DCS 3003

WEBSITE DESIGN

HTML

Recap

HTML – Form : <select>

1) **<select>** tag is used to create **drop down list of options**.

2) **<option>** tag is put into the <select> tag.

3) The first option from the list of options is selected by default. To change a predefined option, the **selected** attribute is used.

4) The **<optgroup>** tag is used to group several options into one group.

HTML – **Form : <select>**

The <select> ,<option> and <optgroup> tags are come in pairs,

container tags.

-> <select> & </select>

-> <option> & </option>

-> <optgroup> & </optgroup>

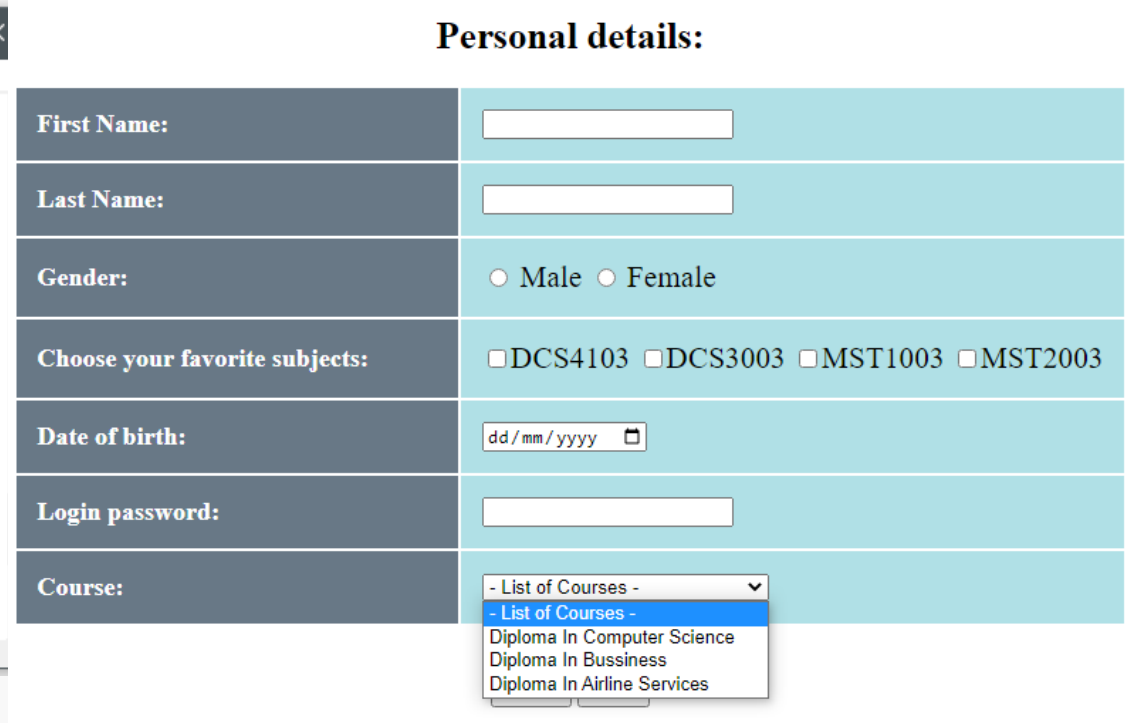
HTML – Form <select> - activity15k.html

activity15k - Notepad

File Edit Format View Help

```
<td>
<select>
<option value="0">- List of Courses -</option>
<option value="DCS" selected>Diploma In Computer Science</option>
<option value="DIB">Diploma In Bussiness</option>
<option value="DAS">Diploma In Airline Services</option>
</select>
</td>
</tr>

</table>
<br><br>
<input type=submit value=Submit>
```



HTML – Form <select> - activity15l.html

activity15l - Notepad

File Edit Format View Help

```
<td class='title'>
Course:
</td>
<td>
<select>
<option value="0">- List of Courses -</option>

<optgroup label="Diploma In Computer Science">
<option value="DCS_S1">Semester 1</option>
<option value="DCS_S2">Semester 2</option>
<option value="DCS_S3">Semester 3</option>
<option value="DCS_S4">Semester 4</option>
<option value="DCS_S5">Semester 5</option>
<option value="DCS_S6">Semester 6</option>
</optgroup>

<option value="DIB">Diploma In Bussiness</option>
<option value="DAS">Diploma In Airline Services</option>
</select>
</td>
</tr>

</table>
<br><br>
<input type=submit value=Submit>
```

Personal details:

First Name:	
Last Name:	
Gender:	Male Female
Choose your favorite subjects:	- List of Courses - (Diploma In Computer Science: Semester 1, Semester 2, Semester 3, Semester 4, Semester 5, Semester 6; Diploma In Bussiness; Diploma In Airline Services) 03 MST1003 MST2003
Date of birth:	
Login password:	
Course:	- List of Courses -

Submit Reset

HTML – Form <input> attributes (activity15m.html)

Attribute	Description
value	The value attribute is used to specify the value of the input element. Example: **<input type=text name=fname value='Name'>**
size	This property is used to specifies the width, in characters, of an <input> element. Example: **<input type=text name=fname value='Name' size=50>**
maxlength	This property is used to specifies the maximum number of characters allowed. Example: **<input type=text name=fname value='Name' size=50 maxlength=10>**
placeholder	Placeholder attribute is used to specify hint that describes the expected value of an input field. Example: **<input type=text name=lname placeholder='Last name'>**

HTML – Form <input> attributes (activity15m.html)

Attribute	Description
autofocus	Autofocus attribute specifies that an element should automatically get focus when the page loads. Example: **<input type=text name=lname placeholder='Last name' autofocus>**
checked	The checked attribute specifies that an element should be pre-selected (checked) when the page loads. The checked attribute can be used with < input type=checkbox> and <input type=radio>. Example: **<input type=checkbox name=fav_sub value=DCS4103 checked>DCS4103**
disabled	The disabled attribute specifies that the element should be disabled. The disabled attribute can be set to keep a user from using the < input > element until some other condition has been met. Example: **<input type=checkbox name=fav_sub value=DCS3003 disabled>DCS3003**

HTML – Form <input> attributes (activity15m.html)

Attribute	Description
min	This property is used to specifies a minimum value for an <input> element. Example: **<input type=date name=dob min=2000-01-01>**
max	The max attribute is used to specify the maximum value for an < input > element. Example: **<input type=date name=dob min=2000-01-01 max=2005-12-31>**
readonly	The readonly attribute specifies that an input field is read-only. A read-only input field cannot be modified. A form will still submit an input field that is readonly, but will not submit an input field that is disabled. Example: **<input type=password name=loginpass readonly>**

HTML – Form <input> attributes (activity15m.html)

Attribute	Description
src	This property is used to specifies the URL of the image to use as a submit button (only for type=image). Example: **<input type=image src=pic.jpg>**
alt	The alt attribute is used to provide alternate text for the user, if they cannot view the image. Example: **<input type=image src=pic.jpg alt=AnImage>**
height	This property is used to specifies the height of an <input> element (only for type=image). Example: **<input type=image src=pic.jpg alt=AnImage height=48>**
width	This property is used to specifies the width of an <input> element (only for type=image) Example: **<input type=image src=pic.jpg alt=AnImage height=48 width=48>**

HTML

Form + JavaScript

HTML – **Form Validation**

1) To ensure all required form controls are filled out.

