SIT774 Web Technologies and Development

Workshop Week 5 - Form

Instructor : Ran Zhang

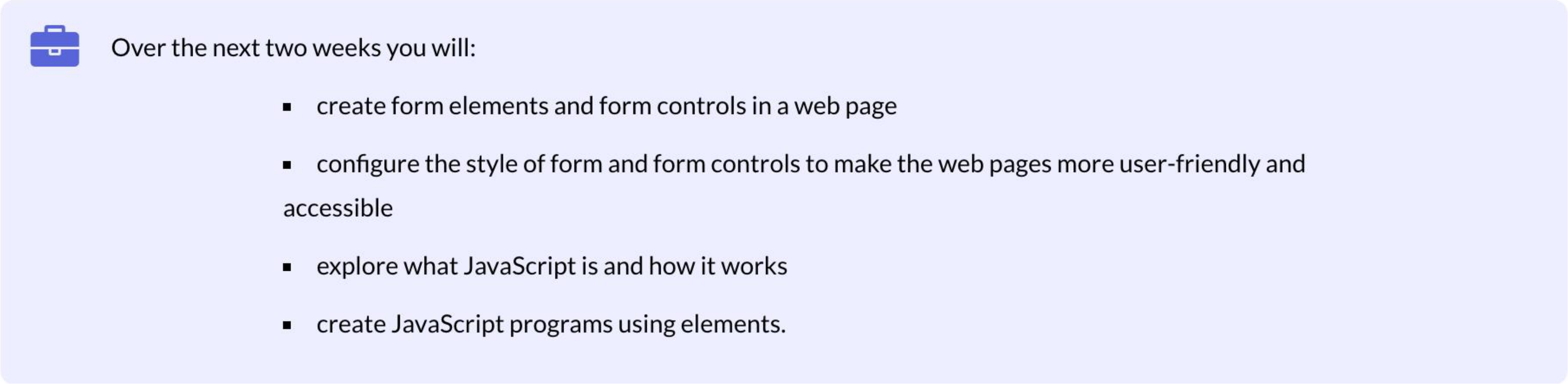
Unit chair : Michael Hobbs

Instructor: Ran Zhang & Ruyi Li

DEAKIN UNIVERSITY

Welcome week 5

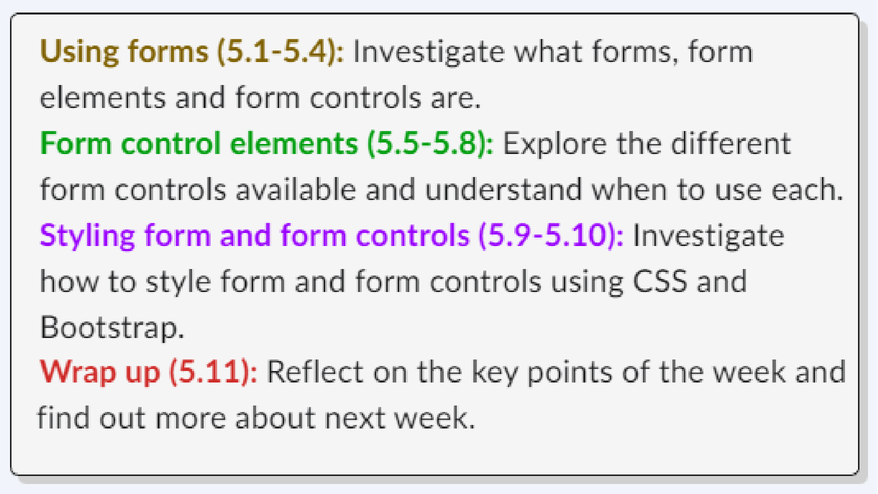
- Till now, the webpages are **static**. This means users can't use webpages to send request or data back to server, and the webpages can't do any other things except to show static content.
- Over the next two weeks we are going to learn how to make them accept and send users' request or data, and learn how to write scripts to make the pages alive and dynamic.
- In real applications, web pages collect or accept user input data and send the data to the server for processing. So the communication between the server and the client is bi-directional.
- **Bi-directional** communication can be implemented by creating form elements in web pages. A form element contains some objects or form controls for accepting or collecting data in different ways.



Over the next two weeks you will:

- create form elements and form controls in a web page
- configure the style of form and form controls to make the web pages more user-friendly and accessible
- explore what JavaScript is and how it works
- create JavaScript programs using elements.

Key concept



Using forms (5.1-5.4): Investigate what forms, form elements and form controls are.

Form control elements (5.5-5.8): Explore the different form controls available and understand when to use each.

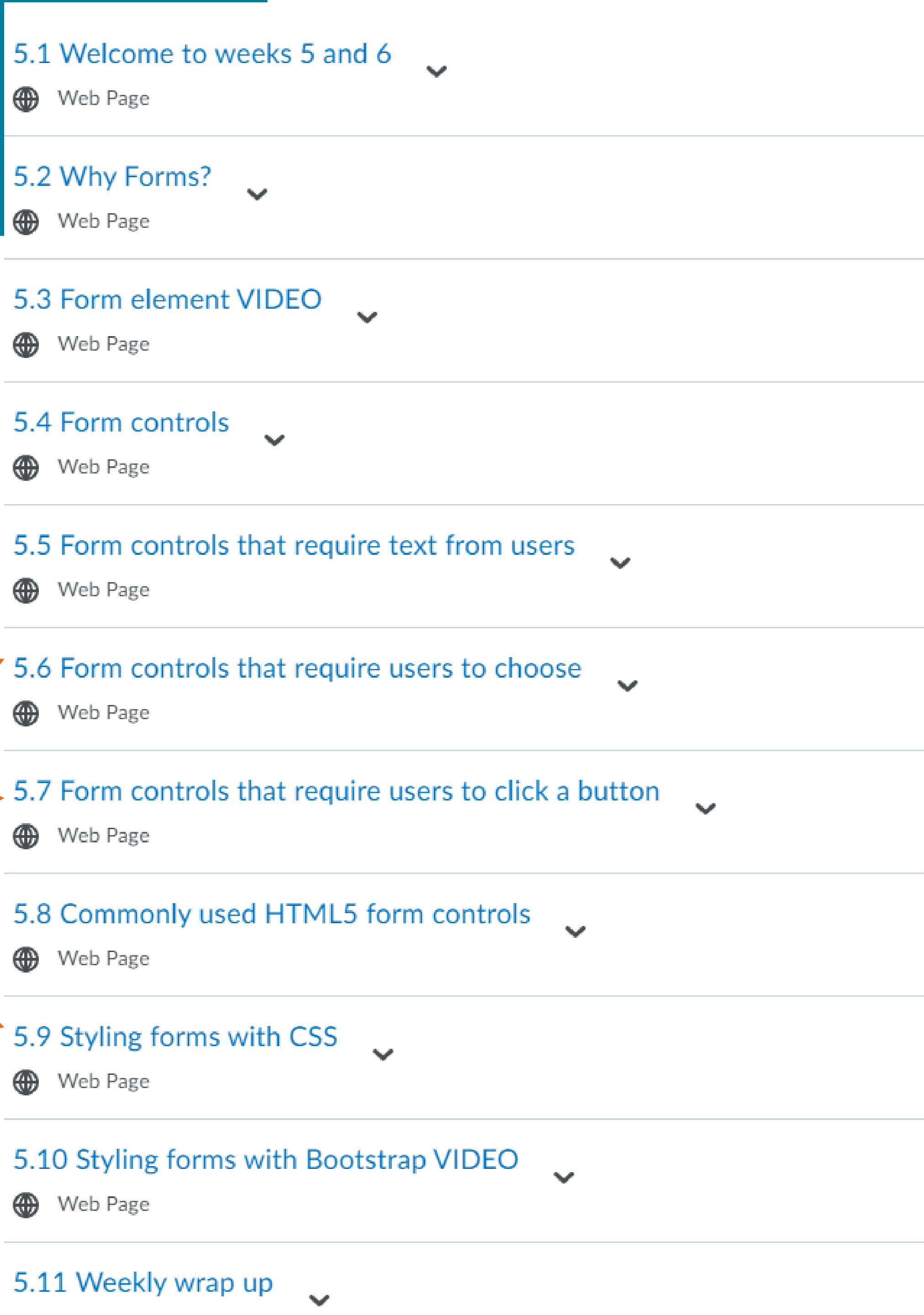
Styling form and form controls (5.9-5.10): Investigate how to style form and form controls using CSS and Bootstrap.

Wrap up (5.11): Reflect on the key points of the week and find out more about next week.

Ontrack task 5.1 - Create a form web page

Ontrack task 5.2 - Create a form web page from requirements

Ontrack task 5.3 - Website project (Part 1 of 3)



5.1 Welcome to weeks 5 and 6

Web Page

5.2 Why Forms?

Web Page

5.3 Form element VIDEO

Web Page

5.4 Form controls

Web Page

5.5 Form controls that require text from users

Web Page

5.6 Form controls that require users to choose

Web Page

5.7 Form controls that require users to click a button

Web Page

5.8 Commonly used HTML5 form controls

Web Page

5.9 Styling forms with CSS

Web Page

5.10 Styling forms with Bootstrap VIDEO

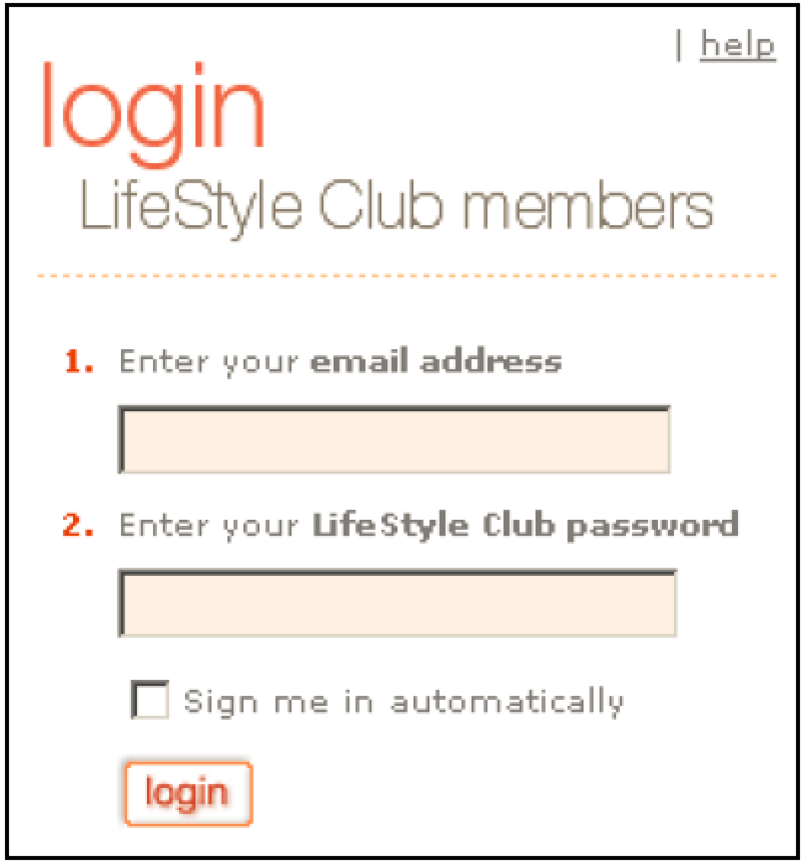
Web Page

5.11 Weekly wrap up

5.2 Why Forms?

Bi-directional – two ways communication!

Forms enable user submittable data or information. With forms, the communication between the user and server is bi-directional see, for example, the following figure:



| help

login

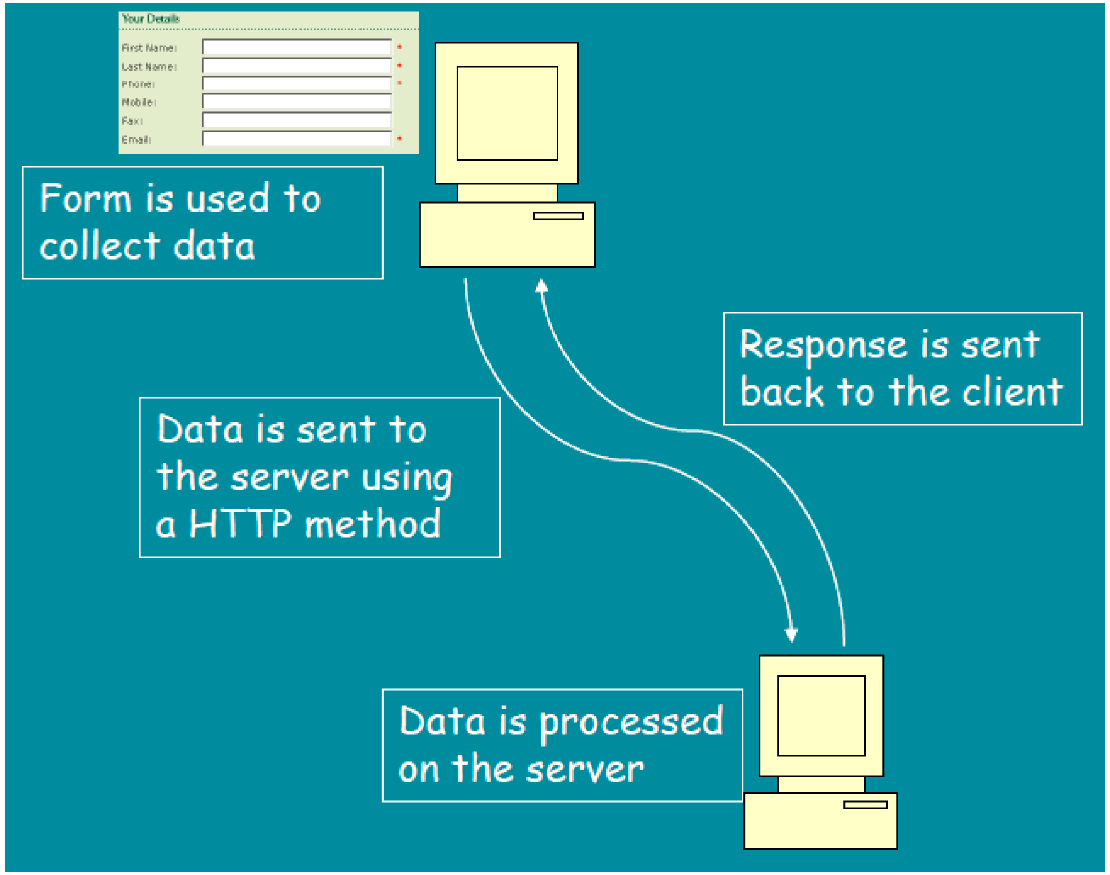
LifeStyle Club members

1. Enter your **email address**

2. Enter your **LifeStyle Club password**

□ Sign me in automatically

login



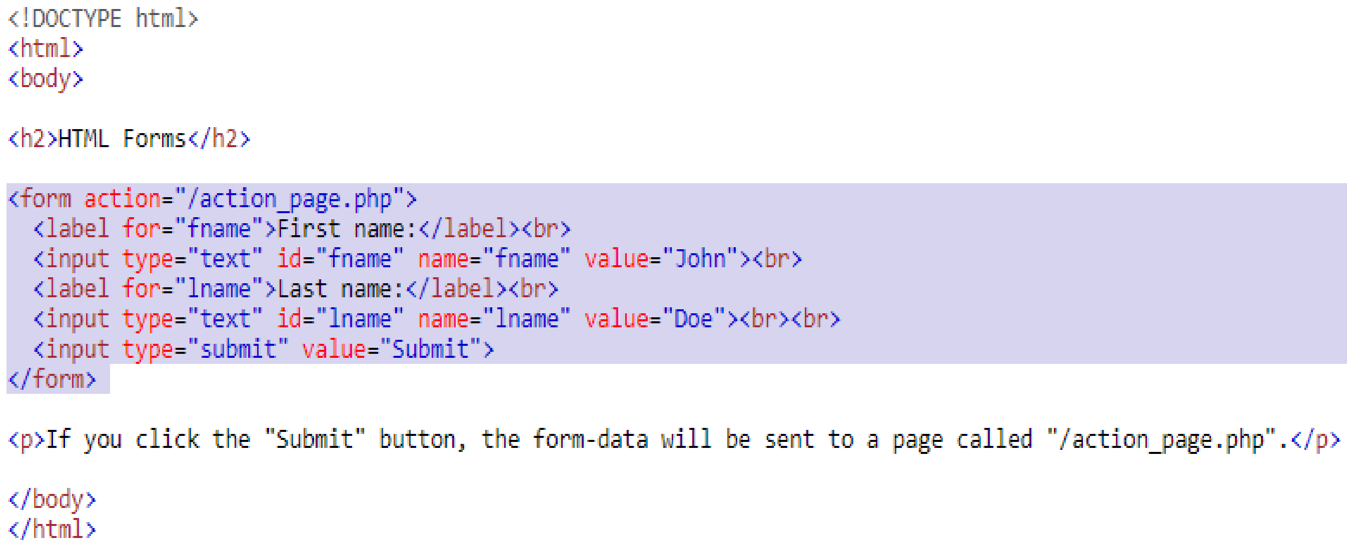
Form is used to collect data

Data is sent to the server using a HTTP method

Response is sent back to the client

Data is processed on the server

HTML form



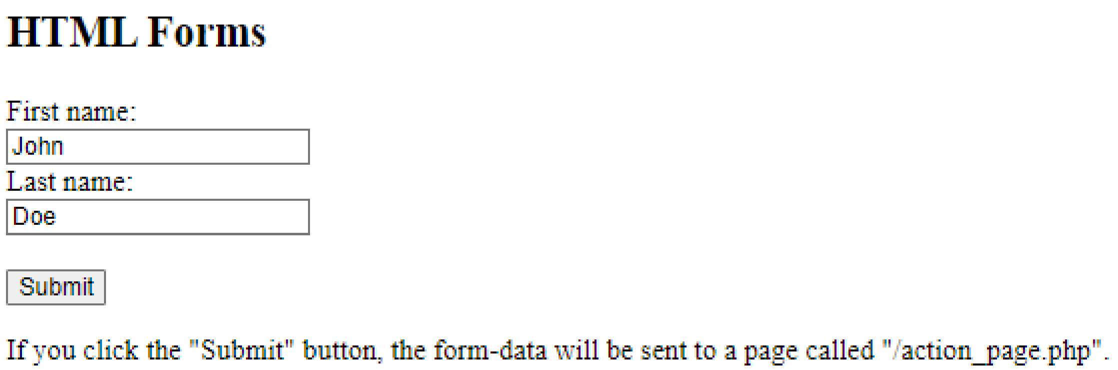
```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Forms</h2>

<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>

<p>If you click the "Submit" button, the form-data will be sent to a page called "/action_page.php".</p>

</body>
</html>
```



