_help").empty();
    }
    if (" " == confirmPassword) {
        $("#cnf_pwd_help").text("Comfirm your password here!").addClass("fail");
        return false;
    } else {
        $("#pwd_help").empty();
    }

    // Matching confirm password.
    if (password != confirmPassword) {
        $("#cnf_pwd").focus();
        $("#cnf_pwd_help").text("Not matching!").addClass("fail");
        return false;
    } else {

        $("#cnf_pwd_help").text("Matched").removeClass("fail").addClass("success");
    }

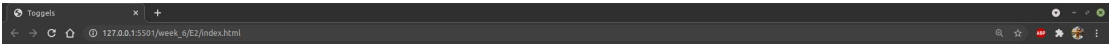
    // Checking strength.
    if (alphaRegx.test(password) && numRegx.test(password) && specialRegx.test(password)) {
        $("#pwd_help").text("Strong password!").removeClass("fail").addClass("success");
    } else {
        $("#pwd").focus();
        $("#pwd_help").text("Weak password! User digits and special characters.").addClass("fail");
        return false;
    }
    });
});
</script>
</body>

```

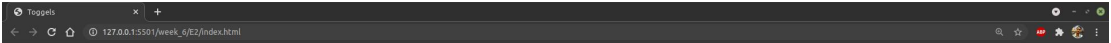
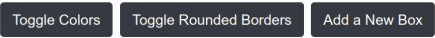
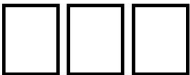


</html>

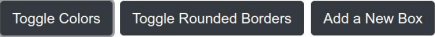
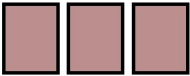
## Exercise 2

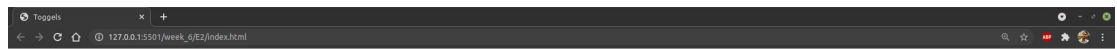


### Exercise 2: Toggles

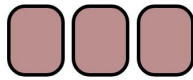


### Exercise 2: Toggles





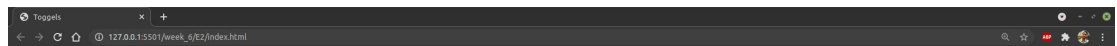
## Exercise 2: Toggles



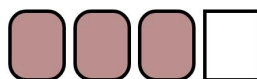
Toggle Colors

Toggle Rounded Borders

Add a New Box



## Exercise 2: Toggles



Toggle Colors

Toggle Rounded Borders

Add a New Box





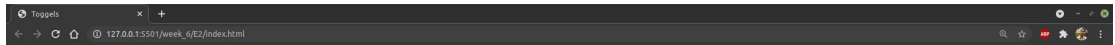
## Exercise 2: Toggles



Toggle Colors

Toggle Rounded Borders

Add a New Box



## Exercise 2: Toggles



Toggle Colors

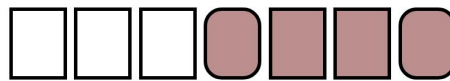
Toggle Rounded Borders

Add a New Box





## Exercise 2: Toggles



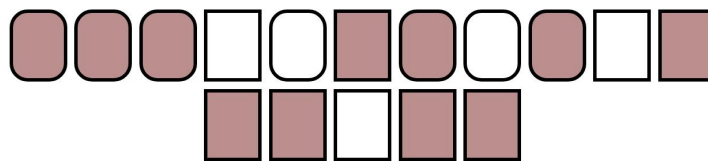
Toggle Colors

Toggle Rounded Borders

Add a New Box



## Exercise 2: Toggles



Toggle Colors

Toggle Rounded Borders

Add a New Box



## Source Code

index.html

```
<!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://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/boot
strap.min.css"

integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFc
JlSAwiGgFAW/dAiS6JXm" crossorigin="anonymous">

    <!-- Style -->
    <style>
        body {
            margin: 50px;
        }

        button {
            margin: 5px;
        }

        .box {
            border: 5px solid black;
            width: 80px;
            height: 100px;
            margin: 5px;
        }

        .box-round {
            border-radius: 25px;
        }

        .box-bg {
            background-color: rosybrown;
        }

        #box_holder {
            margin: 50px;
        }
    </style>
    <title>Toggels</title>
</head>

<body>
    <div class="container">

        <!-- Heading -->
        <div class="row d-flex justify-content-center">
            <h1><b>Exercise 2: Toggles</b></h1>
        </div>

```