2) To ensure all data submitted in the correct format and matches the requirements.

3) This is called **client-side form validation.**

HTML – Form Validation

4) JavaScript provides a way to validate form's data on the client's computer before sending it to the web server.

5) Form validation generally performs two functions:

- Basic Validation

- Data Format Validation

HTML – Form Validation

6) Basic Validation – make sure all the mandatory fields are filled in.

-> It would require just a loop through each field in the form and check for data.

7) Data Format Validation – the data that is submitted must be checked for correct form and value.

-> Must include appropriate logic to test correctness of data.

HTML – Form Validation

9) It is important to validate the form submitted by the user because it can have inappropriate values.

-> validation is must to authenticate user.

10) JavaScript is used to validate the form on the client-side

-> data processing will be faster than server-side validation.

HTML – Form Validation

Example:

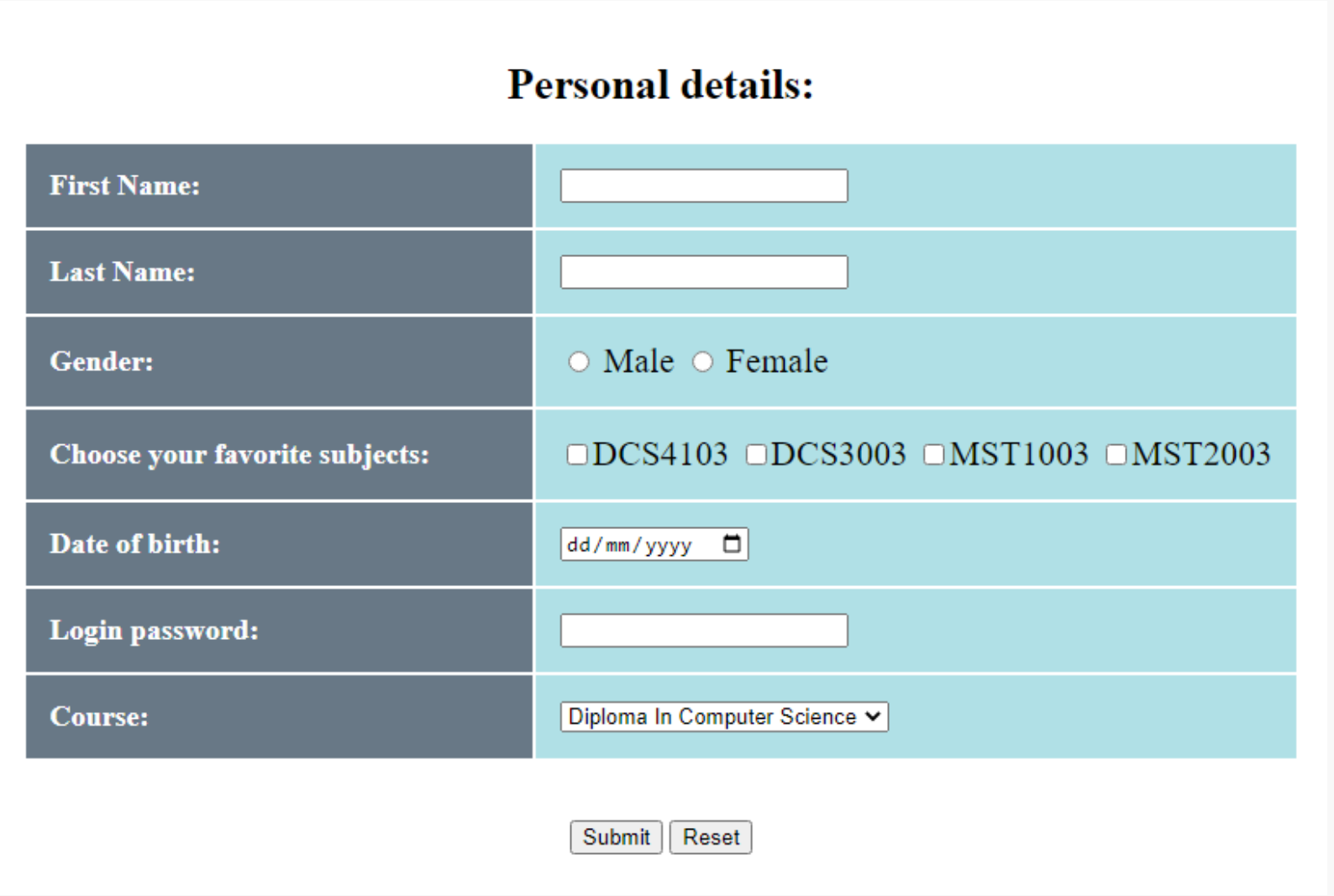
- "This field is required" (You can't leave this field blank).
- "Please enter a valid email address" (the data you entered is not in the right format).
- "Your password needs to be between 8 and 30 characters long and contain one uppercase letter, one symbol, and a number." (A very specific data format is required for your data).

HTML –

Form Validation

activity15k.html

-> activity15n.html



HTML –

Form Validation

activity15n.html

activity15n - Notepad

File Edit Format View Help

```
<html><head><title>Form - Text Input</title>

<link href="activity15.css" rel="stylesheet">

</head>
<body topmargin=50>
<center>
<form>
<br>
<table>
<caption>Personal details:</caption>
<tr>
<td width='40%' class='title'>
Name:
</td>
<td>
<input type=text name=username>
</td>
</tr>
<tr>
<td class='title'>
Gender:
</td>
<td>
<input type = radio name = gender value = Male> Male
```