HTML Forms

First name:

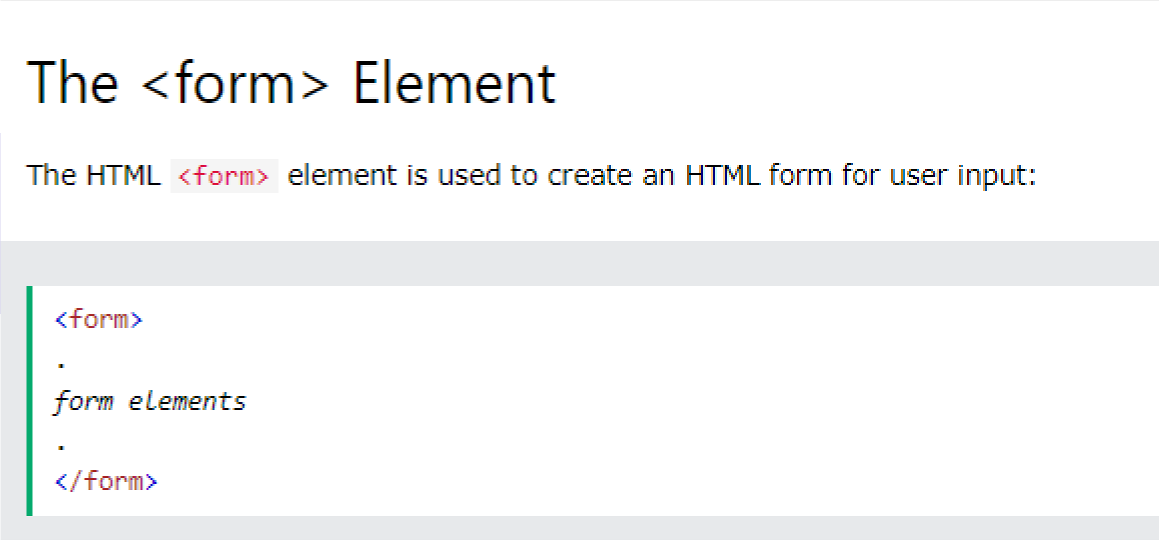
John

Last name:

Doe

Submit

If you click the "Submit" button, the form-data will be sent to a page called "/action_page.php".



The <form> Element

The HTML `<form>` element is used to create an HTML form for user input:

```
<form>
.
form elements
.
</form>
```

The <form> element is a container for different types of input elements,
such as:
text fields, checkboxes, radio buttons, submit buttons, etc.

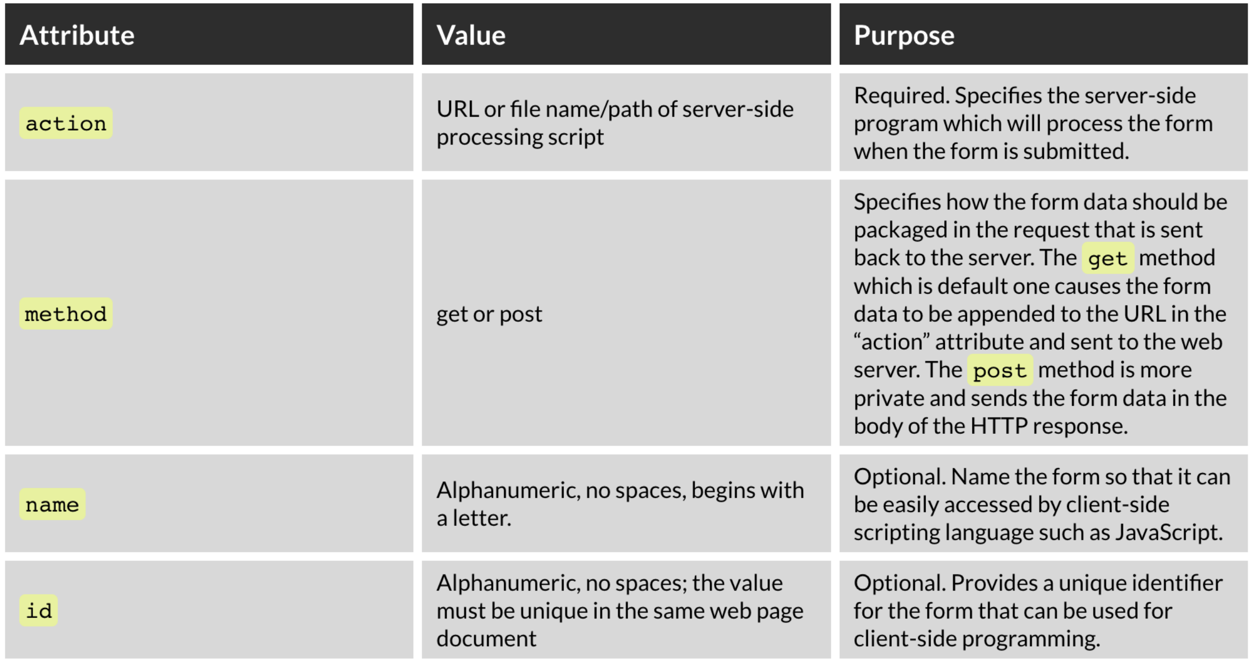
5.3 Form attributes and elements

Discuss the difference of attributes name and id in form controls and whether we could replace the name with the id?

The form element can be configured with **attributes**. These attributes specify which server-side program or file will process:

- the form data - action
- how the form data will be sent to the server - method
- name of the form - name
- id of the form - id

The following table gives the details of these attributes.



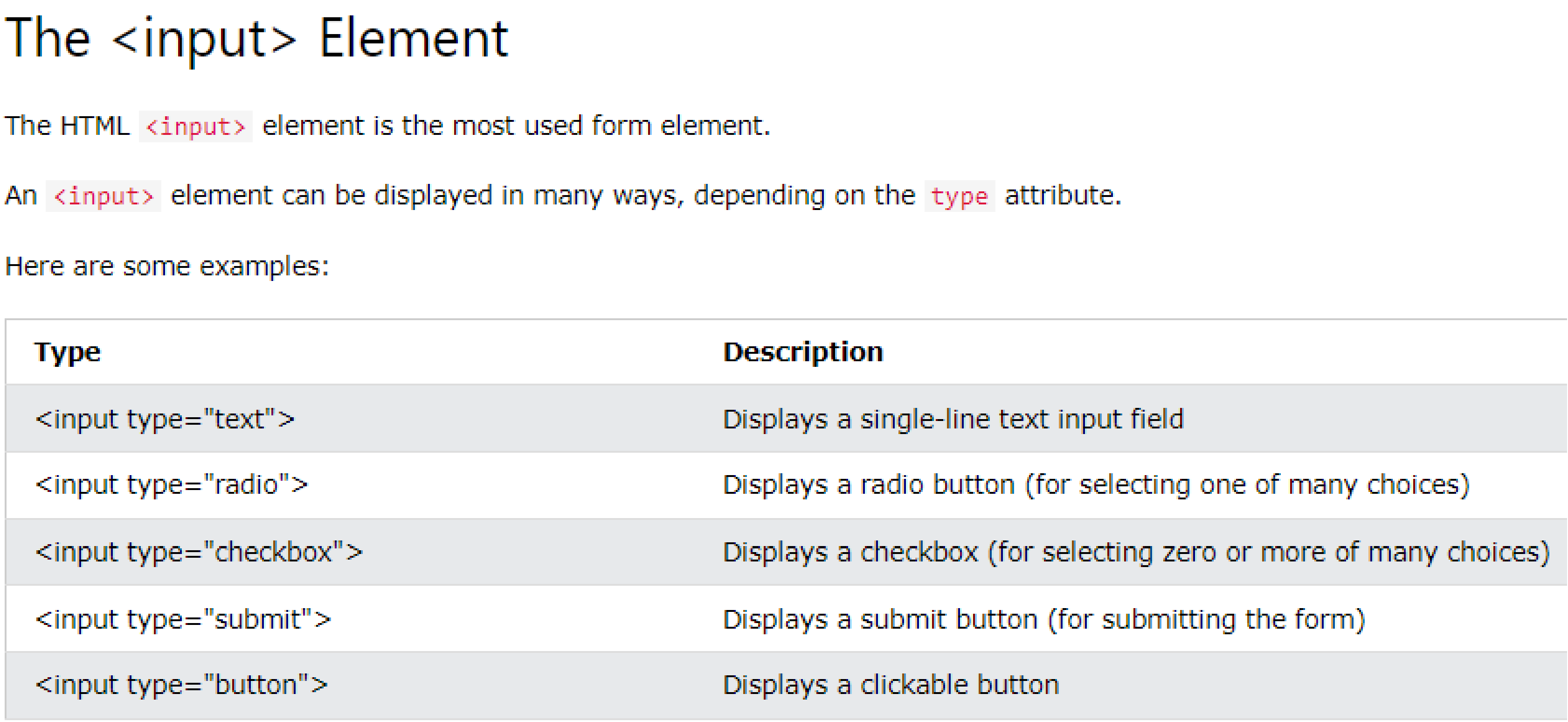
Attribute	Value	Purpose
action	URL or file name/path of server-side processing script	Required. Specifies the server-side program which will process the form when the form is submitted.
method	get or post	Specifies how the form data should be packaged in the request that is sent back to the server. The get method which is default one causes the form data to be appended to the URL in the "action" attribute and sent to the web server. The post method is more private and sends the form data in the body of the HTTP response.
name	Alphanumeric, no spaces, begins with a letter.	Optional. Name the form so that it can be easily accessed by client-side scripting language such as JavaScript.
id	Alphanumeric, no spaces; the value must be unique in the same web page document	Optional. Provides a unique identifier for the form that can be used for client-side programming.

- Use name attributes for form controls (such as <input> and <select>), as that's the identifier used in the POST or GET call that happens on form submission.

- Use id attributes whenever you need to address a particular HTML element with CSS, JavaScript or a fragment identifier. It's possible to look up elements by name, too, but it's simpler and more reliable to look them up by ID. id is unique within the page.

- For example, you may have several radio buttons with different id attributes, but the same name. When submitted, there is just the one value in the response - the radio button you selected.

input element



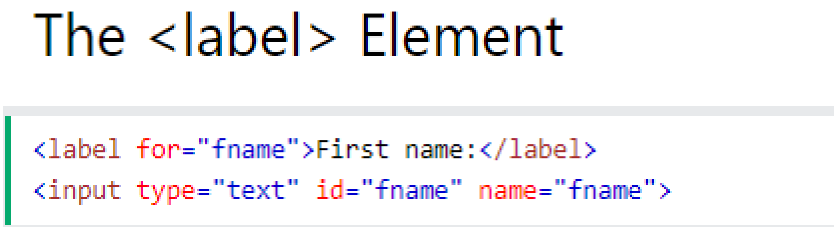
The <input> Element

The HTML `<input>` element is the most used form element.

An `<input>` element can be displayed in many ways, depending on the `type` attribute.

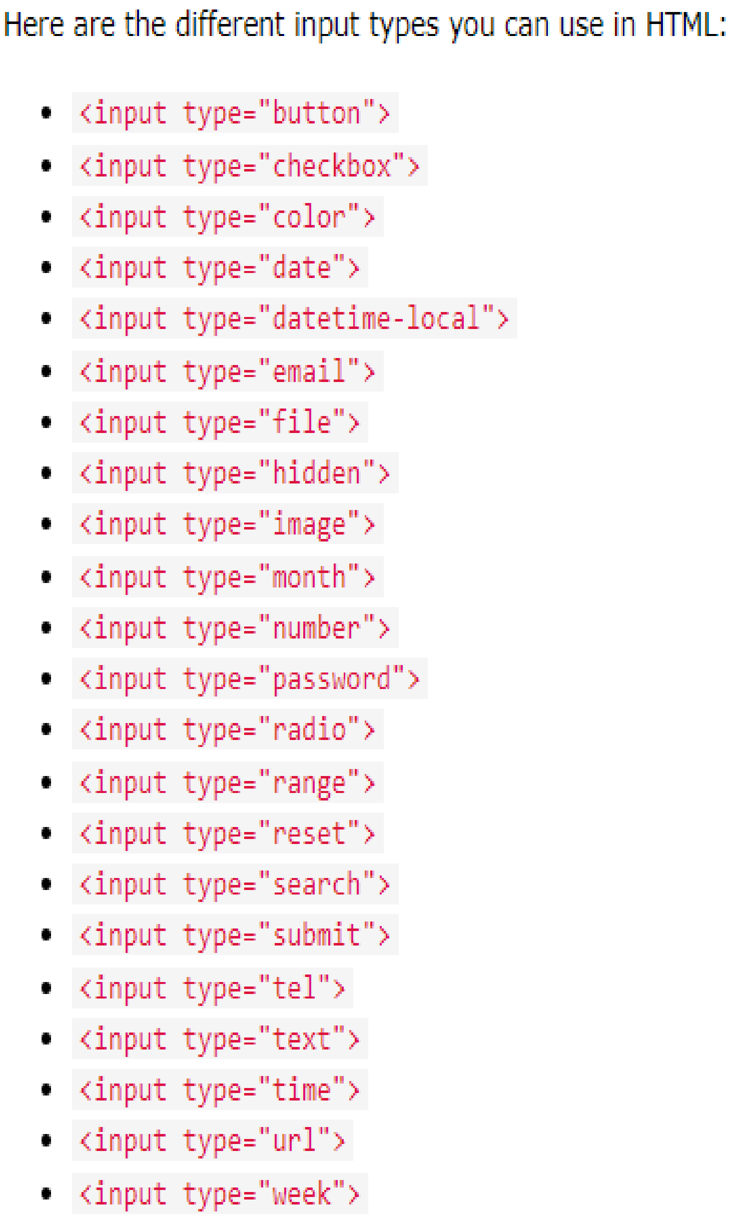
Here are some examples:

Type	Description
<input type="text">	Displays a single-line text input field
<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button



The <label> Element

```
<label for="fname">First name:</label>
<input type="text" id="fname" name="fname">
```

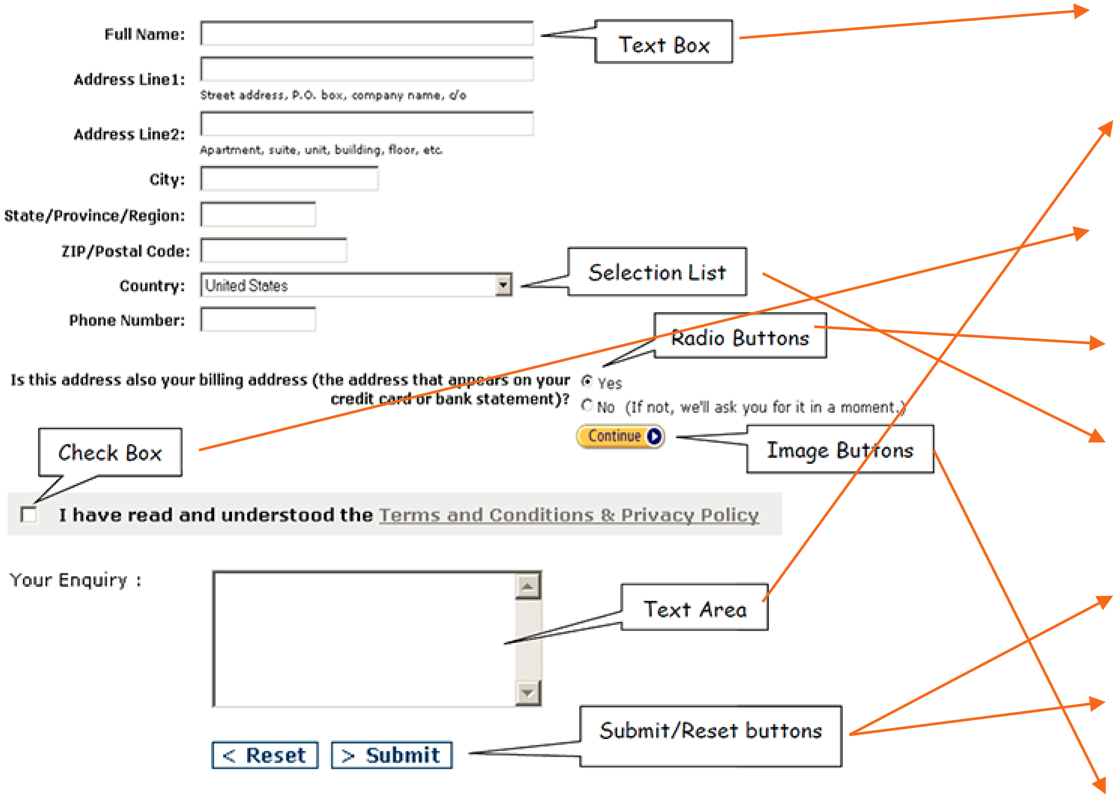


Here are the different input types you can use in HTML:

- `<input type="button">`
- `<input type="checkbox">`
- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<input type="email">`
- `<input type="file">`
- `<input type="hidden">`
- `<input type="image">`
- `<input type="month">`
- `<input type="number">`
- `<input type="password">`
- `<input type="radio">`
- `<input type="range">`
- `<input type="reset">`
- `<input type="search">`
- `<input type="submit">`
- `<input type="tel">`
- `<input type="text">`
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`

Form control examples(unit site 5.5-5.7)

Relate to Ontrack task 5.1P



Full Name:

Address Line1:
Street address, P.O. box, company name, c/o

Address Line2:
Apartment, suite, unit, building, floor, etc.