```

        <!-- Box container div -->
        <div class="row d-flex justify-content-center"
id="box_holder">
            <div class="box"></div>
            <div class="box"></div>
            <div class="box"></div>
        </div>

        <!-- Button container div -->
        <div class="row d-flex justify-content-center">
            <button type="button" class="btn btn-dark btn-lg"
id="tcolor">Toggle Colors</button>
            <button type="button" class="btn btn-dark btn-lg"
id="tborder">Toggle Rounded Borders</button>
            <button type="button" class="btn btn-dark btn-lg"
id="tnew">Add a New Box</button>
        </div>
    </div>

    <!-- jQuery -->
    <script
src="https://code.jquery.com/jquery-3.2.1.slim.min.js"

integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFD
MVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>

    <!-- jQuery -->
    <script>
        $(document).ready(function () {
            // Background change
            $("#tcolor").click(function () {
                $(".div.box").toggleClass("box-bg");
            });

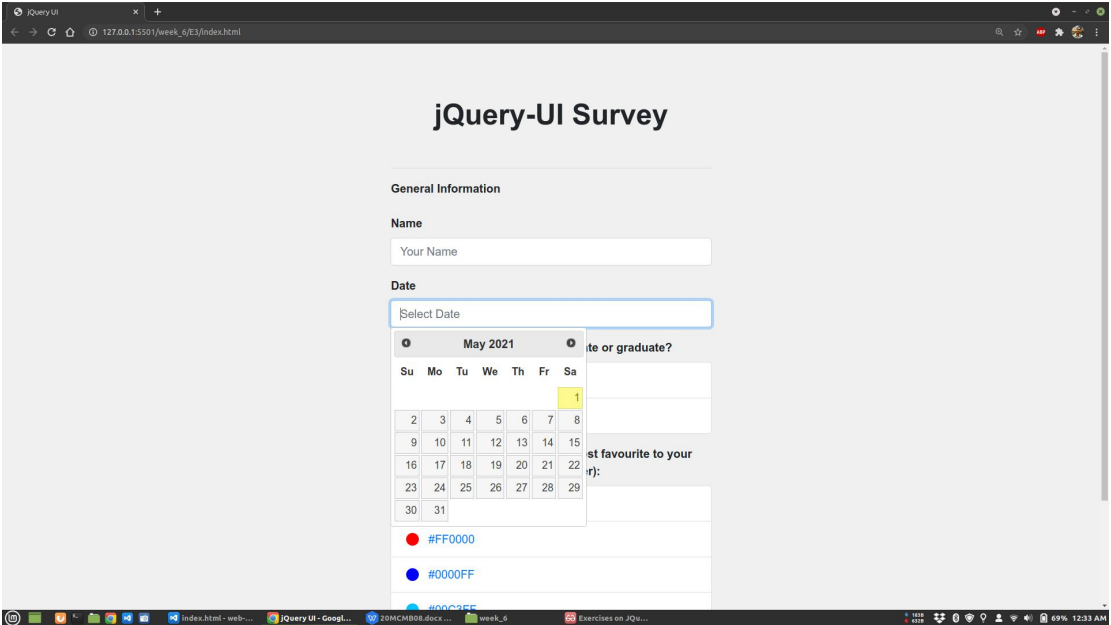
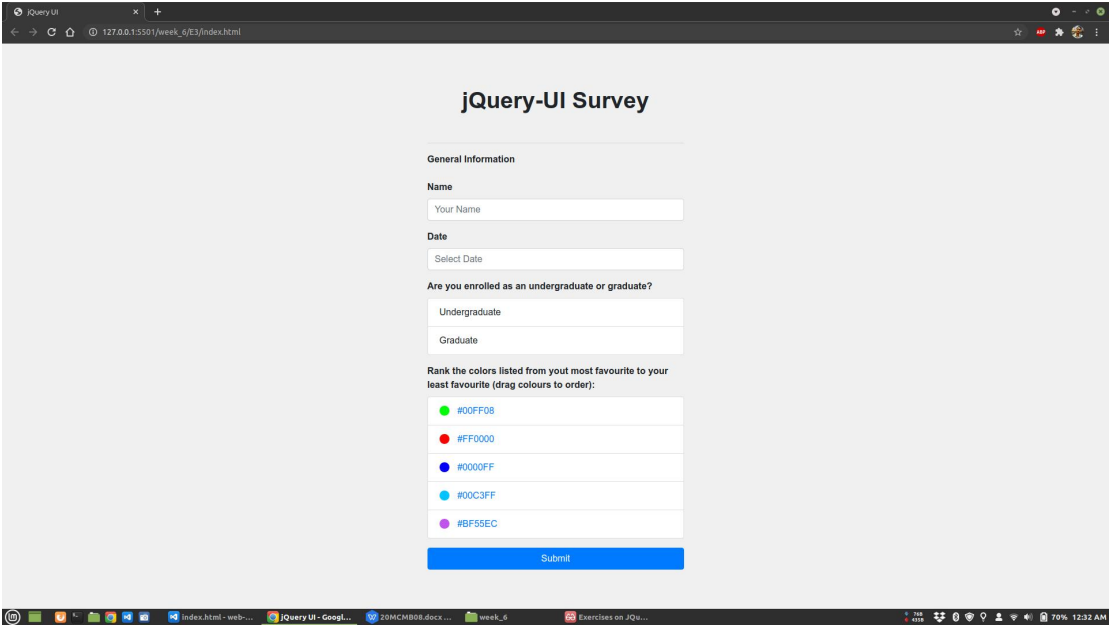
            // Border round
            $("#tborder").click(function () {
                $(".div.box").toggleClass("box-round");
            });