HTML –

Form Validation

activity15n.html

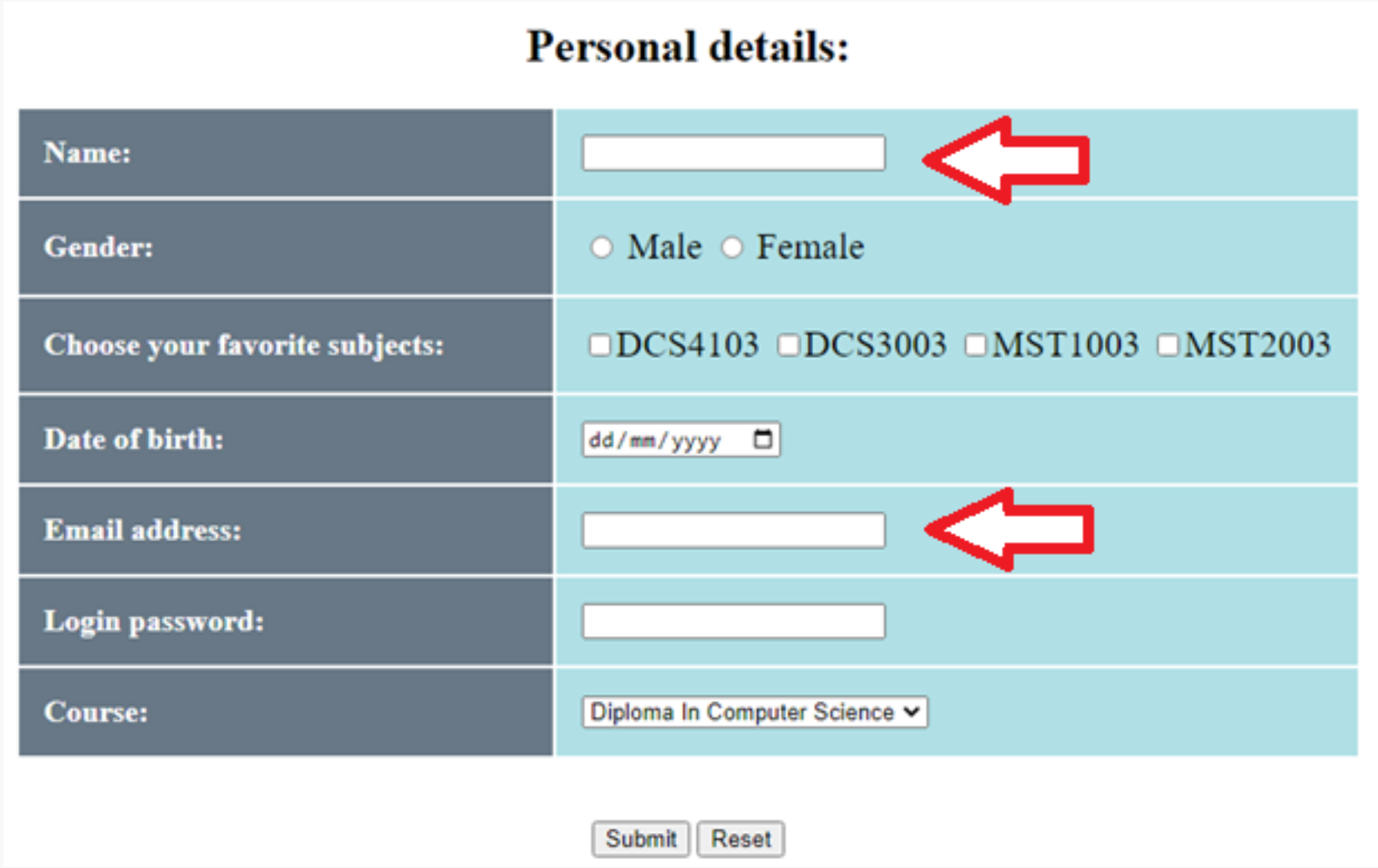
activity15n - Notepad

File Edit Format View Help

```
</td>
<td>
<input type=date name=dob>
</td>
</tr>
<tr>
<td class='title'>
Email address:
</td>
<td>
<input type=email name=useremail>
</td>
</tr>
<tr>
<td class='title'>
Login password:
</td>
<td>
<input type=password name=loginpass>
</td>
</tr>

<tr>
<td class='title'>
Course:
```

HTML – Form Validation - activity15n.html



HTML – Form Validation - activity15n.html

1st

- validate the name.

-> The name

can't be empty.

HTML –

Form Validation

activity15n.html

1st

- validate the name.

-> The name

can't be empty.

activity15n - Notepad

File Edit Format View Help

```
<html><head><title>Form - Text Input</title>
<link href="activity15.css" rel="stylesheet">

<script>
function validateForm() {

  // to validate text - do not allow empty
  let x = document.MyFirstForm.username.value;
  if (x == "")
  {
    alert("Please provide your Name!");
    return false;
  }

}
</script>

</head>
<body topmargin=50>
<center>

<form name=MyFirstForm onsubmit="return validateForm()" >

<br>
<table>
<caption>Personal details:</caption>
<tr>
```

HTML – Form Validation - activity15n.html

1st

- validate the name.

-> The name

can't be empty.