City:

State/Province/Region:

ZIP/Postal Code:

Country: United States

Phone Number:

Is this address also your billing address (the address that appears on your credit card or bank statement)? ● Yes ○ No (If not, we'll ask you for it in a moment.)

□ I have read and understood the Terms and Conditions & Privacy Policy

Your Enquiry :

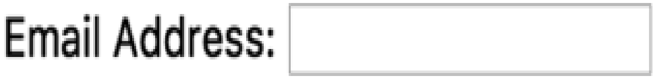
Form controls are the objects used in the form element to gather data from a web page user.

- Text box: <input type=“text” name=“XXXXX”>
- Password box:<input type=“password name=“pws” id=“pwd”>
- Text area: <textarea name="comment" id="comment" cols="40" rows="4"> Please enter your comments here. </textarea>
- Check box:<input type="checkbox" name="tech1" id="tech1" value="php"> I know PHP <br>
- Radio button : <input type="radio" name="color" id="color1" value="red"> Red <br>
- Select list: <select name="major"> <option value="IT"> Information Technology </option> </select>
- Submit button : <input type="submit"> &nbsp; &nbsp; <input type="submit" value="Login">
- Reset button:<input type="reset"> &nbsp; &nbsp; <input type="reset" value="Clear">
- Image button: <input type="button" value="Click Me!" onclick="alert(Hello!)">

Form control (unit site 5.8)

- E-mail textbox

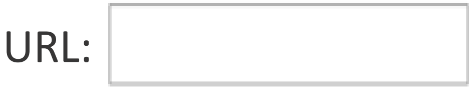
```
<input type="email" name="myEmail" id="myEmail">
```



Email Address:

- URL textbox

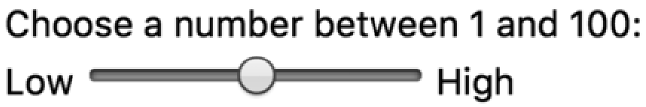
```
<input type="url" name="mySite" id="mySite">
```



URL:

- Slider form control

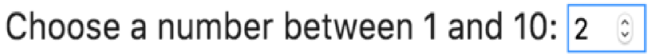
```
choose a number between 1 and 100: <br> Low <input type="range"
name="myChoice" id="myChoice" min="1" max="100"> High
```



Choose a number between 1 and 100:
Low High

- Spinner form control

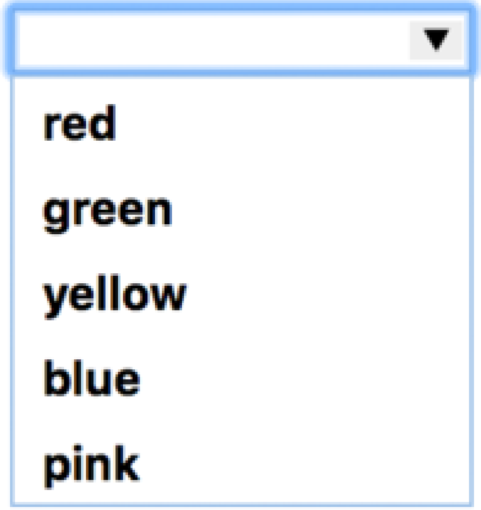
```
Choose a number between 1 and 10: <input type="number"
name="myNumber" id="myNumber" min="1" max="10">
```



Choose a number between 1 and 10: 2

- Datalist form control

```
Choose your favourite color: <br>
<input type="text" name="myColor" id="myColor" list="colors">
<datalist id="colors">
<option value="red">
<option value="green">
<option value="yellow">
<option value="blue">
<option value="pink">
</datalist>
```



▼

red

green

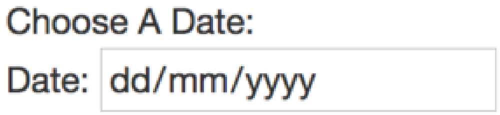
yellow

blue

pink

- Calendar form control

```
Choose A Date: <br> Date: <input type="date" name="myDate" id="myDate">
```

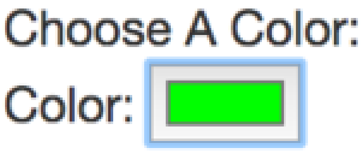


Choose A Date:

Date: dd/mm/yyyy

- Color-well form control

```
Choose A Color: <br> Color: <input type="color" name="myColor" id="myColor">
```



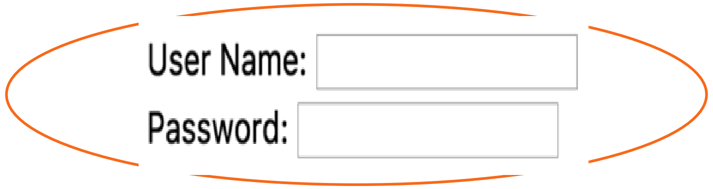
Choose A Color:

Color: 🟩

Styling forms with CSS (unit site 5.9)

You might have noticed the two text boxes in the right form are not well aligned (zig-zagged), which makes the web page look unprofessional.

```
<form>
User Name: <input type="text" name="username" id="username"> <br>
Password: <input type="password" name="pw" id="pw">
</form>
```



User Name:

Password:

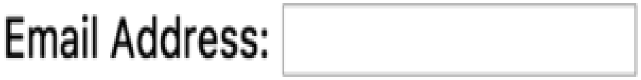
How to use CSS to organise and align form controls? ------Label element

- First method: Placing the label element as a container around both the label text and the form element.

```
<form>
<label> Email Address: <input type="text" name="email" id="email"> </label>
</form>
```

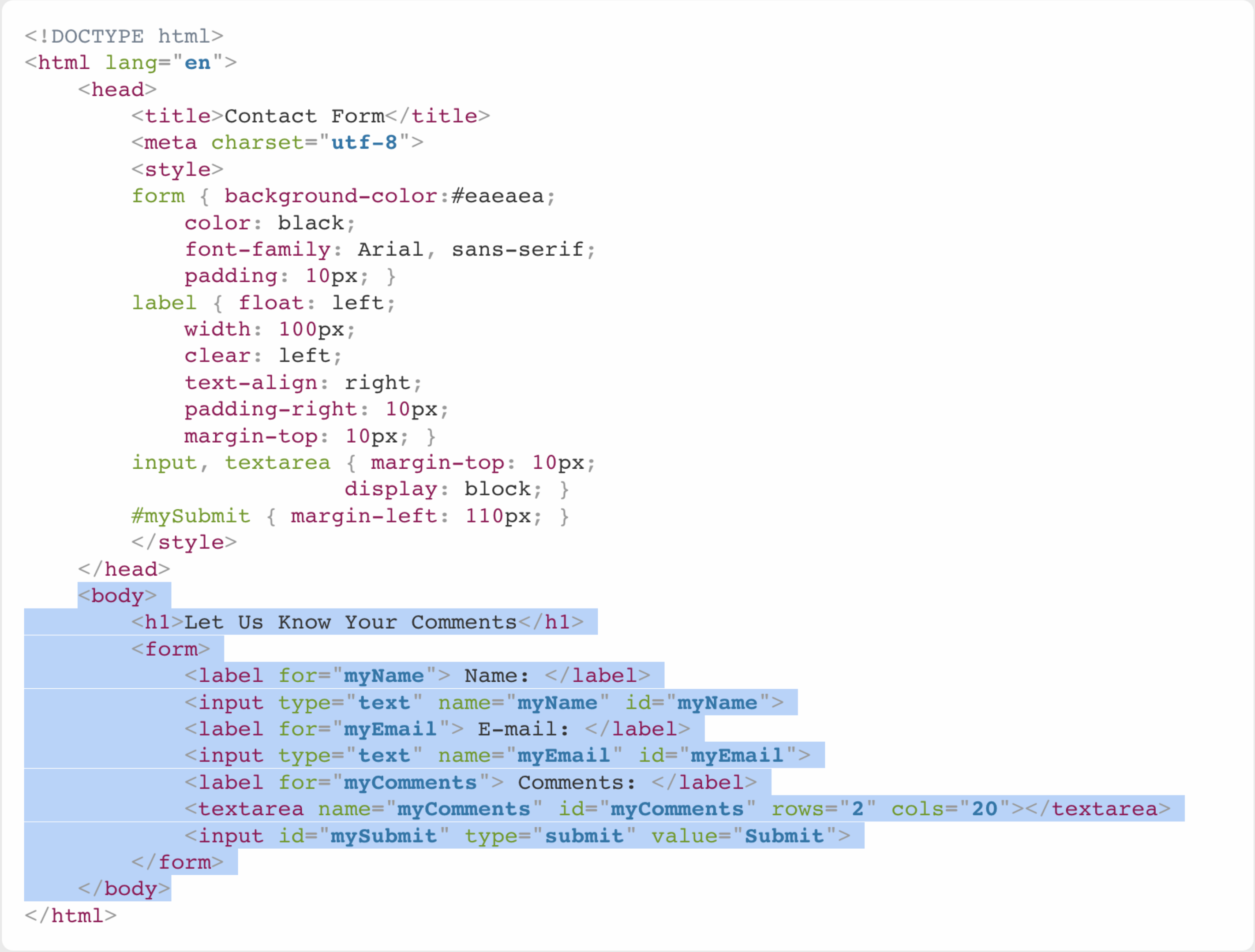
- Second method: Using the **for** attribute of the label element to associate the label with a particular form control.

```
<form>
<label for="email"> Email Address: </label>
<input type="text" name="email" id="email">
</form>
```

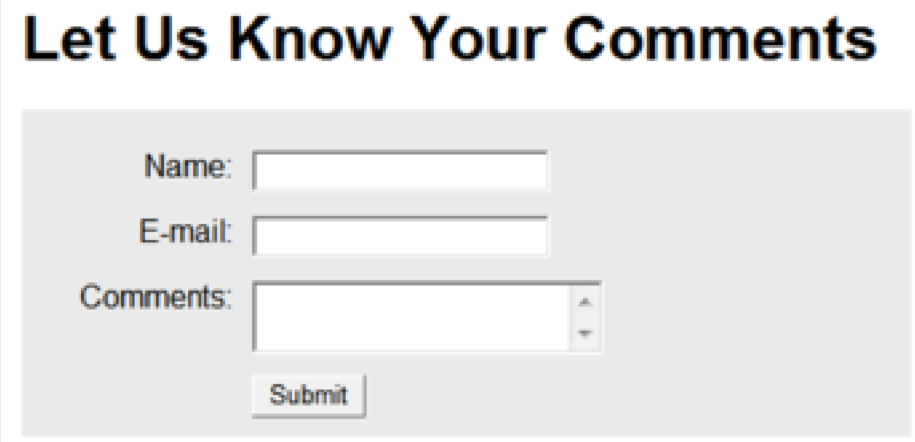


Email Address:

Style a form with CSS



```
<!DOCTYPE html>
<html lang="en">
    <head>
        <title>Contact Form</title>
        <meta charset="utf-8">
        <style>
        form { background-color:#eaeaea;
            color: black;
            font-family: Arial, sans-serif;
            padding: 10px; }
        label { float: left;
            width: 100px;
            clear: left;
            text-align: right;
            padding-right: 10px;
            margin-top: 10px; }
        input, textarea { margin-top: 10px;
                        display: block; }
        #mySubmit { margin-left: 110px; }
        </style>
    </head>
    <body>
        <h1>Let Us Know Your Comments</h1>
        <form>
            <label for="myName"> Name: </label>
            <input type="text" name="myName" id="myName">
            <label for="myEmail"> E-mail: </label>
            <input type="text" name="myEmail" id="myEmail">
            <label for="myComments"> Comments: </label>
            <textarea name="myComments" id="myComments" rows="2" cols="20"></textarea>
            <input id="mySubmit" type="submit" value="Submit">
        </form>
    </body>
</html>
```

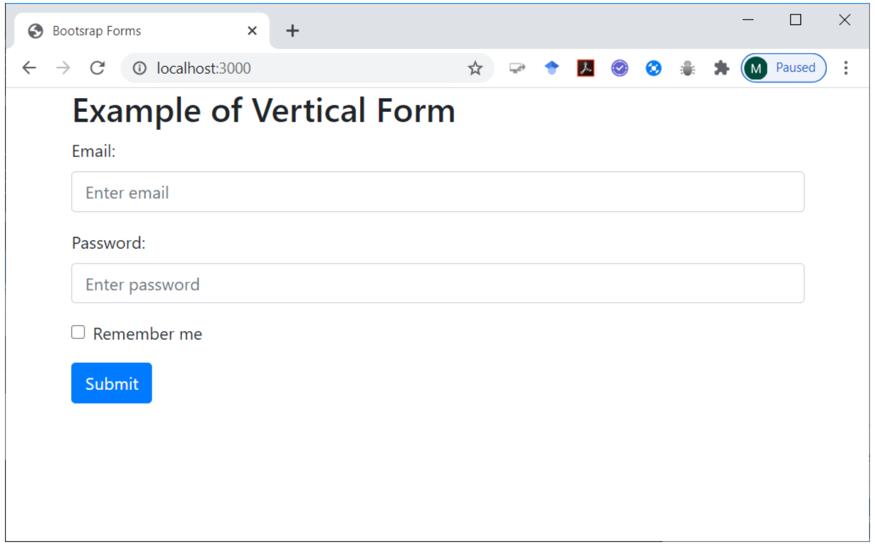


Let Us Know Your Comments

When styling a form with CSS, the box model is used to create a series of boxes into which form controls are placed.

The outer-most box defines the form area, while other boxes are for label elements and form controls. CSS is used to configure these components.