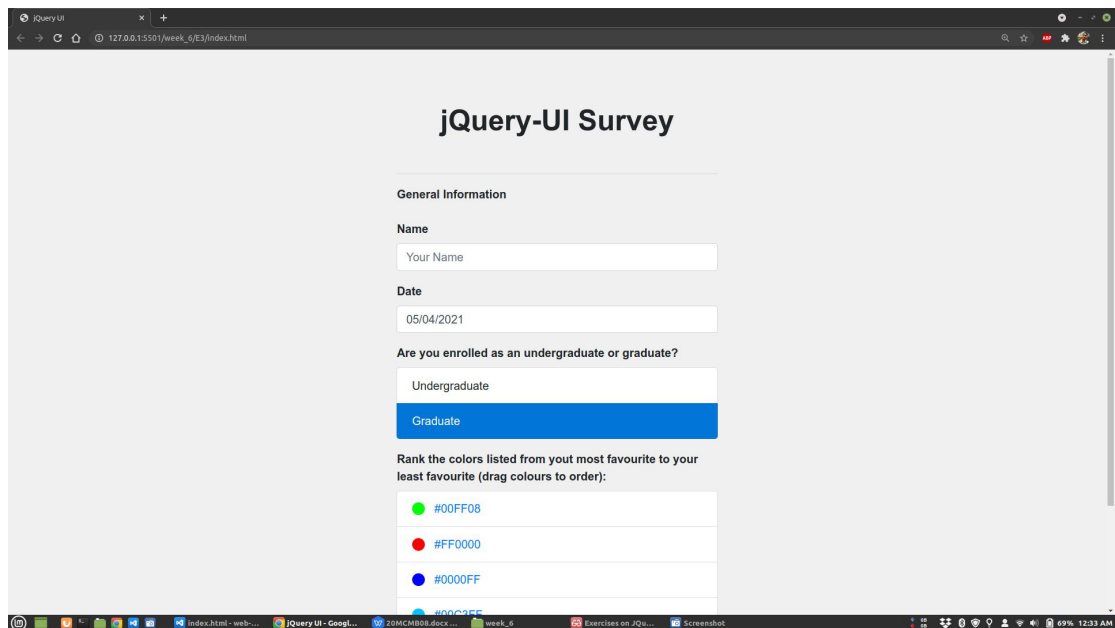
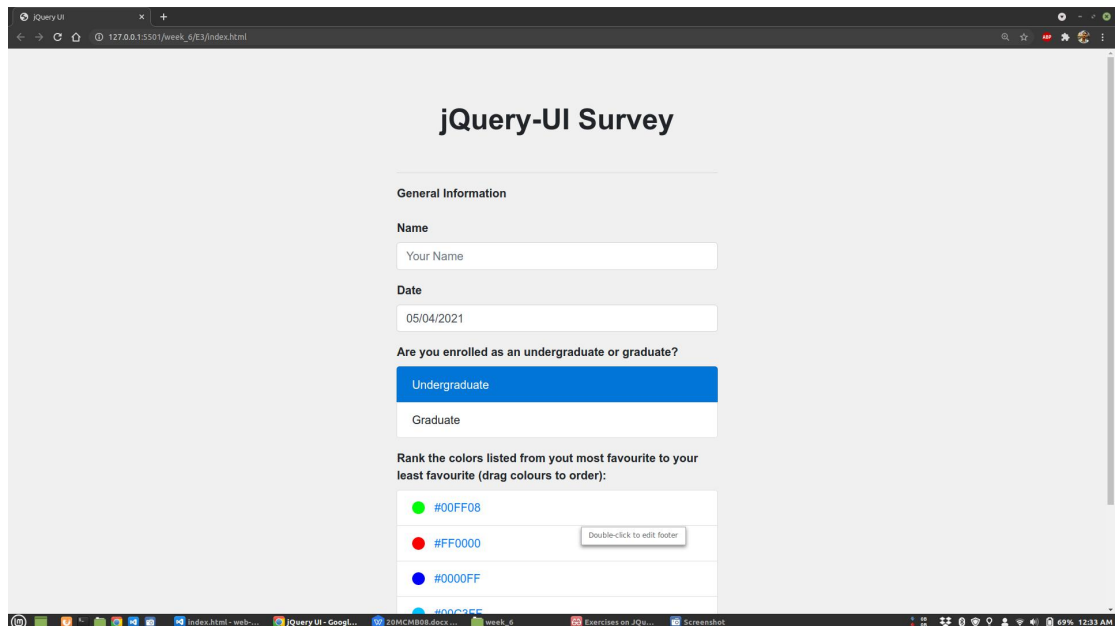
            // Add new box
            $("#tnew").click(function () {
                $("#box_holder").append('<div
class="box"></div>');
            });
        });
    </script>
</body>

```

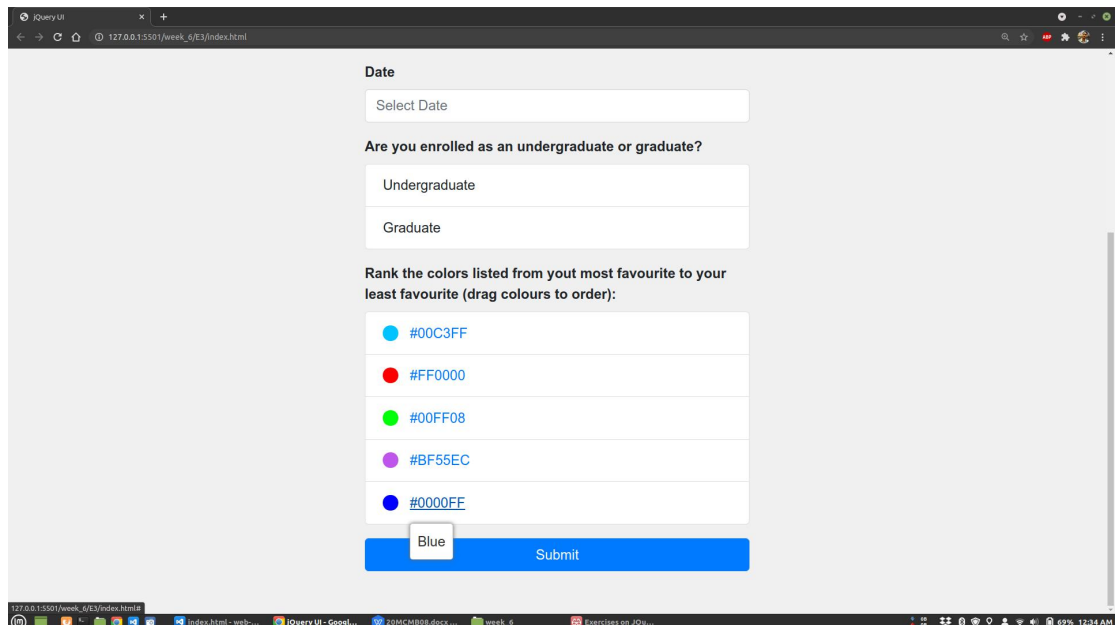
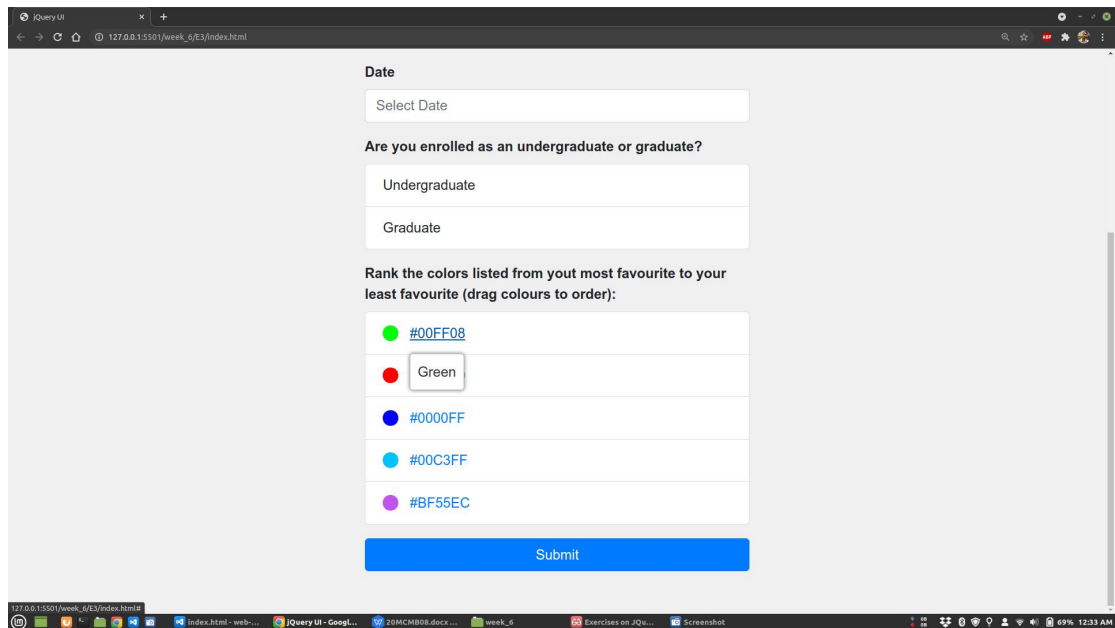
</html>

### Exercise 3









## Source Code

index.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">
```

```
<link rel="stylesheet"
href="//code.jquery.com/ui/1.12.1/themes/base/jquery-ui.css">
<link rel="stylesheet" href="/resources/demos/style.css">
<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>
```

```
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/boot
strap.min.css"
```

```
integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFc
JlSAwiGgFAW/dAiS6JXm" crossorigin="anonymous">
```

```
<!-- Style -->
<style>
  body {
    margin-bottom: 50px;
    background-color: rgb(240, 240, 240);