- Let's the Name text box empty -> Click Submit

HTML – Form Validation - activity15n.html

1st

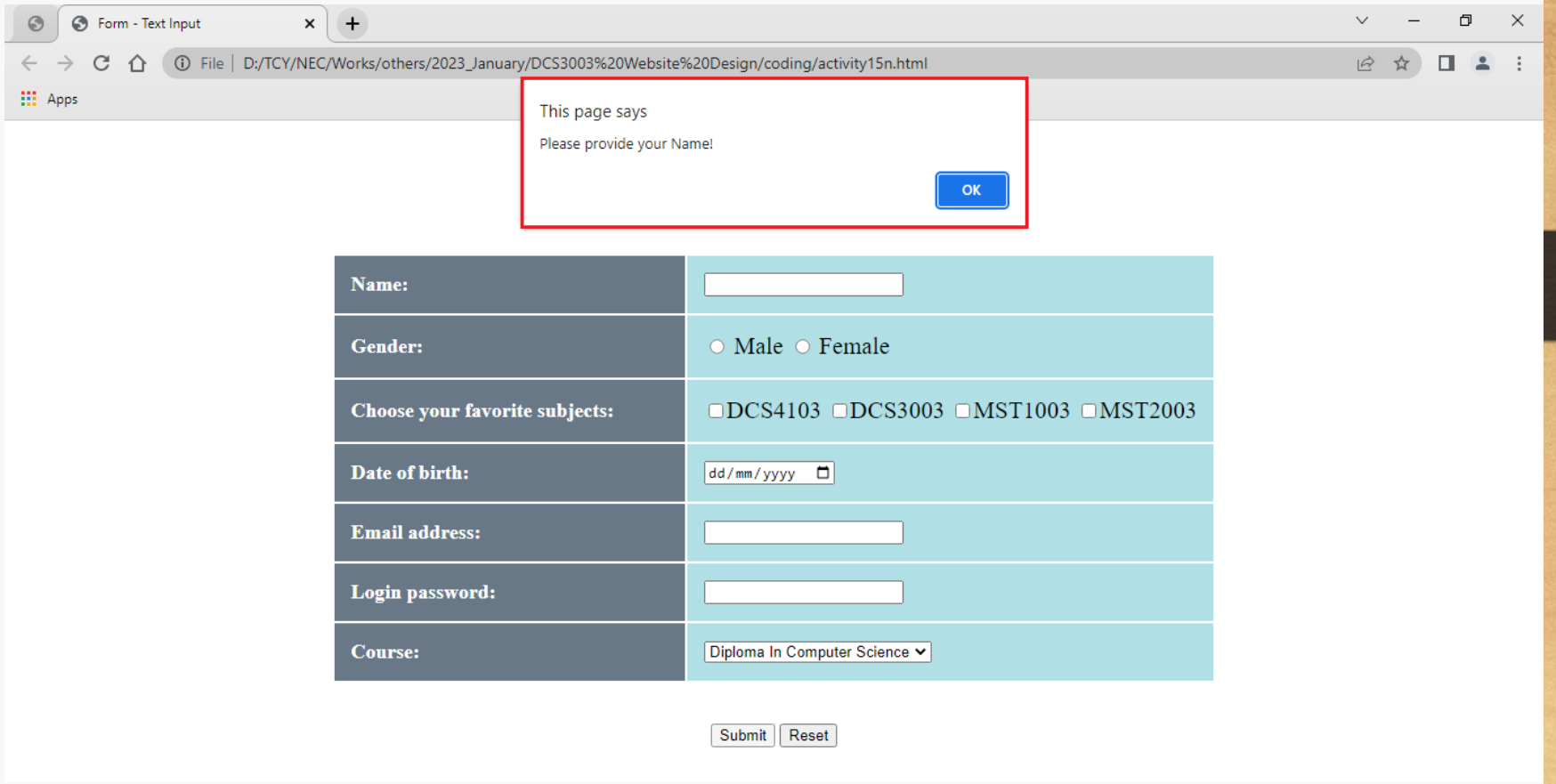
- validate the name.

-> The name

can't be empty.

- Let's the Name text box

empty -> Click Submit



HTML – Form Validation - activity15n.html

2nd

- validate the name.

-> The input data must be characters.

HTML –

Form Validation

activity15n.html

2nd

- validate the name.

-> The input data

must be characters.

activity15n - Notepad

File Edit Format View Help

```
<html><head><title>Form - Text Input</title>
<link href="activity15.css" rel="stylesheet">
<script>
function validateForm() {

  // to validate text - do not allow empty
  let x = document.MyFirstForm.username.value;
  if (x == "") {
    alert("Please provide your Name!");
    return false;
  }

  // to validate text - only allow alphabet characters
  var letters = /^[A-Za-z]/;
  if (!x.match(letters))
  {
    alert("Please input alphabet characters.");
    return false;
  }

}
</script>
</head>
<body topmargin=50>
<center>
<form name=MyFirstForm onsubmit="return validateForm()" >
```

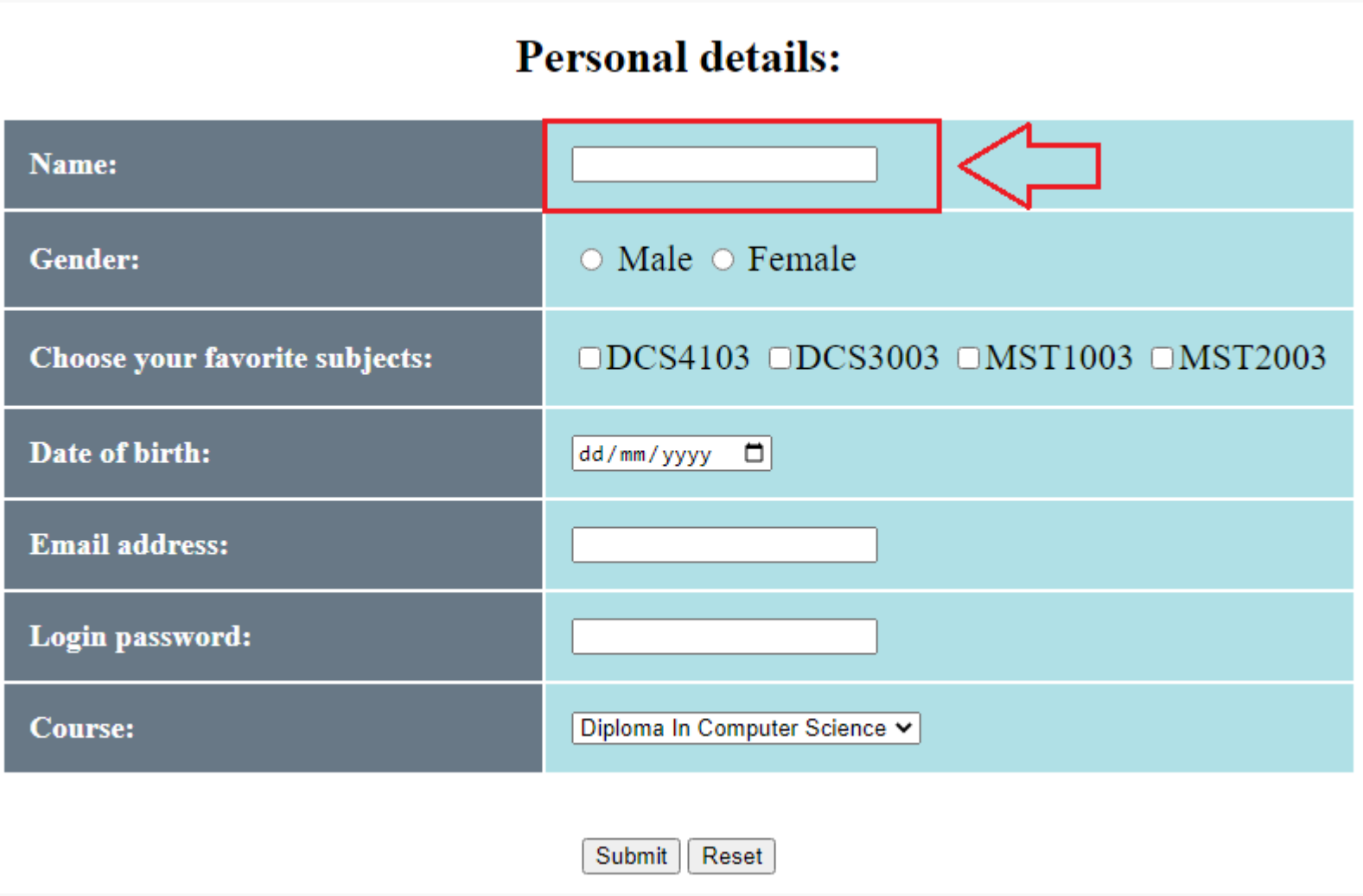
HTML – Form Validation - activity15n.html

2nd

- validate the name.
- The input data must be characters.