Styling forms with Bootstrap(unit site 5.10 video)



Example of Vertical Form

Email:

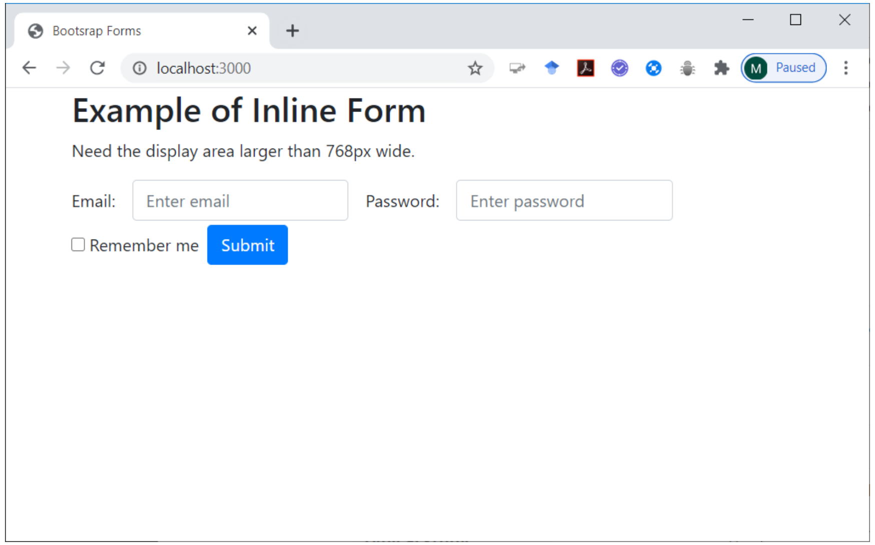
Enter email

Password:

Enter password

□ Remember me

Submit

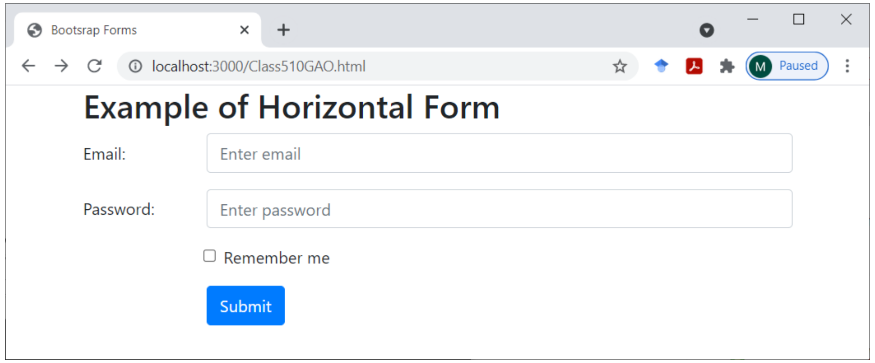


Example of Inline Form

Need the display area larger than 768px wide.

Email: Enter email Password: Enter password

□ Remember me Submit



Example of Horizontal Form

Email: Enter email

Password: Enter password

□ Remember me

Submit

Bootstrap provides three types of form layouts:

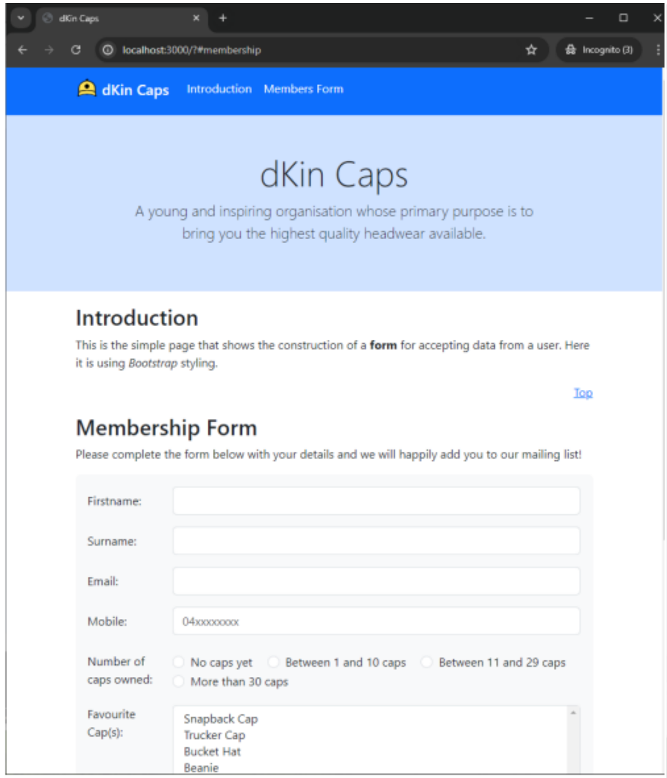
- vertical form (default)
- horizontal form
- inline form.

These are the rules for controlling form layout:

- wrap labels and form controls in <div class="form-group">
- add class .form-control to all textual <input>, <textarea>, and <select> elements.

Ontrack task 5.1P: Create a HTML form web page

- Build a web-form to replicate the the dKin Cap Membership Form shown below. Please use the Bootsratp 5.3.3 components and valid CSS rules to complete this form
- It is important that the form is 'responsive' to the device it is displayed on (i.e., large monitor or small mobile screen) - ensuring the input fields rearrange correctly as the window size is reduced. An example of the form displayed on a smaller screen is shown below.



dKin Caps   Introduction   Members Form

dKin Caps

A young and inspiring organisation whose primary purpose is to bring you the highest quality headwear available.

Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using *Bootstrap* styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:

Surname:

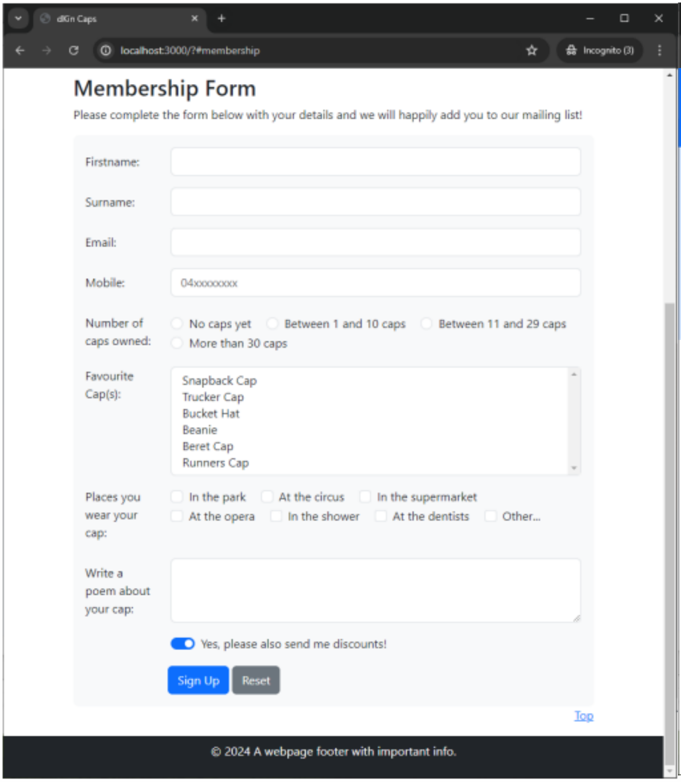
Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s): Snapback Cap / Trucker Cap / Bucket Hat / Beanie

Task5.1.1 dKin Cap Membership Form Start (large window)



Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:

Surname:

Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s): Snapback Cap / Trucker Cap / Bucket Hat / Beanie / Beret Cap / Runners Cap

Places you wear your cap: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem about your cap:

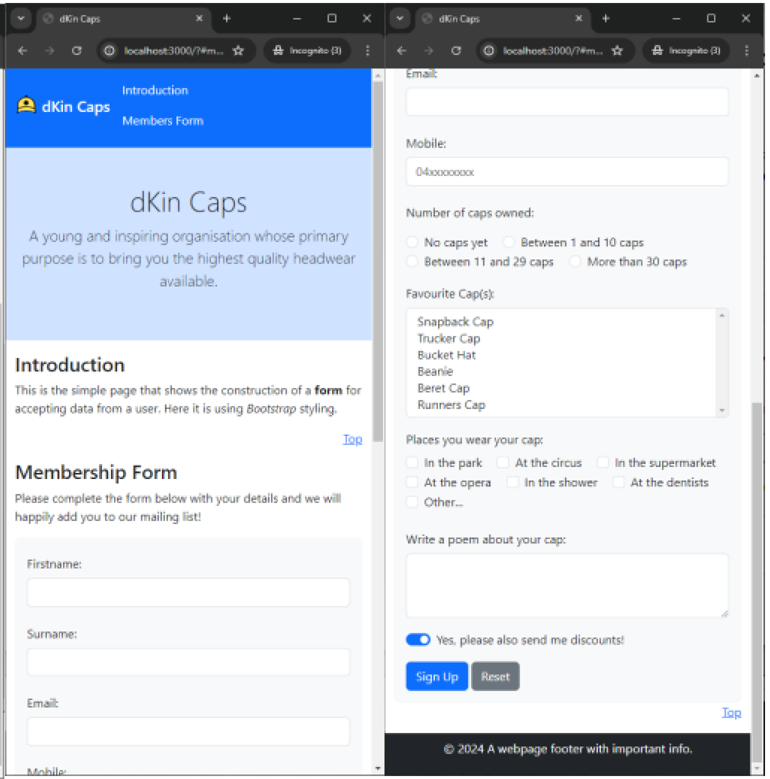
Yes, please also send me discounts!

Sign Up   Reset

Top

© 2024 A webpage footer with important info.

Task5.1.2 dKin Cap Membership Form End (large window)



dKin Caps   Introduction   Members Form

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Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:

Surname:

Email:

Mobile:

Email:

Mobile:

04xxxxxxxx

Number of caps owned:

○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):

Snapback Cap / Trucker Cap / Bucket Hat / Beanie / Beret Cap / Runners Cap

Places you wear your cap:

□ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem about your cap:

Yes, please also send me discounts!

Sign Up   Reset

Top

© 2024 A webpage footer with important info.

Task5.1.2 dKin Cap Membership Form (small window)

Requirements

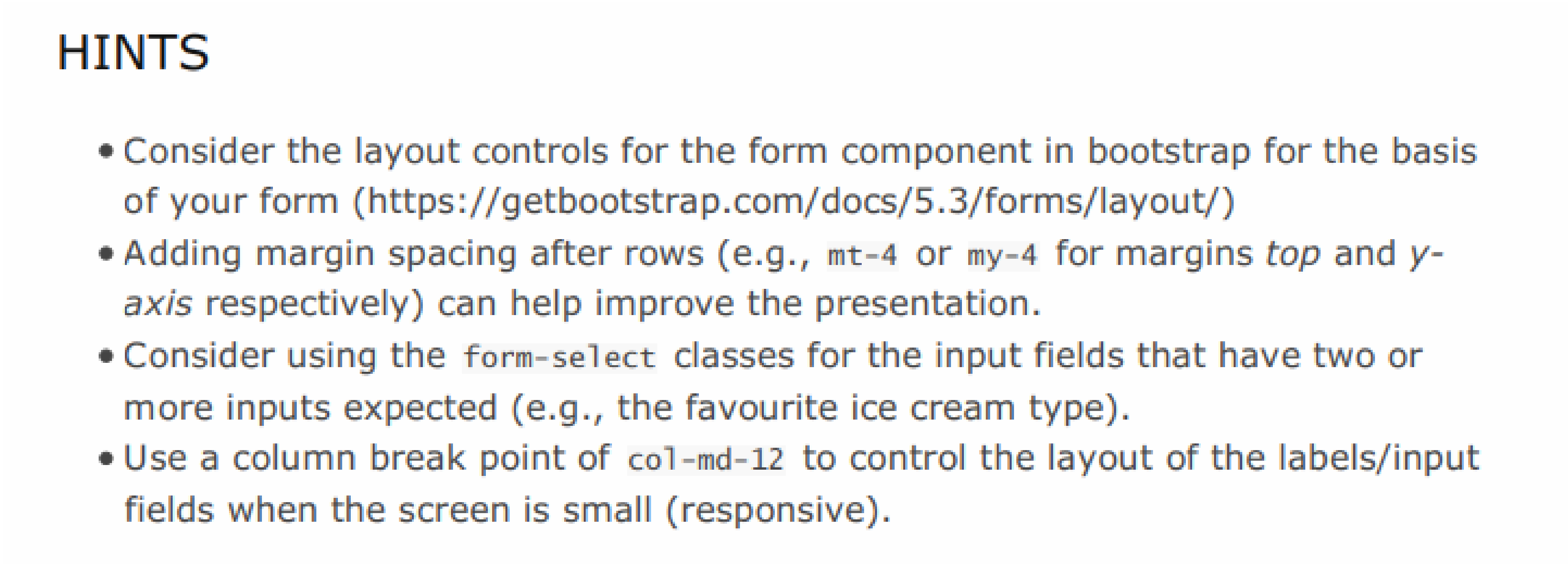
When completing this form, take into account the following requirements:

1. Consider the data being requested for each field and ensure the relevant controls are used. For example,

- the Firstname, Surname Email and Mobile input fields should be required.
- the email address should accept addresses with an __@__
- the phone number field should only accept numbers (10 digits)

2. Ensure **all** required fields are completed before allowing the form to be submitted. [NOTE: The submission/posting of the form contents is not part of this task - We are only expecting the structure/layout/input of the form]

3. Remember the form should be **responsive** and the labels/fields should arrange properly when the screen is reduced to a smaller size.



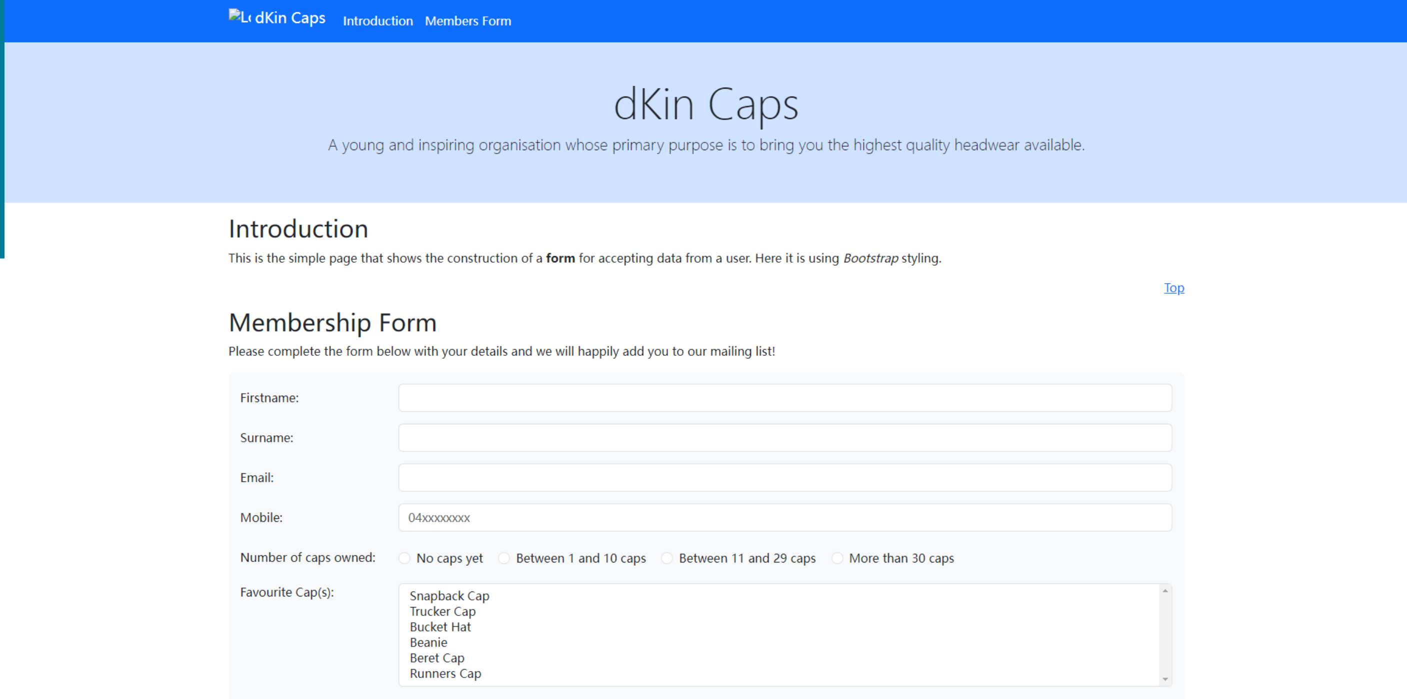
HINTS

- Consider the layout controls for the form component in bootstrap for the basis of your form (https://getbootstrap.com/docs/5.3/forms/layout/)
- Adding margin spacing after rows (e.g., `mt-4` or `my-4` for margins *top* and *y-axis* respectively) can help improve the presentation.
- Consider using the `form-select` classes for the input fields that have two or more inputs expected (e.g., the favourite ice cream type).
- Use a column break point of `col-md-12` to control the layout of the labels/input fields when the screen is small (responsive).

What will you submit?

You should submit:

- Screen-shot of the web page (full sized) showing the form with data entered.
- Screen-shot of the page when on a smaller (mobile) screen size.
- The HTML source code file.



Lı dKin Caps Introduction Members Form

dKin Caps

A young and inspiring organisation whose primary purpose is to bring you the highest quality headwear available.

Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using *Bootstrap* styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:

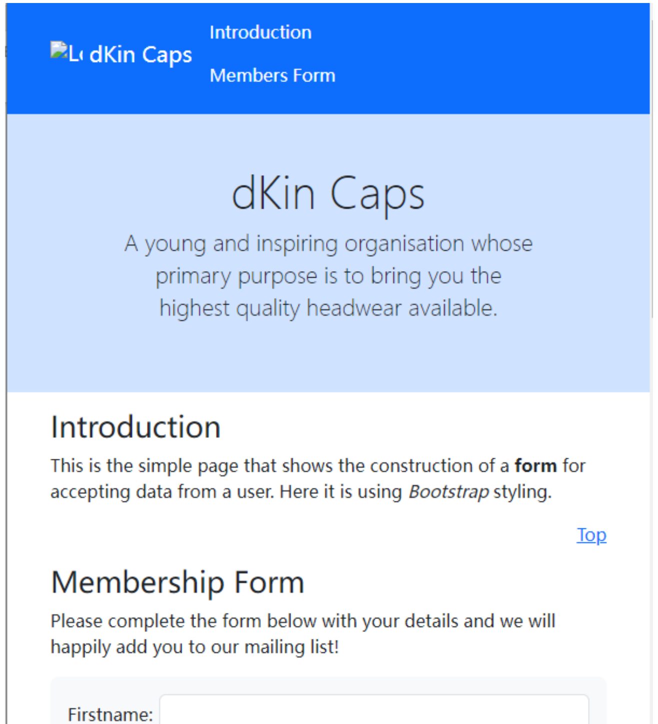
Surname:

Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap



Lı dKin Caps

Introduction

Members Form

dKin Caps

A young and inspiring organisation whose primary purpose is to bring you the highest quality headwear available.

Introduction

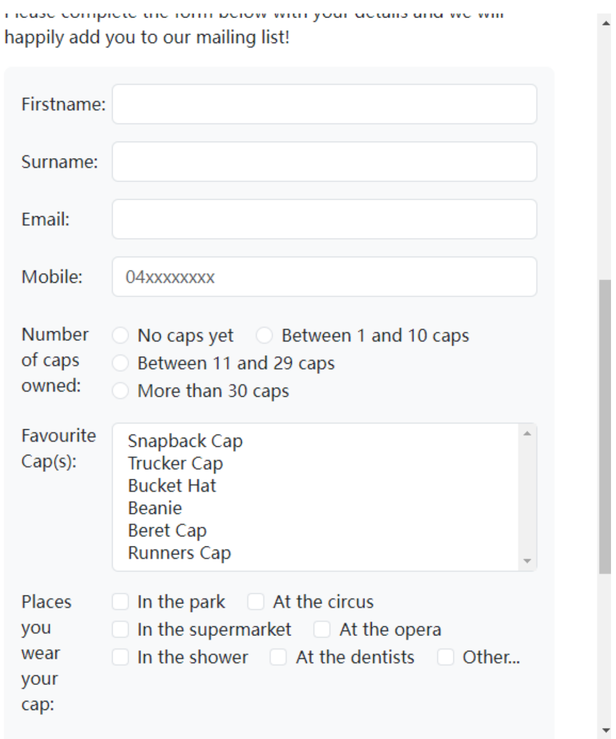
This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using *Bootstrap* styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:



happily add you to our mailing list!

Firstname:

Surname:

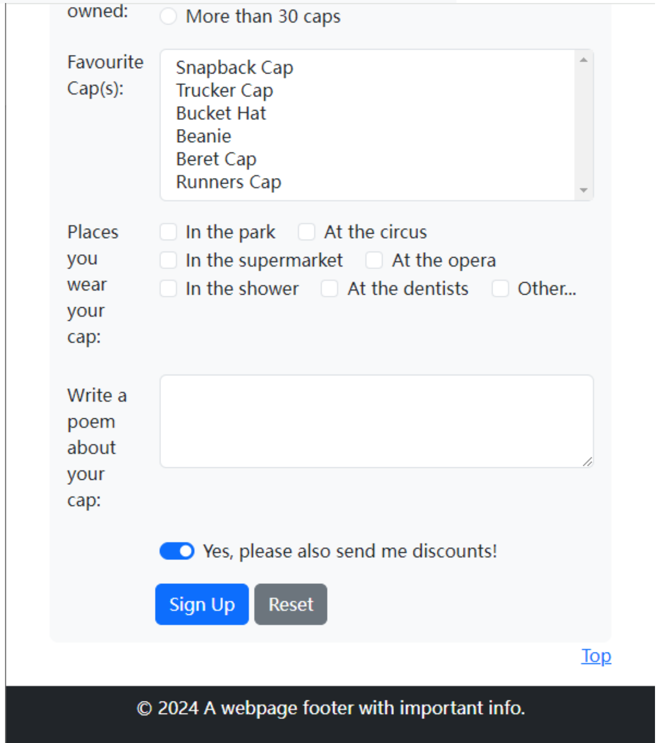
Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap

Places you wear your cap: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...



owned: ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap

Places you wear your cap: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem about your cap:

● Yes, please also send me discounts!

Sign Up Reset

Top

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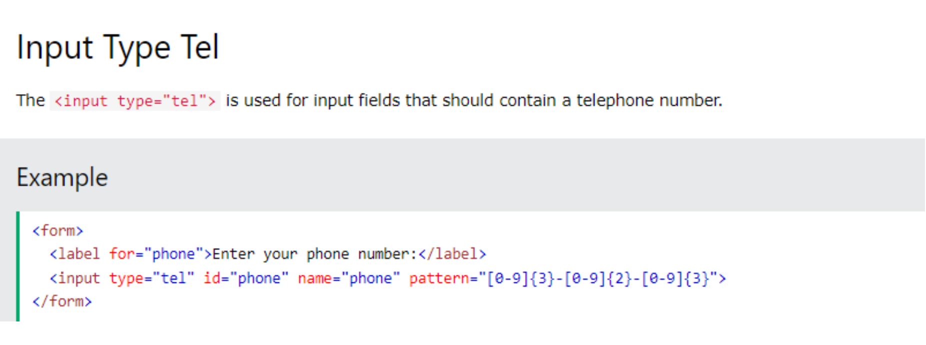
Hints for 5.1

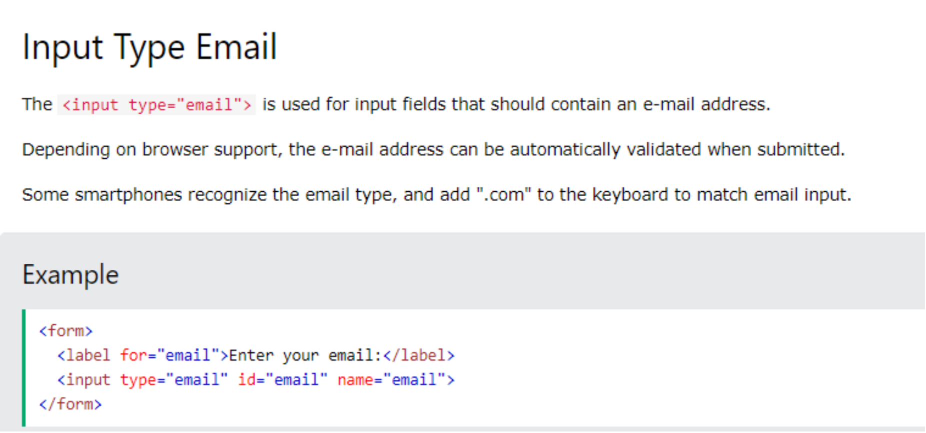


Input Type Tel

The `<input type="tel">` is used for input fields that should contain a telephone number.

Example

```
<form>
  <label for="phone">Enter your phone number:</label>
  <input type="tel" id="phone" name="phone" pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}">
</form>
```



Input Type Email

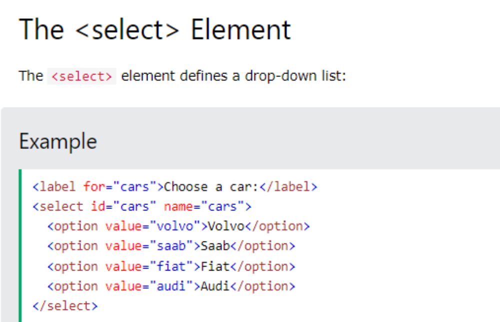
The `<input type="email">` is used for input fields that should contain an e-mail address.

Depending on browser support, the e-mail address can be automatically validated when submitted.

Some smartphones recognize the email type, and add ".com" to the keyboard to match email input.

Example

```
<form>
  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
</form>
```

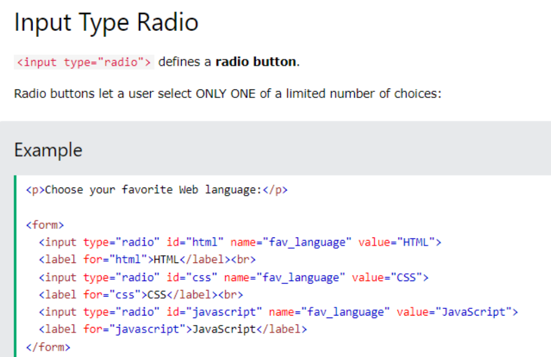


The <select> Element

The `<select>` element defines a drop-down list:

Example

```
<label for="cars">Choose a car:</label>
<select id="cars" name="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```



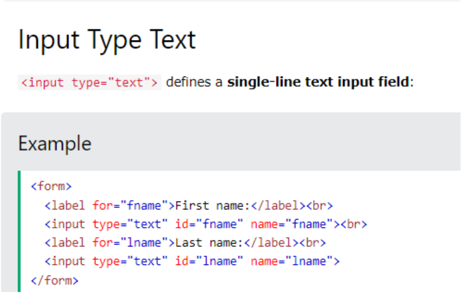
Input Type Radio

`<input type="radio">` defines a **radio button**.

Radio buttons let a user select ONLY ONE of a limited number of choices:

Example

```
<p>Choose your favorite Web language:</p>

<form>
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label>
</form>
```

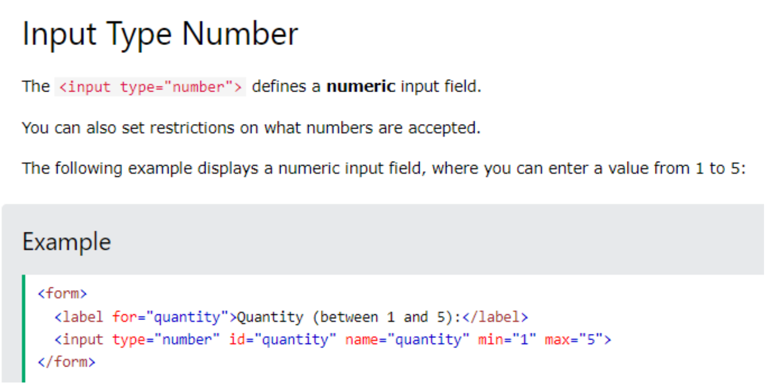


Input Type Text

`<input type="text">` defines a **single-line text input field**:

Example

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
```



Input Type Number

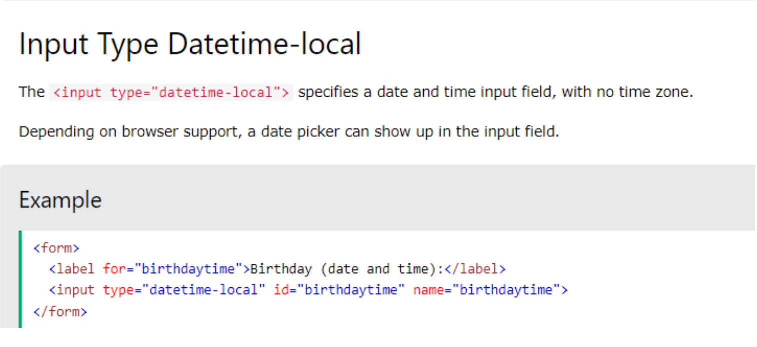
The `<input type="number">` defines a **numeric** input field.

You can also set restrictions on what numbers are accepted.

The following example displays a numeric input field, where you can enter a value from 1 to 5:

Example

```
<form>
  <label for="quantity">Quantity (between 1 and 5):</label>
  <input type="number" id="quantity" name="quantity" min="1" max="5">
</form>
```



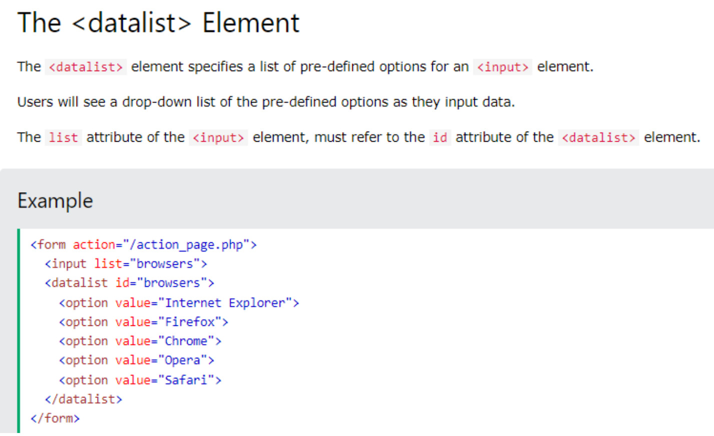
Input Type Datetime-local

The `<input type="datetime-local">` specifies a date and time input field, with no time zone.

Depending on browser support, a date picker can show up in the input field.

Example

```
<form>
  <label for="birthdaytime">Birthday (date and time):</label>
  <input type="datetime-local" id="birthdaytime" name="birthdaytime">
</form>
```



The <datalist> Element

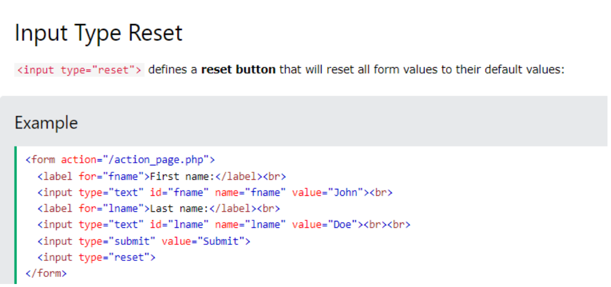
The `<datalist>` element specifies a list of pre-defined options for an `<input>` element.

Users will see a drop-down list of the pre-defined options as they input data.

The `list` attribute of the `<input>` element, must refer to the `id` attribute of the `<datalist>` element.

Example

```
<form action="/action_page.php">
  <input list="browsers">
  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
</form>
```

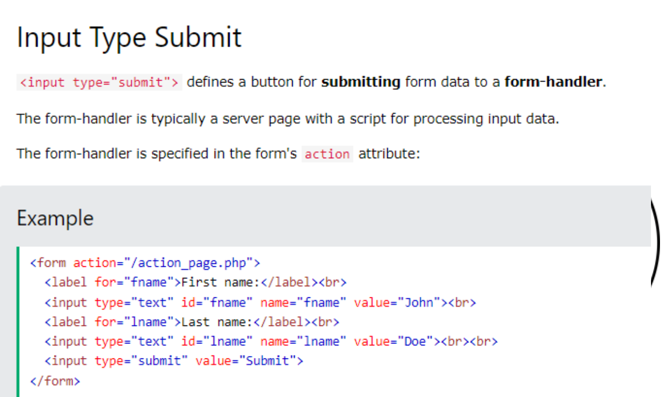


Input Type Reset

`<input type="reset">` defines a **reset button** that will reset all form values to their default values:

Example

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
  <input type="reset">
</form>
```



Input Type Submit

`<input type="submit">` defines a button for **submitting** form data to a **form-handler**.

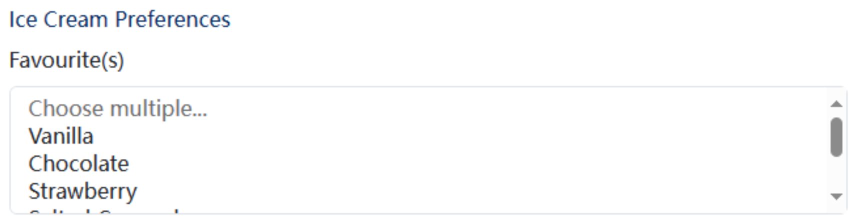
The form-handler is typically a server page with a script for processing input data.

The form-handler is specified in the form's `action` attribute:

Example

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

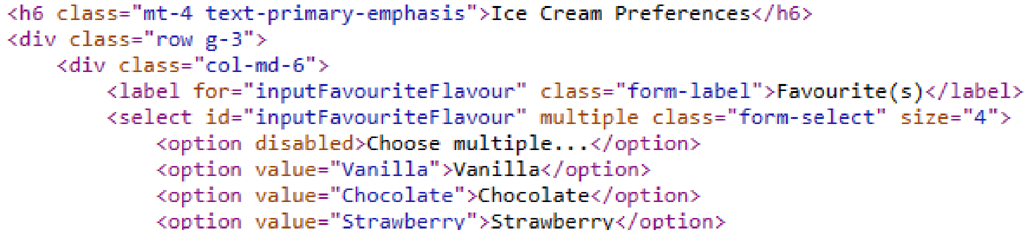
Hints



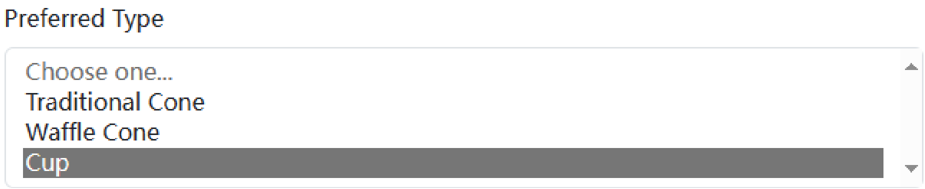
Ice Cream Preferences

Favourite(s)

Choose multiple...
Vanilla
Chocolate
Strawberry

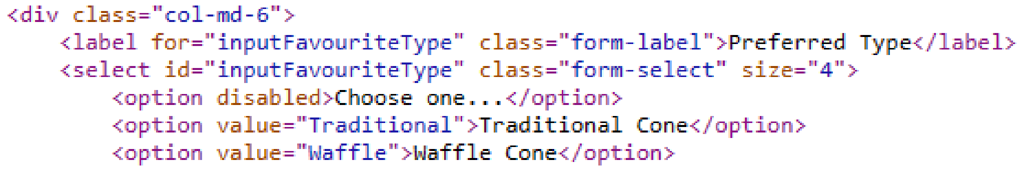