  }

  h1 {
    text-align: center;
    margin: 50px;
  }

  span {
    height: 3px;
    width: 3px;
    border-radius: 10px;
  }

  #selectable .ui-selected {
    background: #0275d8;
    color: white;
  }
</style>
```

```
<!-- jQuery -->
<script>
  $(document).ready(function () {
    $(document).tooltip();
    $("#date").datepicker();
    $("#selectable").selectable();
    $("#sortable").sortable();
    $("#sortable").disableSelection();
    $("#button").click(function () {
      alert('Not implemented yet.');
```

```

    });
  });
</script>
<title>jQuery UI</title>
</head>

<body>
  <div class="container">
    <div class="row d-flex justify-content-center">
      <div class="col-5">
        <!-- survey from -->
        <h1><b>jQuery-UI Survey</b></h1>
        <hr>
        <form action="">
          <!-- Name -->
          <div class="form-group">
            <label for="name"><b>General Information<br><br>Name </b></label>
            <input type="text" class="form-control"
name="name" id="name" aria-describedby="name_help"
placeholder="Your Name">
          </div>

          <!-- Date picker -->
          <div class="form-group">
            <label for="date"><b>Date</b></label>
            <input type="text" class="form-control"
name="date" id="date" aria-describedby="email_help"
placeholder="Select Date">
          </div>

          <!-- Selectable -->
          <div class="form-group">
            <label for="date"><b>Are you enrolled as an
undergraduate or graduate?</b></label>
            <ul class="list-group" id="selectable">
              <li
class="list-group-item">Undergraduate</li>
              <li
class="list-group-item">Graduate</li>
            </ul>
          </div>

          <!-- Sortable color -->
          <div class="form-group">
            <label for="date"><b>Rank the colors listed
from yout most favourite to your least
order):</b></label>
            favourite (drag colours to