- Let's input number

-> Click Submit



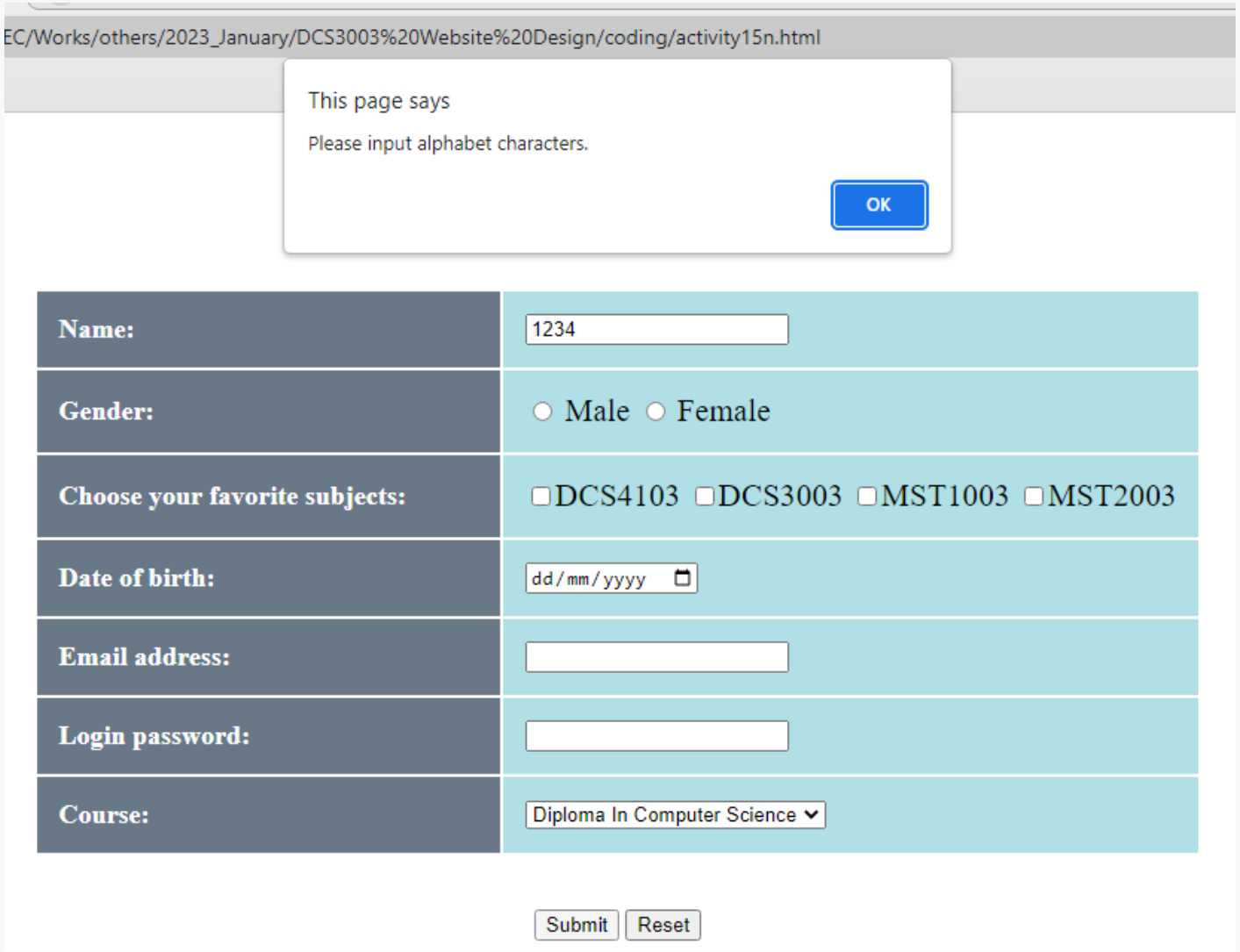
HTML – Form Validation - activity15n.html

2nd

- validate the name.
- The input data must be characters.

- Let's input number

-> Click Submit



HTML – Form Validation - activity15n.html

3rd

- validate the name.

-> The input data must be number.

HTML –

Form Validation

-> first method

activity15n.html

3rd

- validate the name.

-> The input data must be number.