```
<h6 class="mt-4 text-primary-emphasis">Ice Cream Preferences</h6>
<div class="row g-3">
    <div class="col-md-6">
        <label for="inputFavouriteFlavour" class="form-label">Favourite(s)</label>
        <select id="inputFavouriteFlavour" multiple class="form-select" size="4">
            <option disabled>Choose multiple...</option>
            <option value="Vanilla">Vanilla</option>
            <option value="Chocolate">Chocolate</option>
            <option value="Strawberry">Strawberry</option>
```

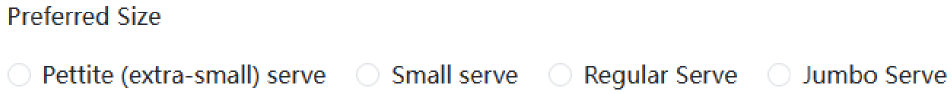


Preferred Type

Choose one...
Traditional Cone
Waffle Cone
Cup

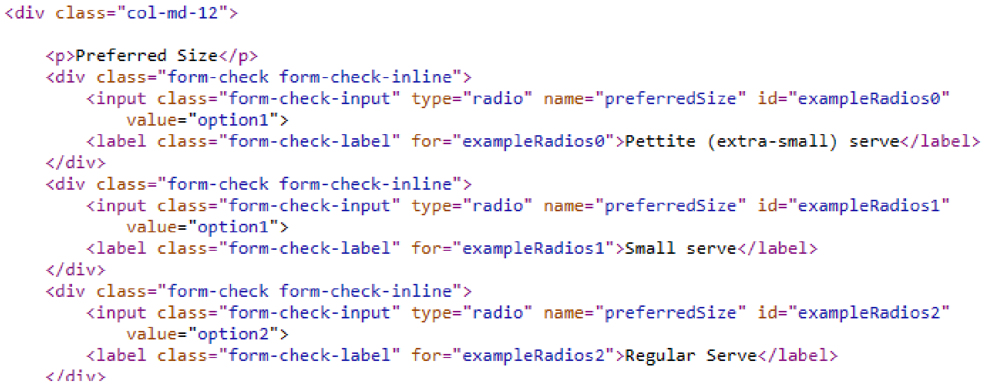


```
<div class="col-md-6">
    <label for="inputFavouriteType" class="form-label">Preferred Type</label>
    <select id="inputFavouriteType" class="form-select" size="4">
        <option disabled>Choose one...</option>
        <option value="Traditional">Traditional Cone</option>
        <option value="Waffle">Waffle Cone</option>
```

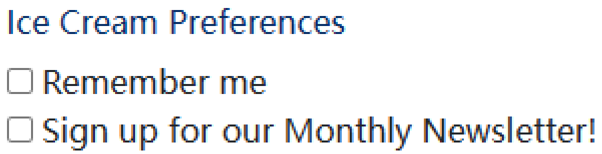


Preferred Size

○ Pettite (extra-small) serve ○ Small serve ○ Regular Serve ○ Jumbo Serve



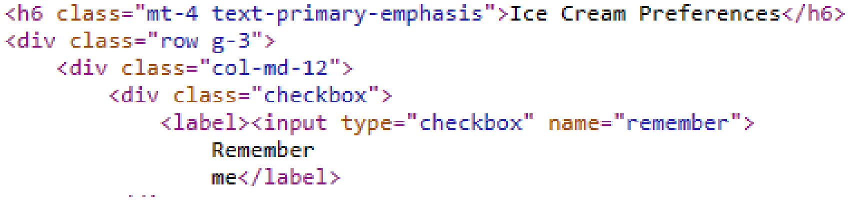
```
<div class="col-md-12">

    <p>Preferred Size</p>
    <div class="form-check form-check-inline">
        <input class="form-check-input" type="radio" name="preferredSize" id="exampleRadios0"
            value="option1">
        <label class="form-check-label" for="exampleRadios0">Pettite (extra-small) serve</label>
    </div>
    <div class="form-check form-check-inline">
        <input class="form-check-input" type="radio" name="preferredSize" id="exampleRadios1"
            value="option1">
        <label class="form-check-label" for="exampleRadios1">Small serve</label>
    </div>
    <div class="form-check form-check-inline">
        <input class="form-check-input" type="radio" name="preferredSize" id="exampleRadios2"
            value="option2">
        <label class="form-check-label" for="exampleRadios2">Regular Serve</label>
    </div>
```



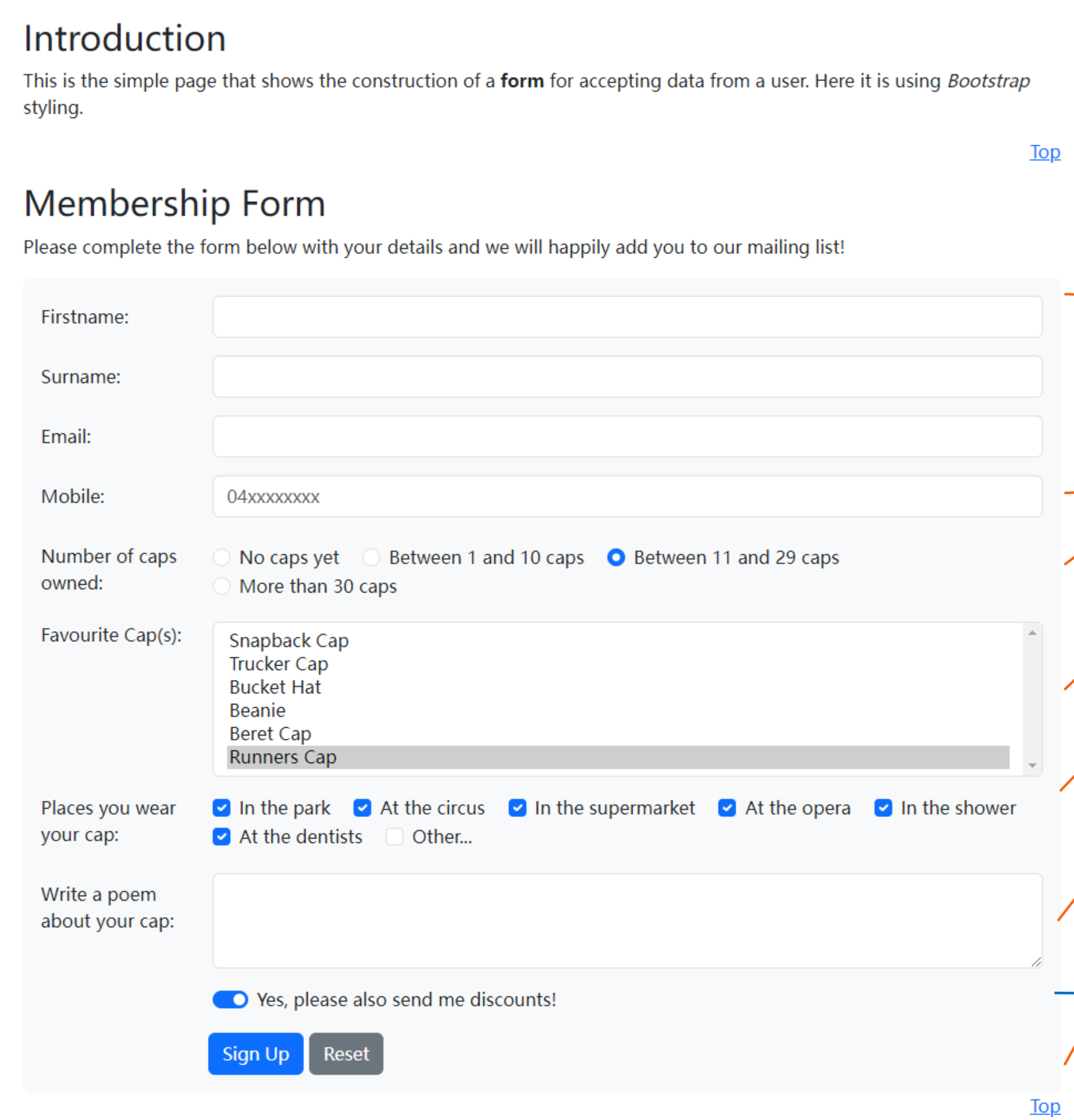
Ice Cream Preferences

□ Remember me

□ Sign up for our Monthly Newsletter!



```
<h6 class="mt-4 text-primary-emphasis">Ice Cream Preferences</h6>
<div class="row g-3">
    <div class="col-md-12">
        <div class="checkbox">
            <label><input type="checkbox" name="remember">
                Remember
                me</label>
```



Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using *Bootstrap* styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname:

Surname:

Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ● Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap

Places you wear your cap: ☑ In the park ☑ At the circus ☑ In the supermarket ☑ At the opera ☑ In the shower ☑ At the dentists ☐ Other...

Write a poem about your cap:

Yes, please also send me discounts!

Top

-`<a href="#">Top</a>`

-Input type : firstname, surname, email, mobile

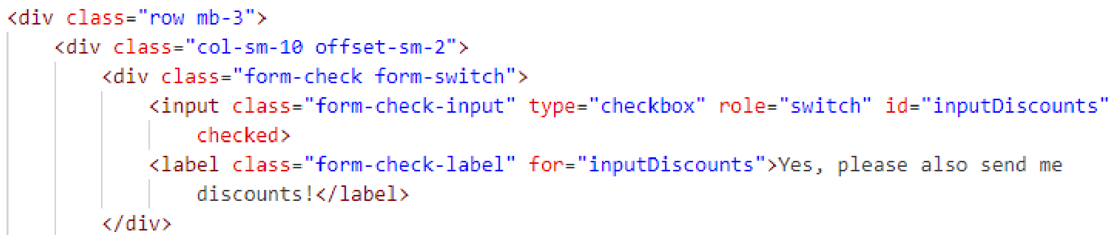
-Input type radio -○

-Dropdown list- select multiple choices

-Input type checkbox -□

-Text area

-Submit /Reset

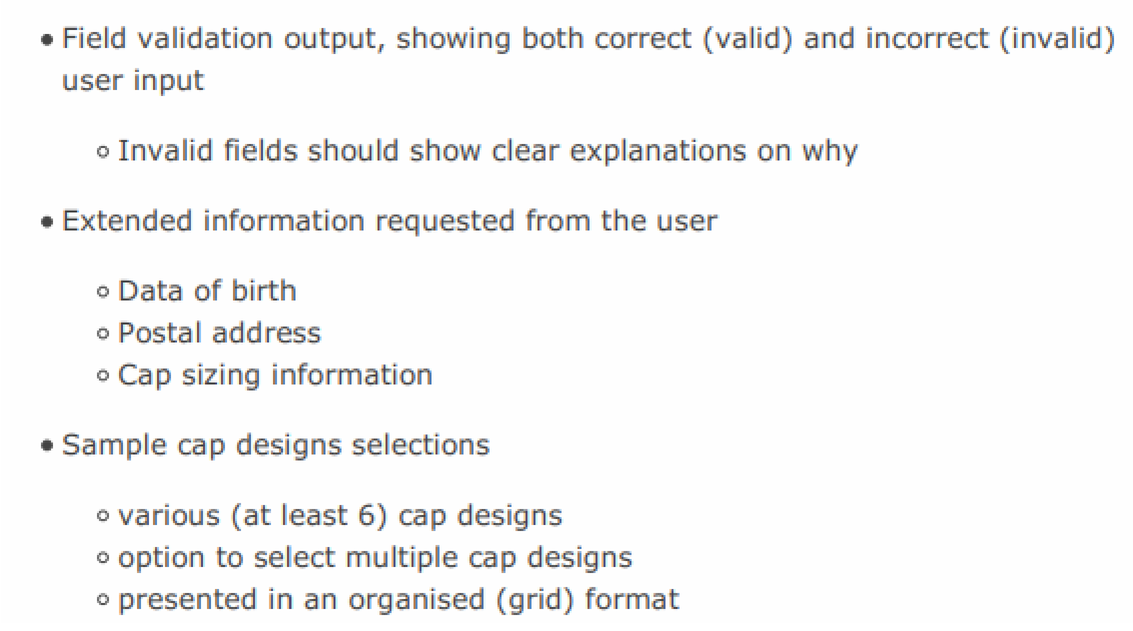