```

```

        <ul class="list-group" id="sortable">
            <li class="list-group-item">
                <span style="background-color:
#00FF08;">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                &nbsp;&nbsp;&
                <a href="#"
title="Green">#00FF08</a>
            </li>
            <li class="list-group-item">
                <span style="background-color:
#FF0000;">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                &nbsp;&nbsp;&
                <a href="#"
title="Red">#FF0000</a>
            </li>
            <li class="list-group-item">
                <span style="background-color:
#0000FF;">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                &nbsp;&nbsp;&
                <a href="#"
title="Blue">#0000FF</a>
            </li>
            <li class="list-group-item">
                <span style="background-color:
#00C3FF;">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                &nbsp;&nbsp;&
                <a href="#"
title="Sky">#00C3FF</a>
            </li>
            <li class="list-group-item">
                <span style="background-color:
#BF55EC;">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</span>
                &nbsp;&nbsp;&
                <a href="#"
title="Purple">#BF55EC</a>
            </li>
        </ul>
    </div>
    <!-- Submit button -->
    <button type="submit" class="btn btn-primary
btn-block" id="submit">Submit</button>
</form>
</div>
</div>
</div>

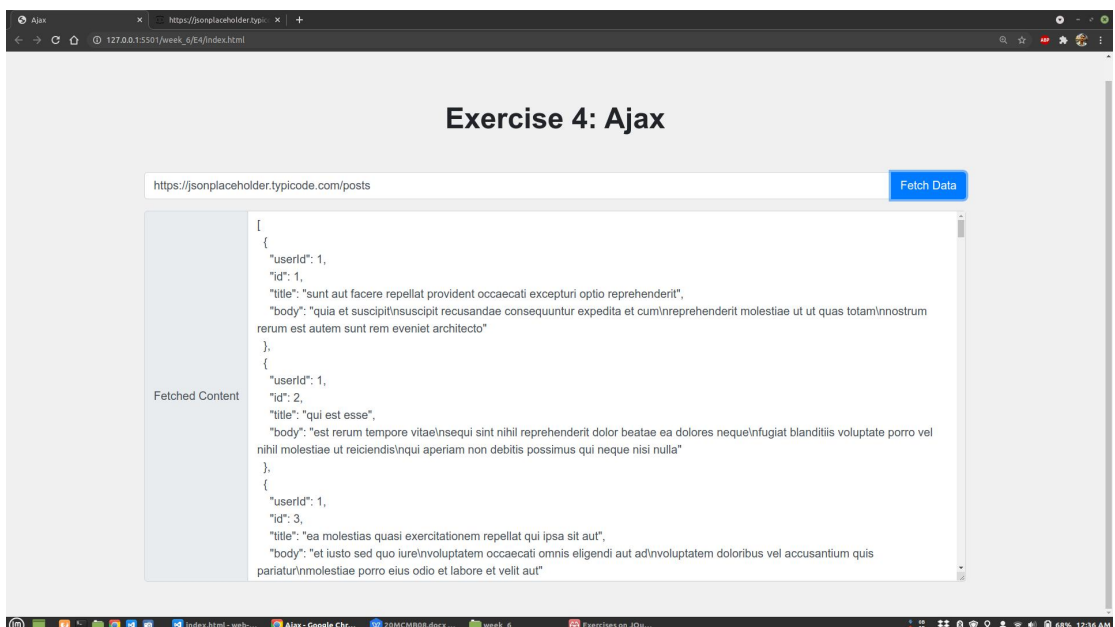
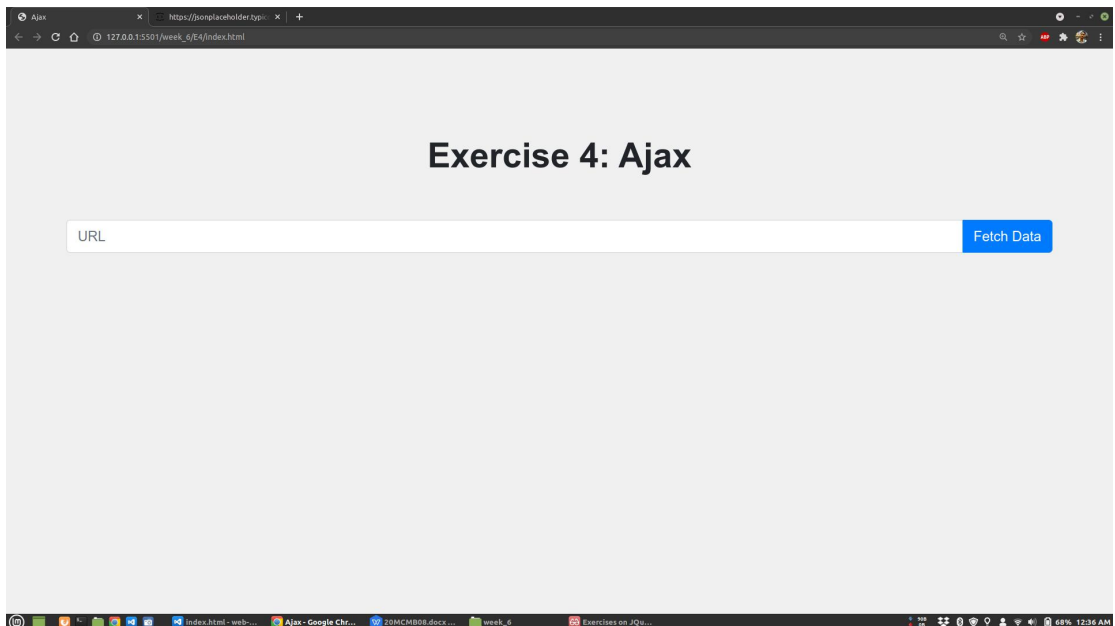
</body>

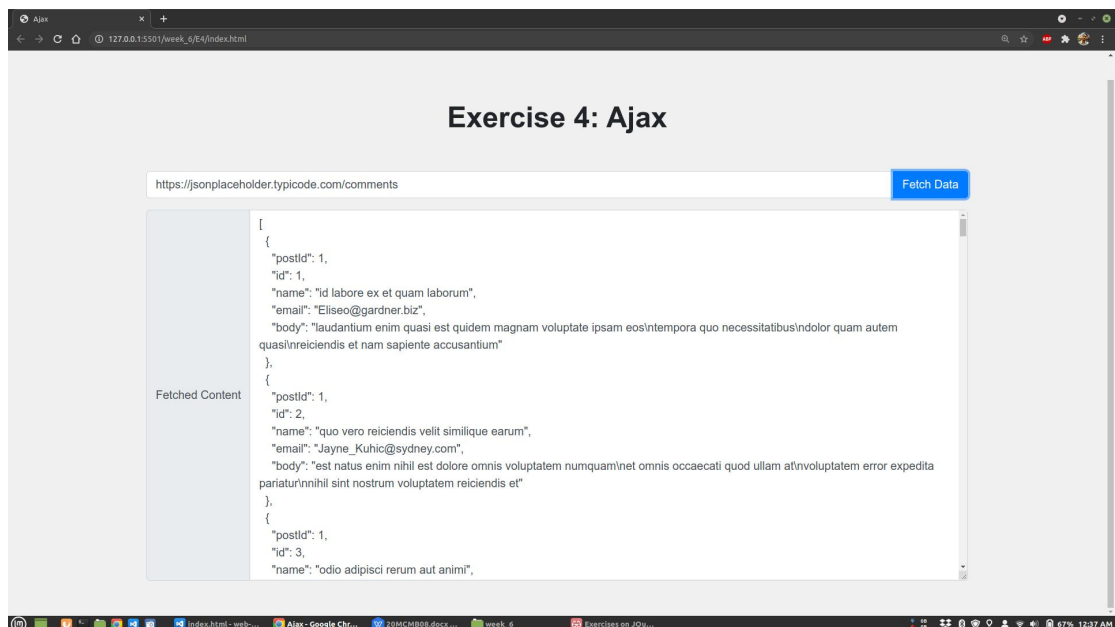
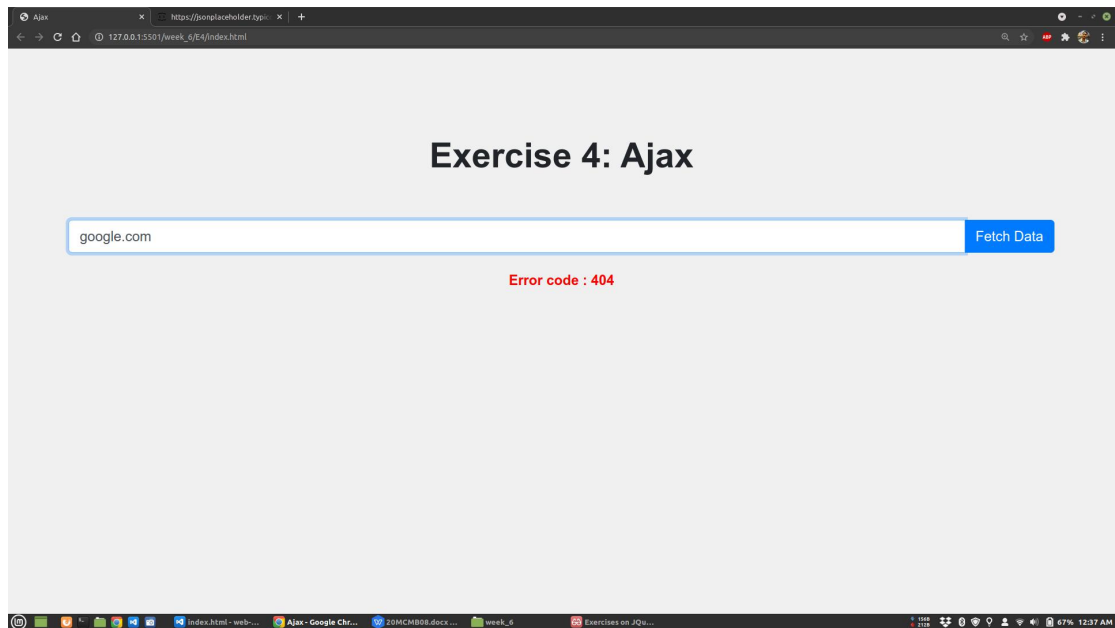
</html>