*activity15n - Notepad

File Edit Format View Help

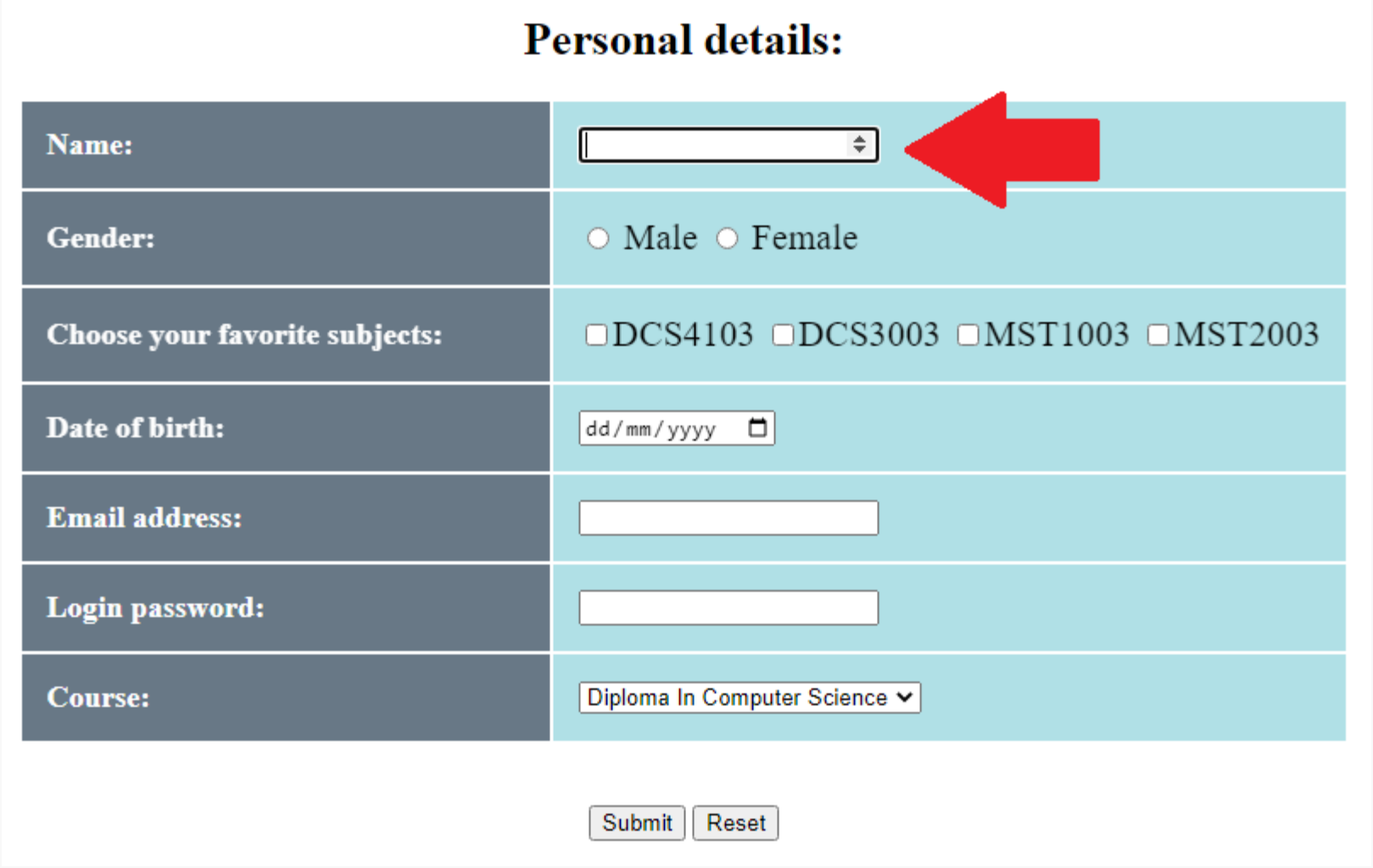
```
</script>
</head>
<body topmargin=50>
<center>
<form name=MyFirstForm onsubmit="return validateForm()" >
<br>
<table>
<caption>Personal details:</caption>
<tr>
<td width='40%' class='title'>
Name:
</td>
<td>
<input type=number name=username>
</td>
</tr>
<tr>
<td class='title'>
Gender:
</td>
<td>
<input type = radio name = gender value = Male> Male
<input type = radio name = gender value = Female> Female
</td>
```

HTML – Form Validation - activity15n.html

3rd

- validate the name.

-> The input data must be number.



HTML –

Form Validation

-> second method

activity15n.html

3rd

- validate the name.

-> The input data must be number.

activity15n - Notepad

File Edit Format View Help

```
function validateForm() {
  let x = document.MyFirstForm.username.value;
  if (x == "") {
    alert("Please provide your Name!");
    return false;
  }

  var letters = /^[0-9]/;
  if (!x.match(letters))
  {
    alert("Please input number.");
    return false;
  }
}
</script></head>
<body topmargin=50>
<center>
<form name=MyFirstForm onsubmit="return validateForm()" >
<br><table>
<caption>Personal details:</caption>
<tr>
<td width='40%' class='title'>Name: </td>
<td>
<input type=text name=username>
</td>
```

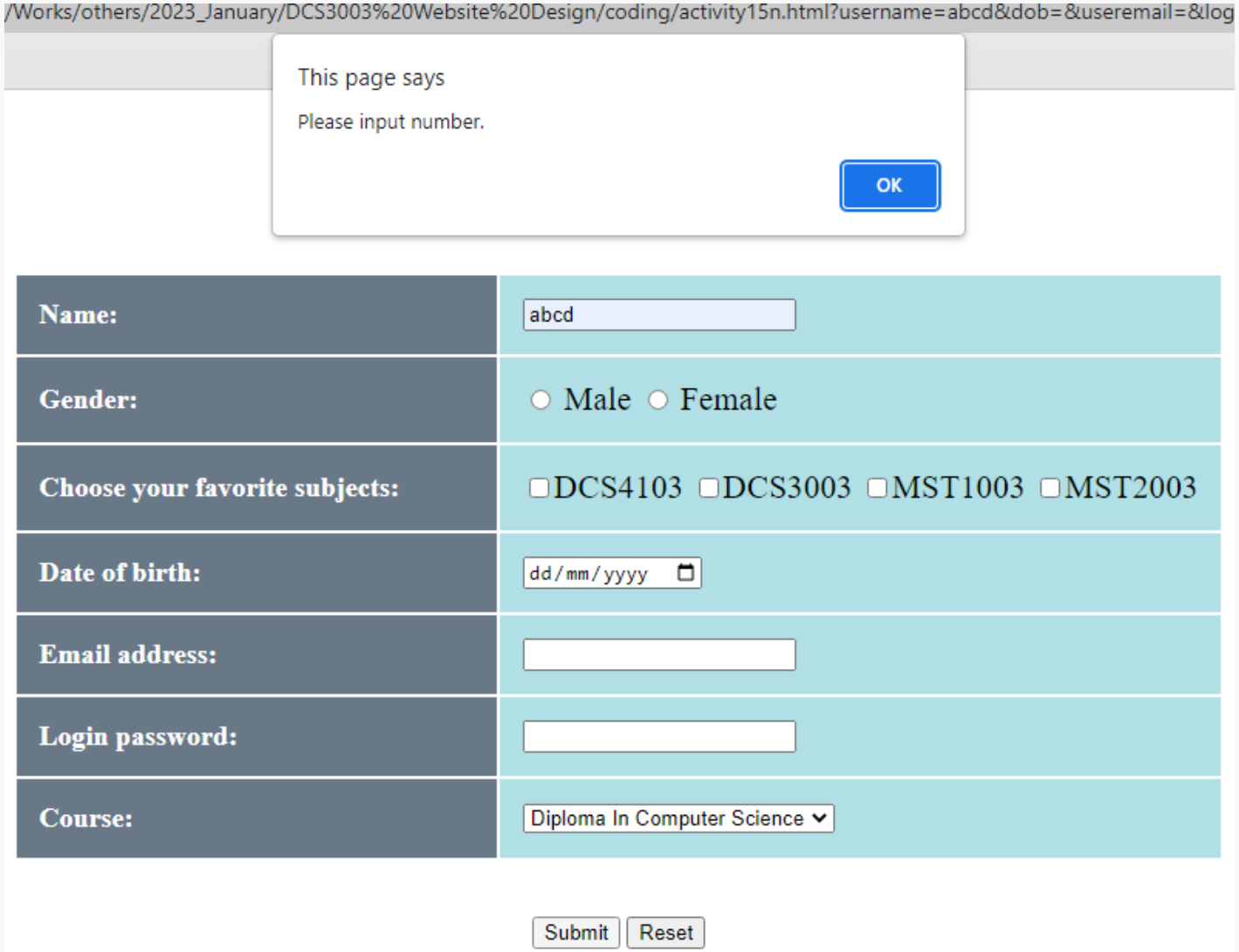
HTML – Form Validation - activity15n.html

3rd

- validate the name.
- The input data must be number.