```
<div class="row mb-3">
    <div class="col-sm-10 offset-sm-2">
        <div class="form-check form-switch">
            <input class="form-check-input" type="checkbox" role="switch" id="inputDiscounts"
                checked>
            <label class="form-check-label" for="inputDiscounts">Yes, please also send me
                discounts!</label>
        </div>
```

Ontrack task 5.2C: Create a Form web page from requirements

The dKin Cap business is taking off and you are looking at having an online website where your valued clients can purchase dKin Cap with various and colorful designs.

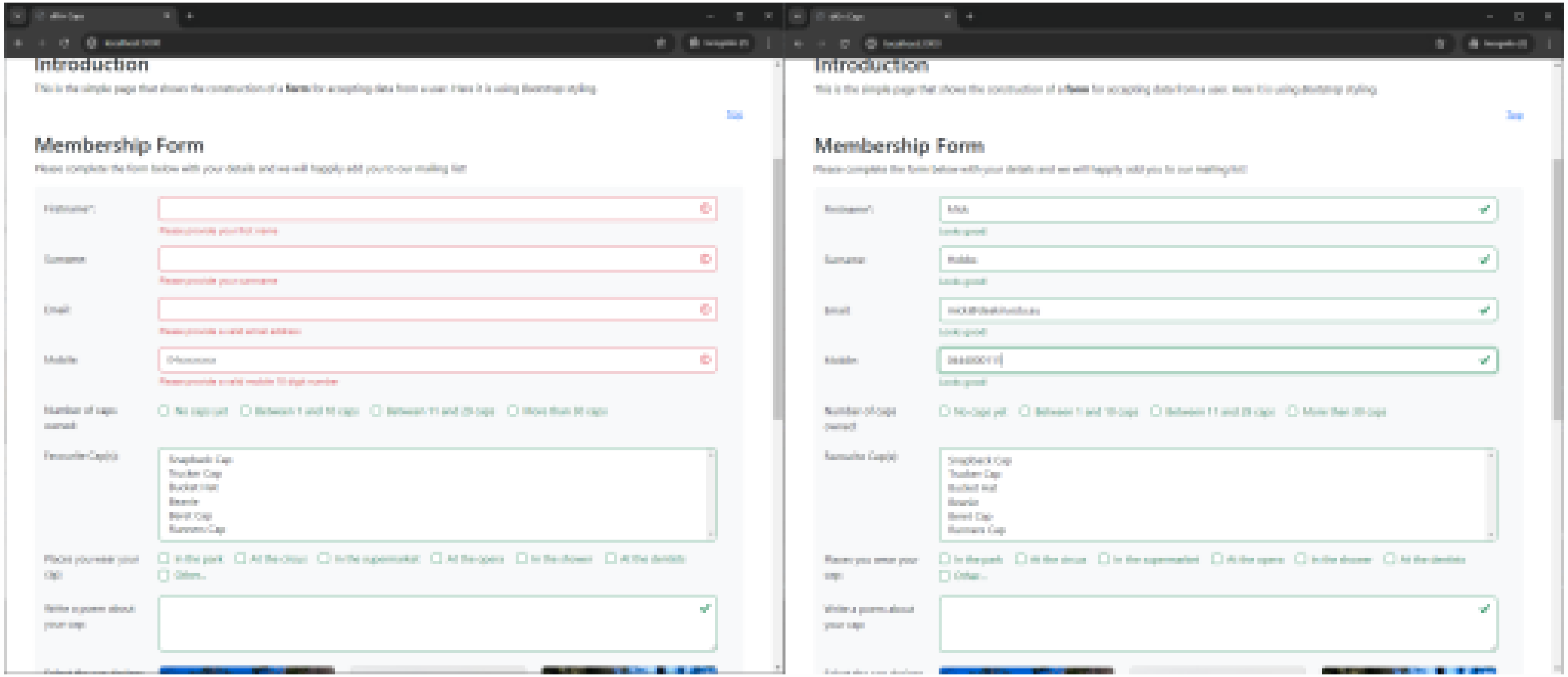
To gauge the interest of cap designs, you have been asked to improve and extend the Membership Form in two ways: adding improved form validation; and to show samples cap designs. Please use your sample form created for Task 5.1P as a starting point. Extend to include the follow:



- Field validation output, showing both correct (valid) and incorrect (invalid) user input
    - Invalid fields should show clear explanations on why
- Extended information requested from the user
    - Data of birth
    - Postal address
    - Cap sizing information
- Sample cap designs selections
    - various (at least 6) cap designs
    - option to select multiple cap designs
    - presented in an organised (grid) format

Requirements:

The user input validation on the form can use the Bootstrap components, Boostrap Custom Validation Styles with an example of the possible out shown below (NOTE: You will need to also add the JavaScript code block shown in the Bootstrap example to the end of your section of your page):



Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using Bootstrap styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname*:
Please provide your first name

Surname:
Please provide your surname

Email:
Please provide a valid email address

Mobile: 04xxxxxxxx
Please provide a valid mobile 10 digit number

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 20 caps ○ More than 20 caps

Favourite Cap(s): Snapback Cap, Trucker Cap, Bucket Hat, Beanie, Beret Cap, Runners Cap

Places you wear your cap: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem about your caps: ✓

Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using Bootstrap styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname*: [illegible] ✓
Looks good!

Surname: [illegible] ✓
Looks good!

Email: [illegible] ✓
Looks good!

Mobile: [illegible] ✓
Looks good!

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 20 caps ○ More than 20 caps

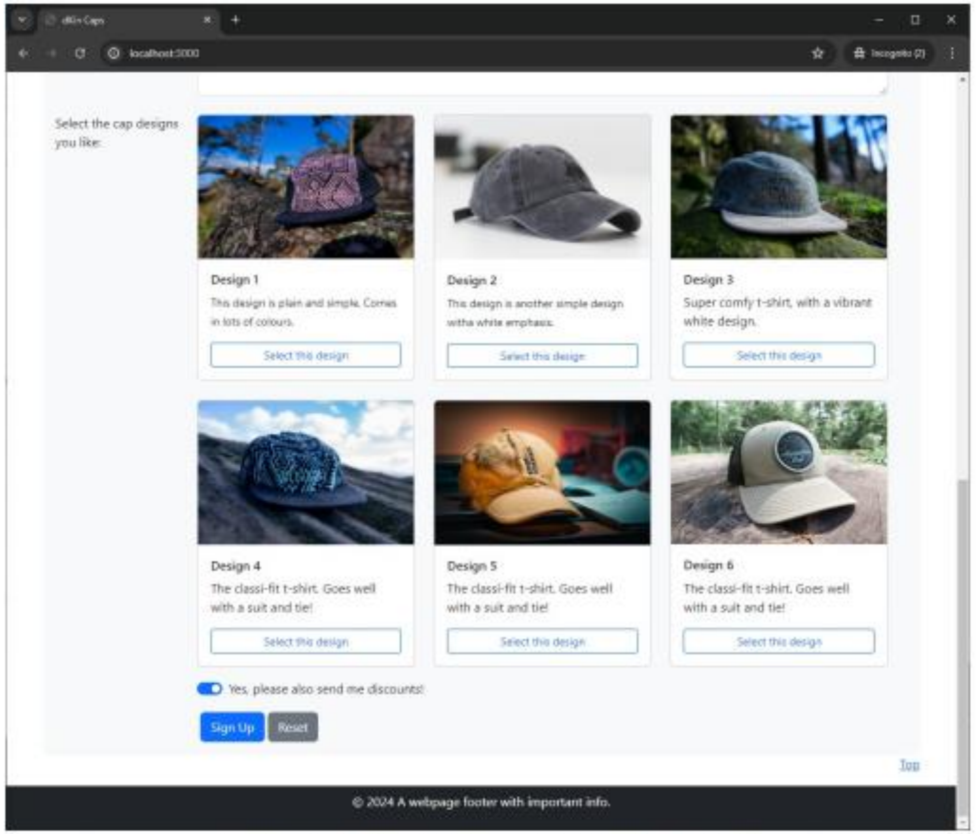
Favourite Cap(s): Snapback Cap, Trucker Cap, Bucket Hat, Beanie, Beret Cap, Runners Cap

Places you wear your cap: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem about your caps: ✓

Task5.2.1 Feild Validation Examples

In presenting the customer with the various cap designs, consider using an interesting/user-friendly way of selecting cap designs. Below is one possible layout using Boostrap Cards:



Select the cap designs you like:

Design 1
This design is plain and simple. Comes in lots of colours.

Design 2
This design is another simple design witha white emphasis.

Design 3
Super comfy t-shirt, with a vibrant white design.

Design 4
The classi-fit t-shirt. Goes well with a suit and tie!

Design 5
The classi-fit t-shirt. Goes well with a suit and tie!

Design 6
The classi-fit t-shirt. Goes well with a suit and tie!

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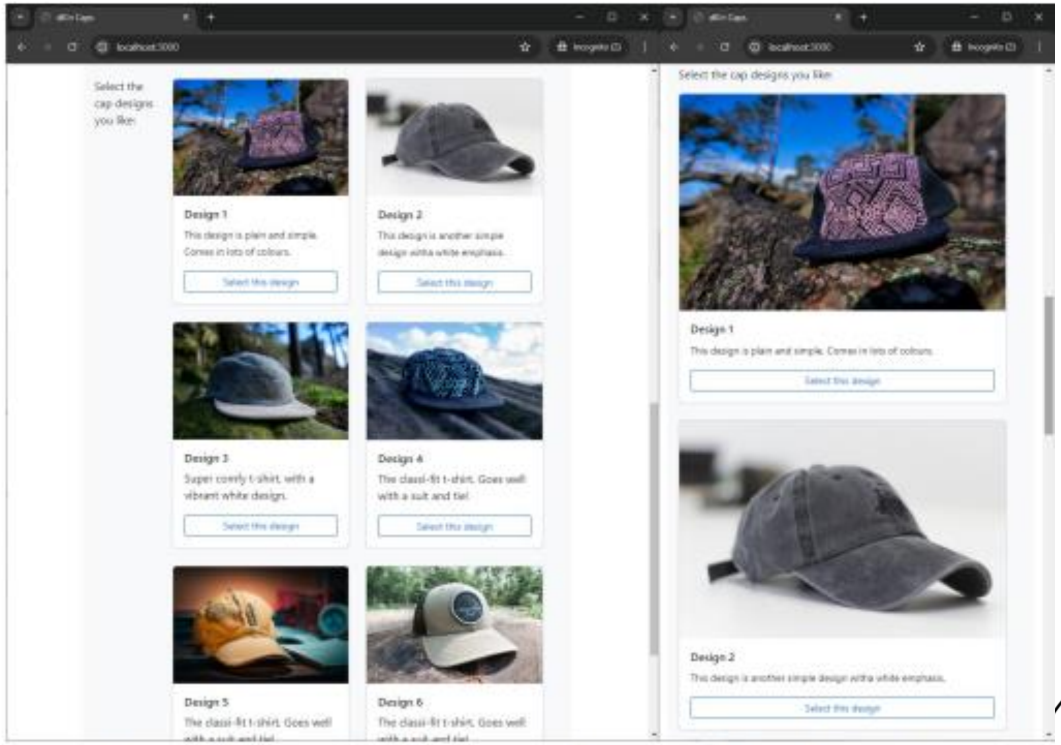
Task5.2.1 Sample Cap Design Selection

Making sure the web page is also usable on smaller sized screens, the cards should arrange themselves accordingly (here it is 3 columns on larger screens, 2 columns on mid-sized screens and a single column on small/mobile screens)



Select the cap designs you like:

Design 1
This design is plain and simple. Comes in lots of colours.

Design 2
This design is another simple design witha white emphasis.

Design 3
Super comfy t-shirt, with a vibrant white design.

Design 4
The classi-fit t-shirt. Goes well with a suit and tie!

Design 5
The classi-fit t-shirt. Goes well with a suit and tie!

Design 6
The classi-fit t-shirt. Goes well with a suit and tie!

Select the cap designs you like:

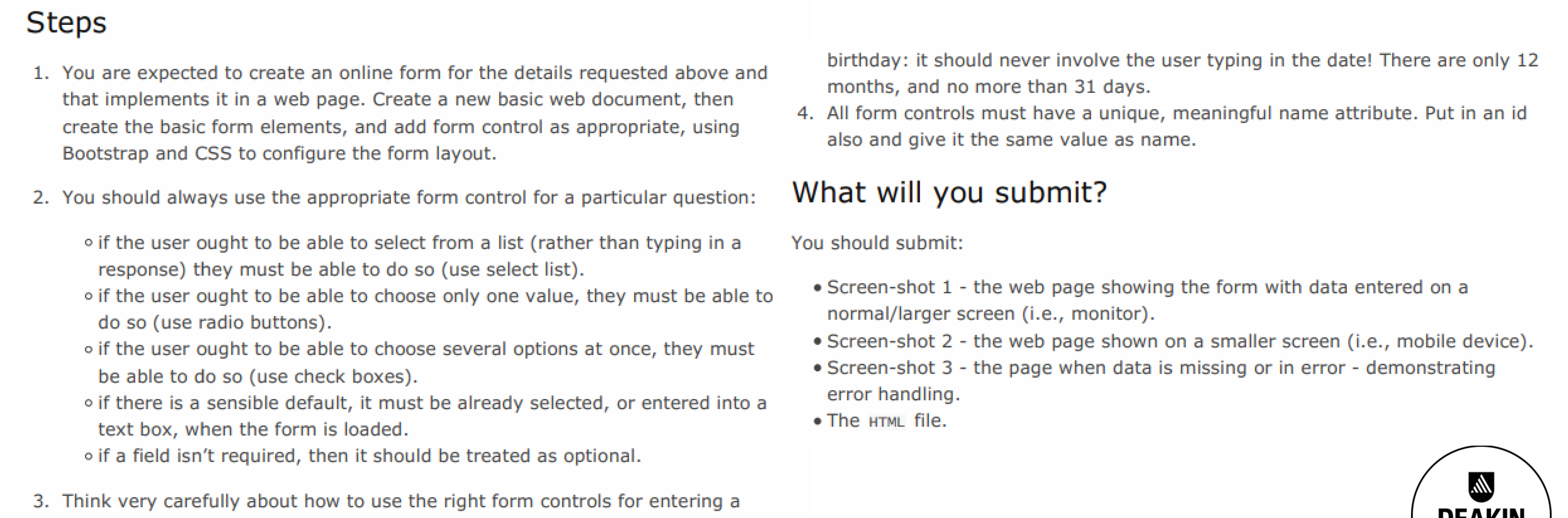
Design 1
This design is plain and simple. Comes in lots of colours.

Design 2
This design is another simple design witha white emphasis.

Task5.2.2 dKin Cap Design Selection (small sized screens)

Requirements:

Your goal is to present this form in a way that is clear and easy to use - regardless of the device on which it is being displayed (i.e., responsive). You can reorganise the fields or change what is being asked, as the above list is just a starting point.



Steps

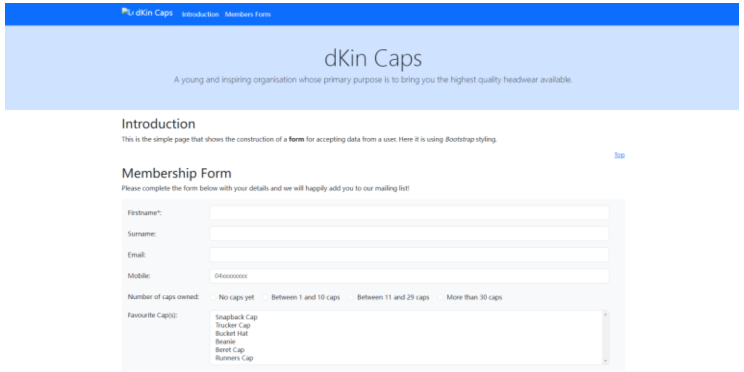
1. You are expected to create an online form for the details requested above and that implements it in a web page. Create a new basic web document, then create the basic form elements, and add form control as appropriate, using Bootstrap and CSS to configure the form layout.
2. You should always use the appropriate form control for a particular question:
   - if the user ought to be able to select from a list (rather than typing in a response) they must be able to do so (use select list).
   - if the user ought to be able to choose only one value, they must be able to do so (use radio buttons).
   - if the user ought to be able to choose several options at once, they must be able to do so (use check boxes).
   - if there is a sensible default, it must be already selected, or entered into a text box, when the form is loaded.
   - if a field isn't required, then it should be treated as optional.
3. Think very carefully about how to use the right form controls for entering a birthday: it should never involve the user typing in the date! There are only 12 months, and no more than 31 days.
4. All form controls must have a unique, meaningful name attribute. Put in an id also and give it the same value as name.

What will you submit?

You should submit:

- Screen-shot 1 - the web page showing the form with data entered on a normal/larger screen (i.e., monitor).
- Screen-shot 2 - the web page shown on a smaller screen (i.e., mobile device).
- Screen-shot 3 - the page when data is missing or in error - demonstrating error handling.
- The HTML file.

What will you submit?


dKin Caps Introduction Members Form

dKin Caps

A young and inspiring organisation whose primary purpose is to bring you the highest quality headwear available.

Introduction

This is the simple page that shows the construction of a **form** for accepting data from a user. Here it is using *Bootstrap* styling.

Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname*:

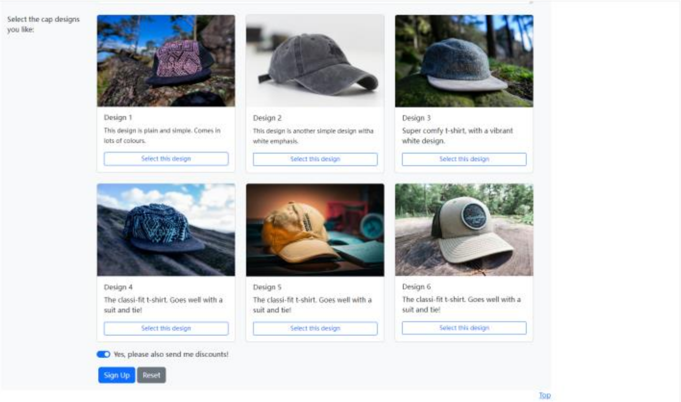
Surname:

Email:

Mobile: 04xxxxxxxx

Number of caps owned: ○ No caps yet ○ Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap


Select the cap designs you like:

Design 1
This design is plain and simple. Comes in lots of colours.
Select this design

Design 2
This design is another simple design witha white emphasis.
Select this design

Design 3
Super comfy t-shirt, with a vibrant white design.
Select this design

Design 4
The classi-fit t-shirt. Goes well with a suit and tie!
Select this design

Design 5
The classi-fit t-shirt. Goes well with a suit and tie!
Select this design

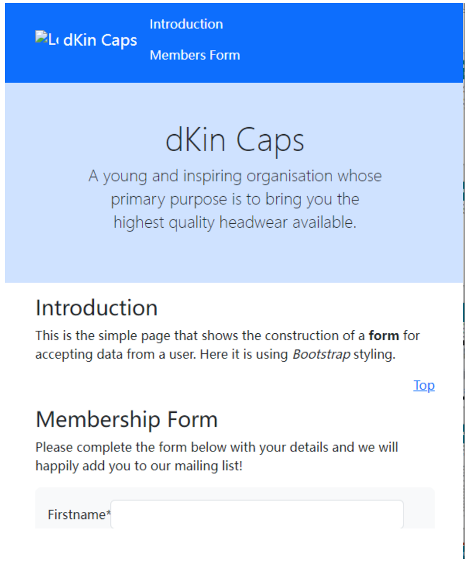
Design 6
The classi-fit t-shirt. Goes well with a suit and tie!
Select this design

Yes, please also send me discounts!

Sign Up Reset

Top

- the web page showing the form with data entered on a normal/larger screen (i.e., monitor).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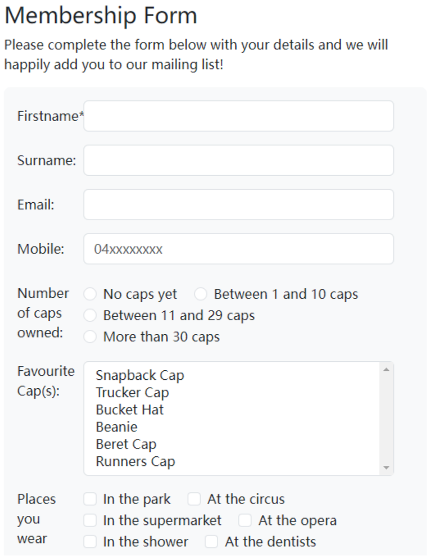
Membership Form

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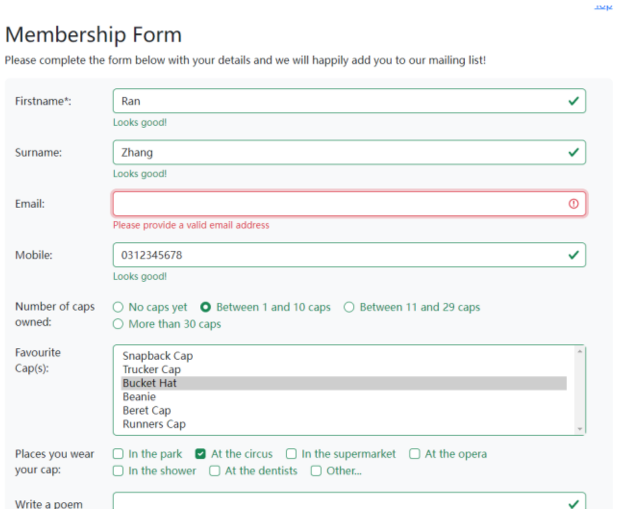
Beret Cap
Runners Cap

Places you wear: □ In the park □ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists

- the web page shown on a smaller screen (i.e., mobile device)


Top

Membership Form

Please complete the form below with your details and we will happily add you to our mailing list!

Firstname*: Ran ✓
Looks good!

Surname: Zhang ✓
Looks good!

Email:
Please provide a valid email address

Mobile: 0312345678 ✓
Looks good!

Number of caps owned: ○ No caps yet ● Between 1 and 10 caps ○ Between 11 and 29 caps ○ More than 30 caps