```

---

# Exercise 4





## Source Code

index.html

```
<!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://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/boot
strap.min.css"

integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFc
JlSAwiGgFAW/dAiS6JXm" crossorigin="anonymous">

    <title>Ajax</title>

    <!-- Style -->
    <style>
        body {
            margin-top: 50px;
            margin-bottom: 50px;
            background-color: rgb(240, 240, 240);
        }

        h1 {
            text-align: center;
            margin: 50px;
        }

        .fail {
            color: red;
            font-weight: bold;
            font-size: medium;
        }
    </style>
</head>

<body>
    <div class="container">
        <div class="row d-flex justify-content-center">
            <h1><b>Exercise 4: Ajax</b></h1>
            <!-- URL input -->
            <div class="input-group mb-3">
                <input type="text" class="form-control"
placeholder="URL" aria-label="Recipient's username"
                aria-describedby="basic-addon2" id="url">
                <div class="input-group-append">
                    <button class="btn btn-primary"
type="button">Fetch Data</button>
                </div>
            </div>
            <!-- Error show -->
            <small id="url_help" class="form-text fail"></small>

```

```

        <!-- Content show -->
        <div class="input-group" id="out">
            <div class="input-group-prepend">
                <span class="input-group-text">Fetched
Content</span>
            </div>
            <textarea class="form-control" aria-label="With
textarea"></textarea>
        </div>
    </div>
</div>

    <!-- jQuery -->
    <script
src="https://code.jquery.com/jquery-3.2.1.slim.min.js"

integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFD
MVNA/GpGFF93hXpG5KkN"
        crossorigin="anonymous"></script>

    <!-- Ajax and jQuery -->
    <script>
        $(document).ready(function () {
            // Hide the content show div.
            $("#out").hide();

            // Button click.
            $("button").click(function () {
                const url = $("#url").val();
                console.log(url);

                const xhr = new XMLHttpRequest();

                xhr.onload = function () {
                    console.log(this);

                    // Show the data.
                    if (this.status === 200) {
                        $("#url_help").empty();
                        $("#out").show();

                        $("textarea").val(this.responseText).height(500);
                    } else {
                        $("#url_help").text(`Error code :
${this.status}`);
                        $("#url").focus();
                    }
                }
            })
        })
    </script>

```



```
        xhr.open('get', url);
        xhr.send();
    });
});
</script>
</body>

</html>
```

---