- Let's input characters

-> Click Submit



HTML – Form Validation - activity15n.html

/^[A-Za-z]/

/^[0-9]/

/^[A-Za-z0-9]/

Where:

^ represents the starting of the string

[A-Za-z] represents the alphabets from a-z, A-Z

[0-9] represents any number from 0-9

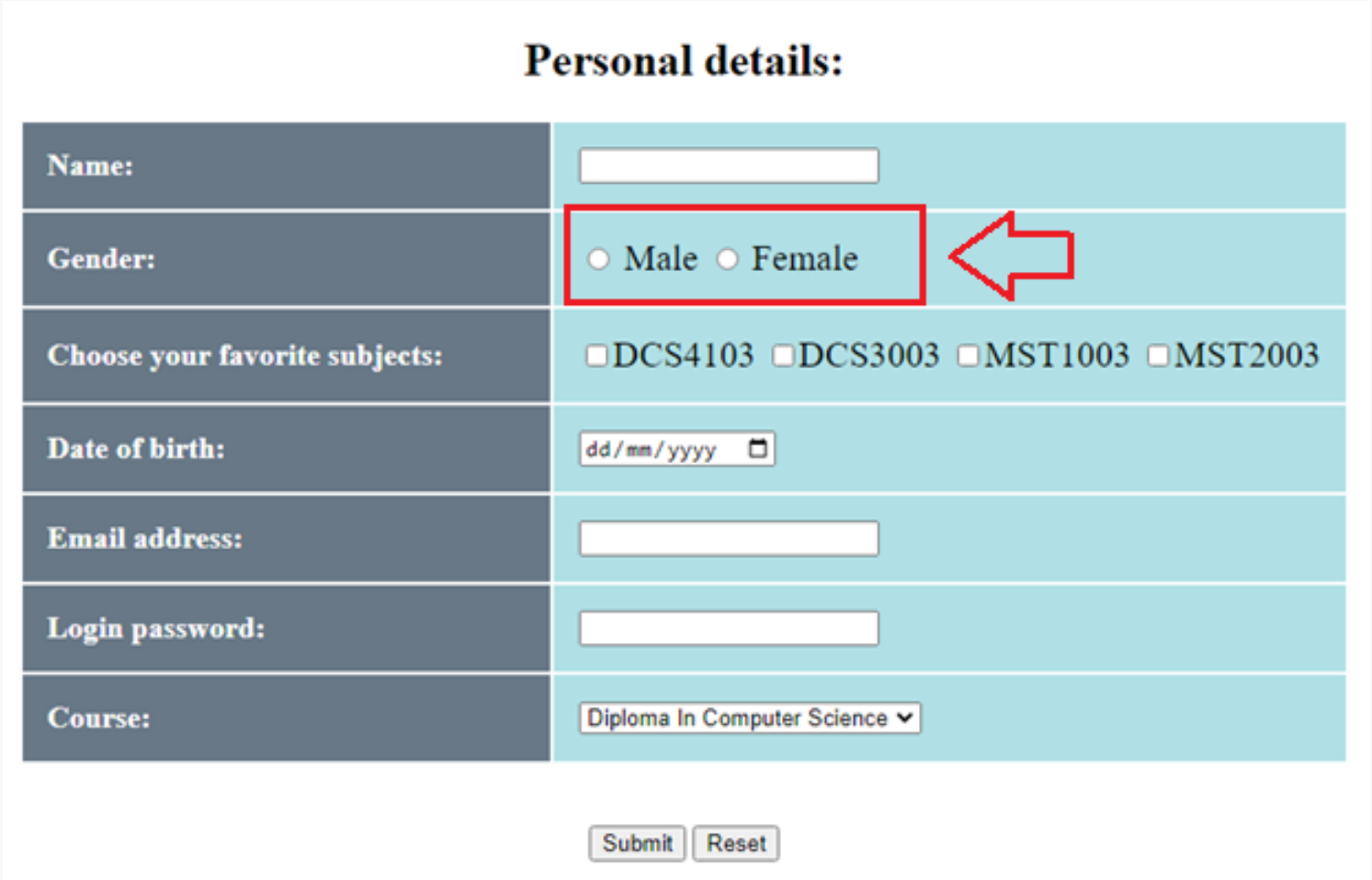
[A-Za-z0-9] represents whether everything is either alphabetical or digit

HTML – Form Validation - activity15n.html

4th

- validate the gender.

-> Must do selection.



HTML – Form Validation - activity15n.html

activity15n - Notepad

File Edit Format View Help

```
    alert("Please provide your Name!");
    return false;
  }

  var letters = /^[A-Za-z]+$/;
  if (!x.match(letters))
  {
    alert('Please input alphabet characters.');
    return false;
  }

  if ( ( MyFirstForm.gender[0].checked == false ) && ( MyFirstForm.gender[1].checked == false ) )
  {
alert ( "Please choose Gender: Male or Female" );
return false;
}

}
</script>
</head>
<body topmargin=50>
<center>
<form name=MyFirstForm onsubmit="return validateForm()" >
<br>
<table>
```

