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# Brief description of program

Use JavaScript and HTML to provide an interface and input validation for a user, requiring input of First Name, Surname, Email Address, and providing drop-down menus to allow input of Date of Birth and Favourite Sport.

# Design description

I have a simple form asking for user first name, surname and email with auto-validated inputs. This mean that all three fields are marked as ‘required’, preventing a user leaving them blank. The email field is of type ‘email’, so HTML automatically requires the user to enter ‘something@somethingelse’.

The remaining inputs are validated by virtue of all being drop-down menus, therefore I can control all the available inputs, and the user can only choose from valid data.

All of the drop-down menus are populated using JavaScript. The Month and Sport drop-downs are populated from an array, the year drop-down is populated using a min and max year, and the day is populated depending on the month.

I have chosen to use JavaScript and <select><option> tags to create date input, as I have read that the input type ‘date’ does not work with Firefox and earlier versions of Internet Explorer; it was also an interesting challenge to attempt.

The JavaScript is included from an external file; this is done so at the bottom of the body to improve the load time of the page’s visuals.

I have also constructed a small amount of css to improve the look of the page; this is included from an external file.

# Source code

## index.html:

<!DOCTYPE html>

<html>

<head>

<link rel = "stylesheet" type = "text/css" href = "index.css">

<title>ICT373 - Question 1</title>

</head>

<body>

<h2>Sports Register</h2>

<form id = "form" method = "post" action = "http://www.it.murdoch.edu.au/cgi-bin/reply1.pl">

First Name:<br>

<input type = "text" name = "firstname" placeholder = "First Name..." required><br>

Surname:<br>

<input type = "text" name = "surname" placeholder = "Last Name..." required><br>

Email:<br>

<input type = "email" name = "email" placeholder = "Email..." required><br>

Birth Date:<br>

<select name = "day" id = 'day'>

</select>

<select name = "month" id = 'month' onChange="changeMonth(this.selectedIndex);">

</select>

<select name = "year" id = 'year'>

</select><br>

Favourite Sport:<br>

<select name = "sport" id = 'sport'>

</select><br>

<input type = "submit">

</form>

<script src = "selectFiller.js"></script>

</body>

</html>

## selectFiller.js

var months = ["January", "February", "March", "April", "May", "June",

"July", "August", "September", "October", "November", "December"];

var sports = ["Athletics", "Basketball", "Cricket", "Football", "Hockey", "Swimming", "Tennis"];

var currMonth = "January";

var minYear = 1950;

var maxYear = 2017;

var daySel = document.getElementById('day');

var monSel = document.getElementById('month');

var yeaSel = document.getElementById('year');

var spoSel = document.getElementById('sport');

for (var i = 0; i < months.length; i++)

{

var opt = document.createElement('option');

opt.innerHTML = months[i];

opt.value = months[i];

monSel.appendChild(opt);

}

for (var i = minYear; i <= maxYear; i++)

{

var opt = document.createElement('option');

opt.innerHTML = i;

opt.value = i;

yeaSel.appendChild(opt);

}

for (var d = 1; d <= 31; d++)

{

var opt = document.createElement('option');

opt.innerHTML = d;

opt.value = d;

daySel.appendChild(opt);

}

for (var s = 0; s < sports.length; s++)

{

var opt = document.createElement('option');

opt.innerHTML = sports[s];

opt.value = sports[s];

spoSel.appendChild(opt);

}

function changeMonth(sel)

{

while (daySel.firstChild)

{

daySel.removeChild(daySel.firstChild);

}

currMonth = sel;

if ((currMonth == 0) || (currMonth == 2) || (currMonth == 4) || (currMonth == 6) ||

(currMonth == 7) || (currMonth == 9) || (currMonth == 11))

{

for (var d = 1; d <= 31; d++)

{

var opt = document.createElement('option');

opt.innerHTML = d;

opt.value = d;

daySel.appendChild(opt);

}

}else if ((currMonth == 3) || (currMonth == 5) || (currMonth == 8) || (currMonth == 10))

{

for (var d = 1; d <= 30; d++)

{

var opt = document.createElement('option');

opt.innerHTML = d;

opt.value = d;

daySel.appendChild(opt);

}

}else if ((currMonth == 1))

{

for (var d = 1; d <=29; d++)

{

var opt = document.createElement('option');

opt.innerHTML = d;

opt.value = d;

daySel.appendChild(opt);

}

}

}

## index.css

body {

background-image: url("back\_field.jpg");

background-position: top;

}

h2 {

font-family: verdana;

text-align: center;

}

#form {

font-family: verdana;

font-size: 16px;

text-align: center;

}

input[type = text], [type = email], select, [type = submit] {

padding: 12px 12px;

margin: 8px 0;

box-sizing: border-box;

border: 2px solid grey;

border-radius: 4px;

}

input[type = text]:focus, [type = email]:focus, select:focus {

border-color: red;

}

# Sample test results

This test uses good input:

David

Nankivell

[David.Nanki@gmail.com](mailto:David.Nanki@gmail.com)

1

January

1995

Tennis

Bad first name input; requests blank field prior to submission:

\*blank\*

Nankivell

[David.Nanki@gmail.com](mailto:David.Nanki@gmail.com)

1

January

1995

Tennis

Bad last name input; requests blank field prior to submission:

David

\*blank\*

[David.Nanki@gmail.com](mailto:David.Nanki@gmail.com)

1

January

1995

Tennis

Bad email input; requests blank field prior to submission:

David

Nankivell

\*blank\*

January

1995

Tennis

Bad email input; requests @ and something following it prior to submission:

David

Nankivell

David.Nanki

January

1995

Tennis