Favourite Cap(s):
Snapback Cap
Trucker Cap
Bucket Hat
Beanie
Beret Cap
Runners Cap

Places you wear your cap: □ In the park ☑ At the circus □ In the supermarket □ At the opera □ In the shower □ At the dentists □ Other...

Write a poem ✓

- the page when data is missing or in error - demonstrating error handling.

Ontrack task 5.3D: Website project (Part 1 of 3): specification, design and draft

- The final website is required to use HTML5, CSS, Bootstrap, JavaScript and NodeJS properly.
- All web pages on the website need to be hyperlinked properly with the corresponding functionalities, and consistent in style.
- The website must have a Home page, from which users can access the information and functionalities of this online business.
- The website must provide necessary information about the products/services of the business, and other related information such as history, aims, news etc.
- The website must provide a search input function to enable users to search for products/services.
- The website must provide an input section or query function to enable users to send queries/feedback to the website.
- The website must provide contact information, such as postal address, map, phone number, email address, and working hours.

The quality of the website is assessed based on:

- Techniques are used properly and professionally,
  such as using images, lists, tables, colours, forms, CSS, Bootstrap, JavaScript and database.
- Functionalities are implemented and work correctly.

Hints

- **The home page could include the following information**

  -A brief introduction to the background, purposes and functionalities of the website.

  -Latest news and events.

  -Other information or resources that you think are attractive to users(e.g supporting images, quotations).
- **Search can be based on single criterion or multiple criteria.**
- **Query function should provide a form for users to send queries.**

  The form should include relevant fields for users to provide their contact details(e.g. name, email and phone number). There should be a field for users to enter their query.
- **Appropriate form validation should be implemented using JavaScript when the query form is to be submitted.**

  The form validation must include the following checks:

  -All required fields are not blank.

  -Email address should be in email format (e.g., should contain “@” or other patterns).

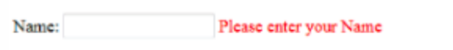
  -Phone number must be digits and should not exceed a maximum length.

  -Any other checks that you believe are necessary for the website running.

  -If the validation fails: The form should not be submitted;

  -An error needs to be generated using JavaScript;

  -An appropriate error message should appear on the webpage (it should not be a pop-up message).
- **When a query form is submitted, the form data should be stored in a database, in an appropriate database table.**
- **There should be a way for the administrator to view received queries.**

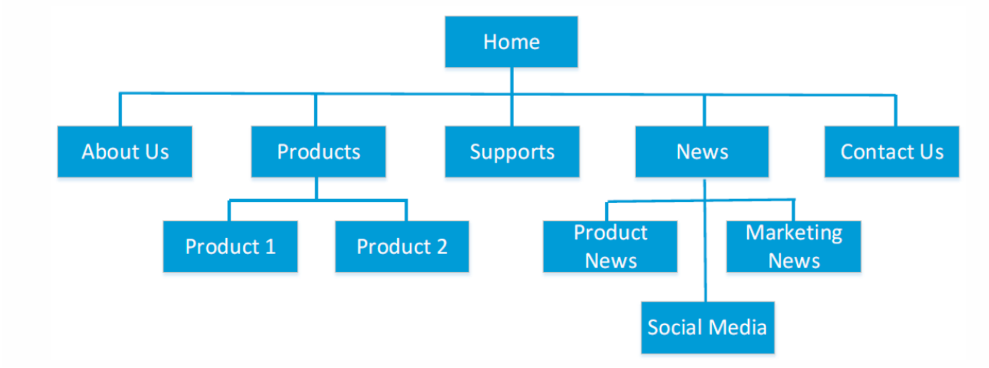


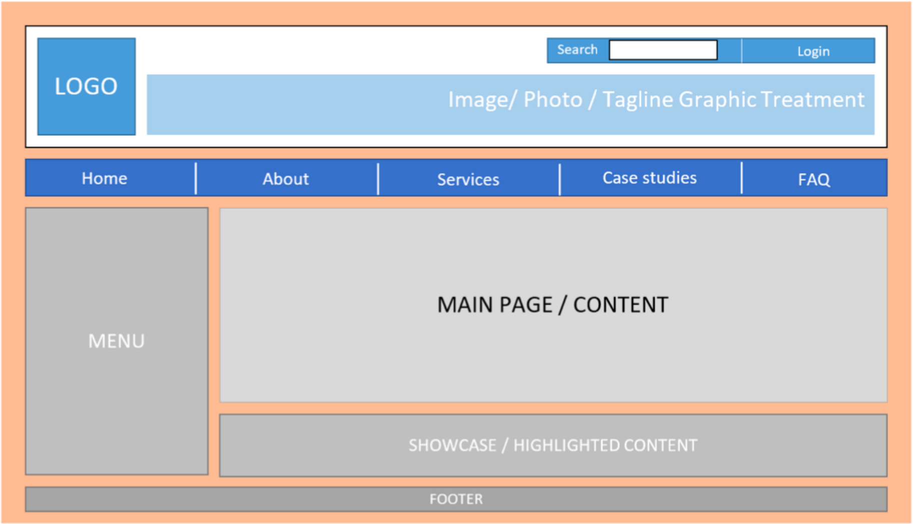
Name: Please enter your Name

Task5.3.1 Error Notice

Website Design

- Identify two or three website examples that you are using for inspiration towards the design of your website. Highlight the features/layout/styles in these sample webpages that interest you, and explain why they are of interest.
- Draw a site map to present the designed structure of your website, and briefly describe the purpose of the website and the content of each page. A site map depicts web pages, as well as their relationships, on a website. A site map example is as follow.





Task5.3.3 Wireframe Example

- For each web page of your website, create a wireframe to depict the layout of the page content, including interface elements and navigational systems, to best accomplish a particular purpose of the page.

An example of a web page wireframe is as above (yours may be structured differently, but it is the box outline of the structure that is important).

- A wireframe can be produced by means of a broad array of software applications, such as MS Visio, Lucidchart, Word or other free applications on the Internet.

Requirements

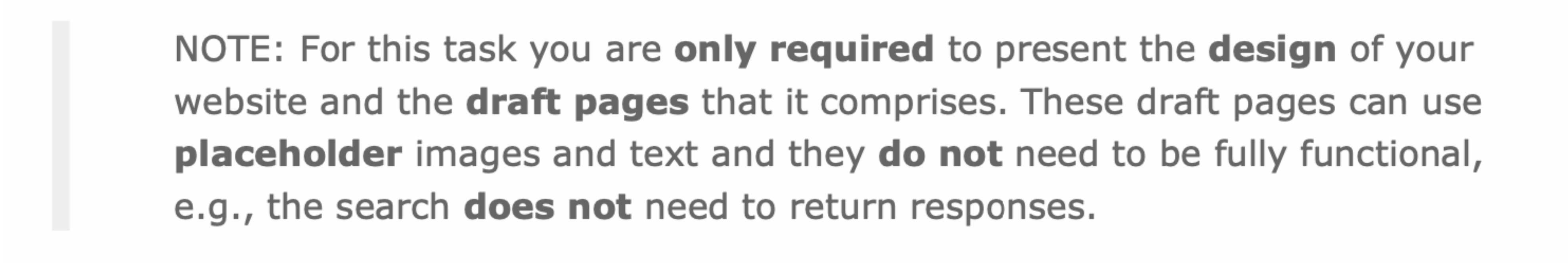
Based on the site map and web page wireframes of your business website, you are expected to finish the following tasks:

- For each web page in the site map, design hyperlinks that enable the user to navigate from the page to other pages. Some design questions should be answered, such as:

  -Where are the hyperlinks placed?

  -How to create links, via text or images?

  Consider to use HTML5 structural elements to configure your web page structures.
- Use the techniques learnt up to now, such as images, tables, forms, CSS and Bootstrap, to create the draft web pages of your website, providing information as much as you can at this stage in the web pages.
- Use the learnt HTML coding techniques to present the page content in a professional way and make the web pages readable and understandable.
- Add proper comments to improve the readability of the HTML source code.
- Save the HTML documents and open them in a web browser (e.g., Firefox or Internet Explorer) to check whether the page content is correct and rendered as what you expect.
- These draft web pages are to be improved with the progress of your unit study.



> NOTE: For this task you are **only required** to present the **design** of your website and the **draft pages** that it comprises. These draft pages can use **placeholder** images and text and they **do not** need to be fully functional, e.g., the search **does not** need to return responses.

What will you submit?

You should submit:

- A PDF file that contains the outcomes of the above three Website Design tasks.

- A PDF file that contains the screenshots of all draft web pages shown in a web browser.

- A PDF file that contains the html/css/JS code of all draft web pages

(NOTE: Given there may/will be multiple HTML files, we are asking for these to be combined in the one PDF document for submission).

Examples:

Inspiration

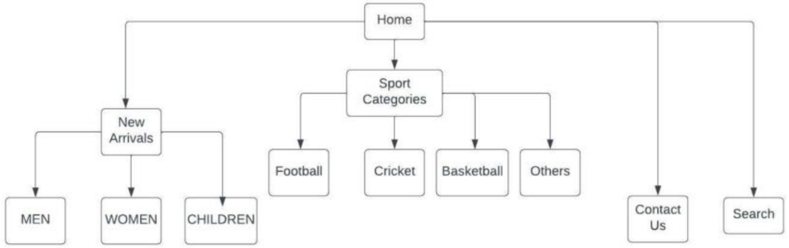
The website project that I am interested in building is an online sport shoe ordering system. For this system, I went through the pages of different websites to take a reference such as Nike, puma, adidas, new balance among others. These websites have a similar design with a few changes. Nike consists of a video carousel to show its flagship product at front. The navigation bar consists of logo, cart, search, and hamburger icon. It consists of cards and footer and the whole webpage is user friendly. Similarly, adidas has also similar design with a drop-down button associated in the body section. Puma and new balance have similar designs as the other with few styling and layout changes.

Link to the websites:

1. Nike: www.nike.com.au
2. Adidas: www.adidas.com.au
3. Puma: www.puma.com.au
4. New balance: www.newbalance.com.au

I have titled my website as Deakin Sport Collection.

Site Map



Home

New Arrivals

MEN

WOMEN

CHILDREN

Sport Categories

Football

Cricket

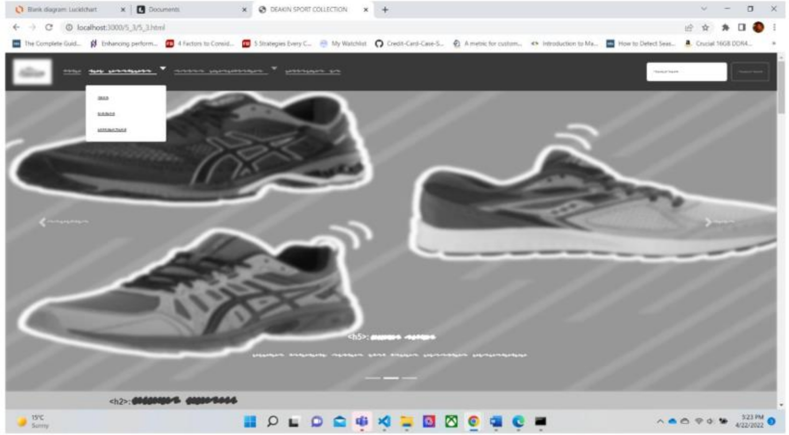
Basketball

Others

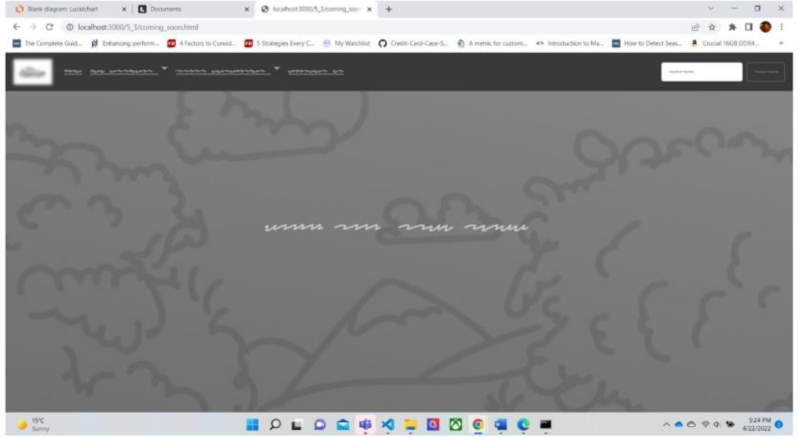
Contact Us

Search

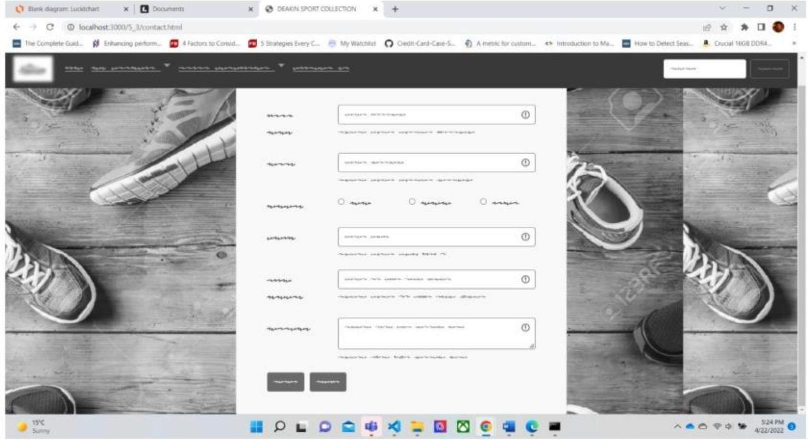
1. Home Page Wireframe:



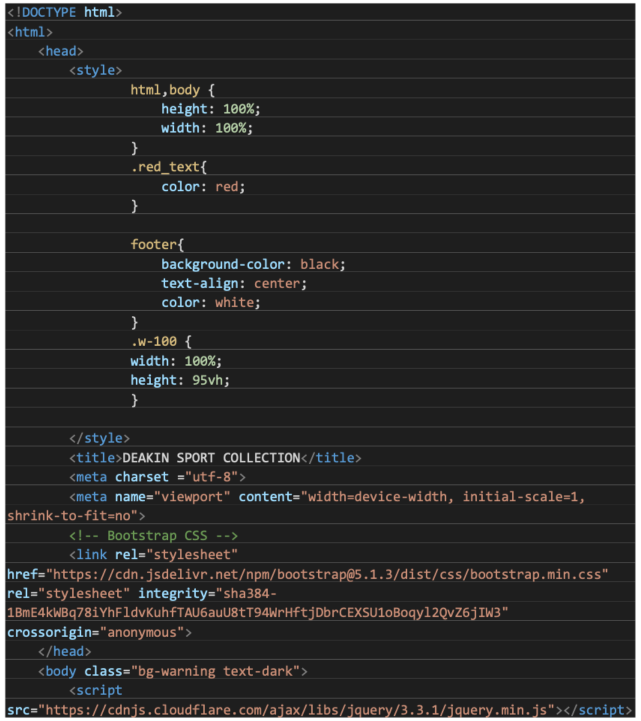
2. Maintenance page Wireframe:


Blank diagram: Lucidchart
Documents
localhost:3000/5_3/coming_soon.html

3. Contact Details Wireframe:



Home Page Source Code



```
<!DOCTYPE html>
<html>
    <head>
        <style>
                html,body {
                    height: 100%;
                    width: 100%;
                }
                .red_text{
                    color: red;
                }

                footer{
                    background-color: black;
                    text-align: center;
                    color: white;
                }
                .w-100 {
                width: 100%;
                height: 95vh;
                }

        </style>
        <title>DEAKIN SPORT COLLECTION</title>
        <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://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
crossorigin="anonymous">
    </head>
    <body class="bg-warning text-dark">
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
```

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