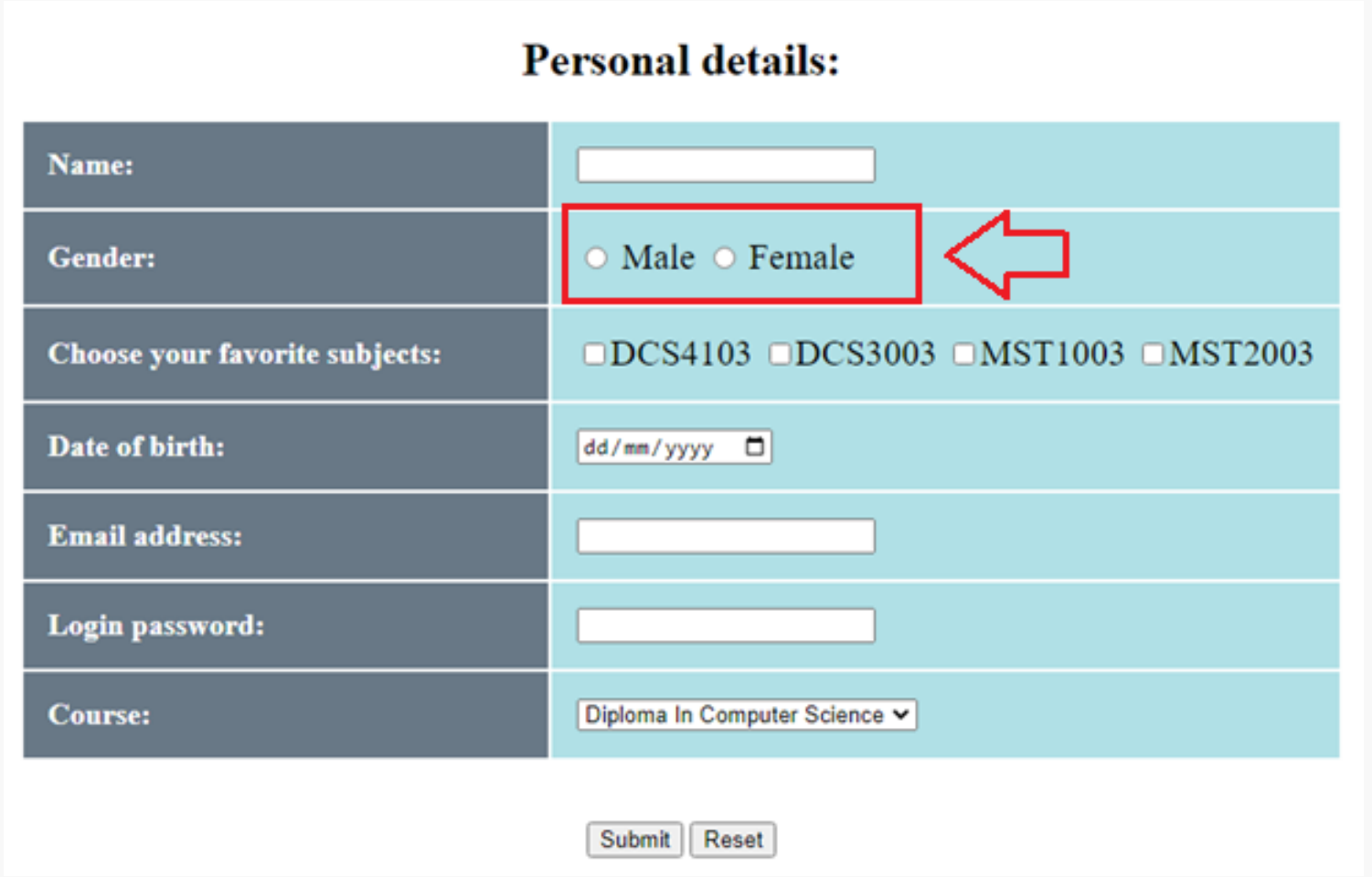
HTML – Form Validation - activity15n.html

4th

- validate the gender.
- **Must do selection.**

- Do not select gender

-> Click Submit



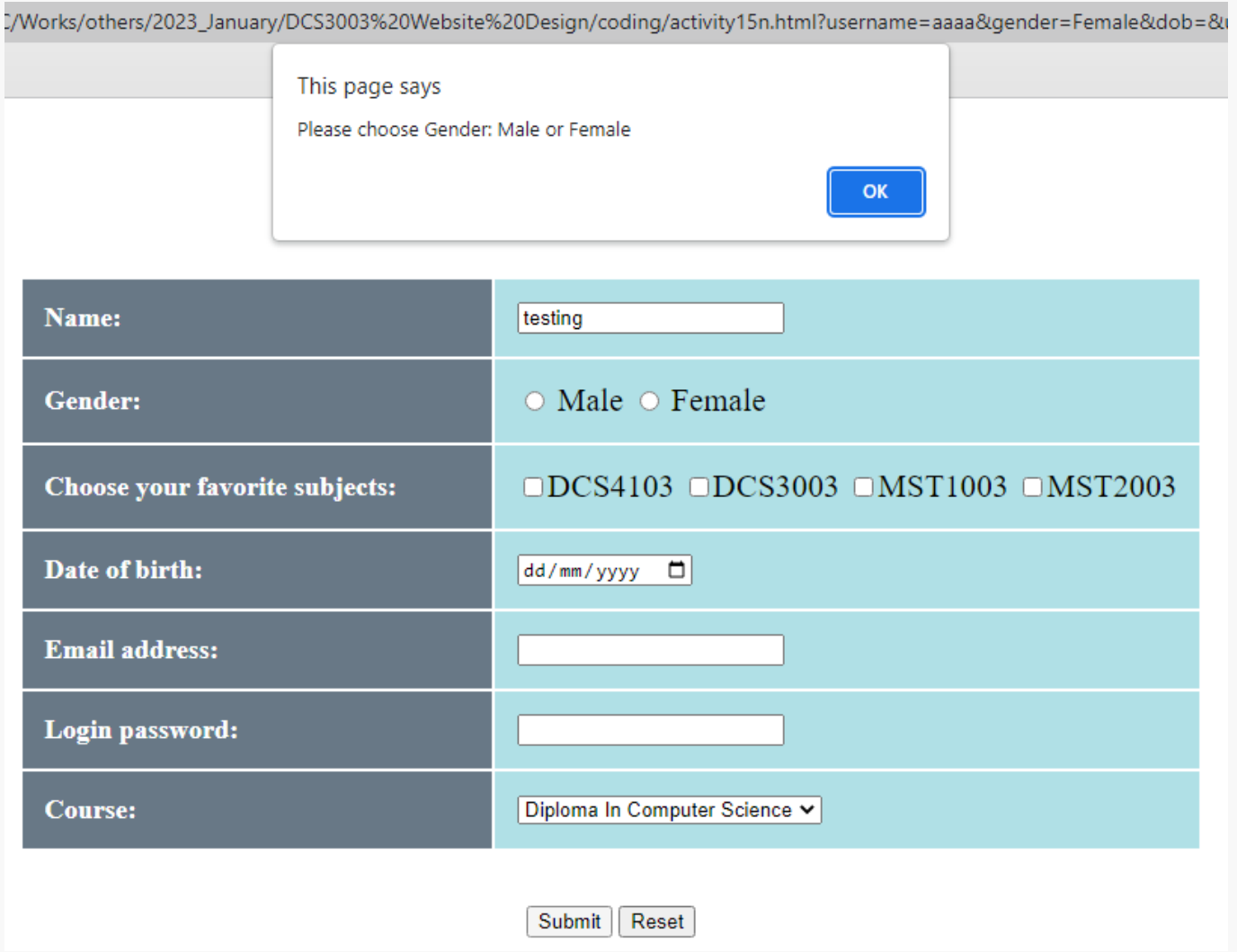
HTML – Form Validation - activity15n.html

4th

- validate the gender.
- Must do selection.

- Do not select gender

-> Click Submit



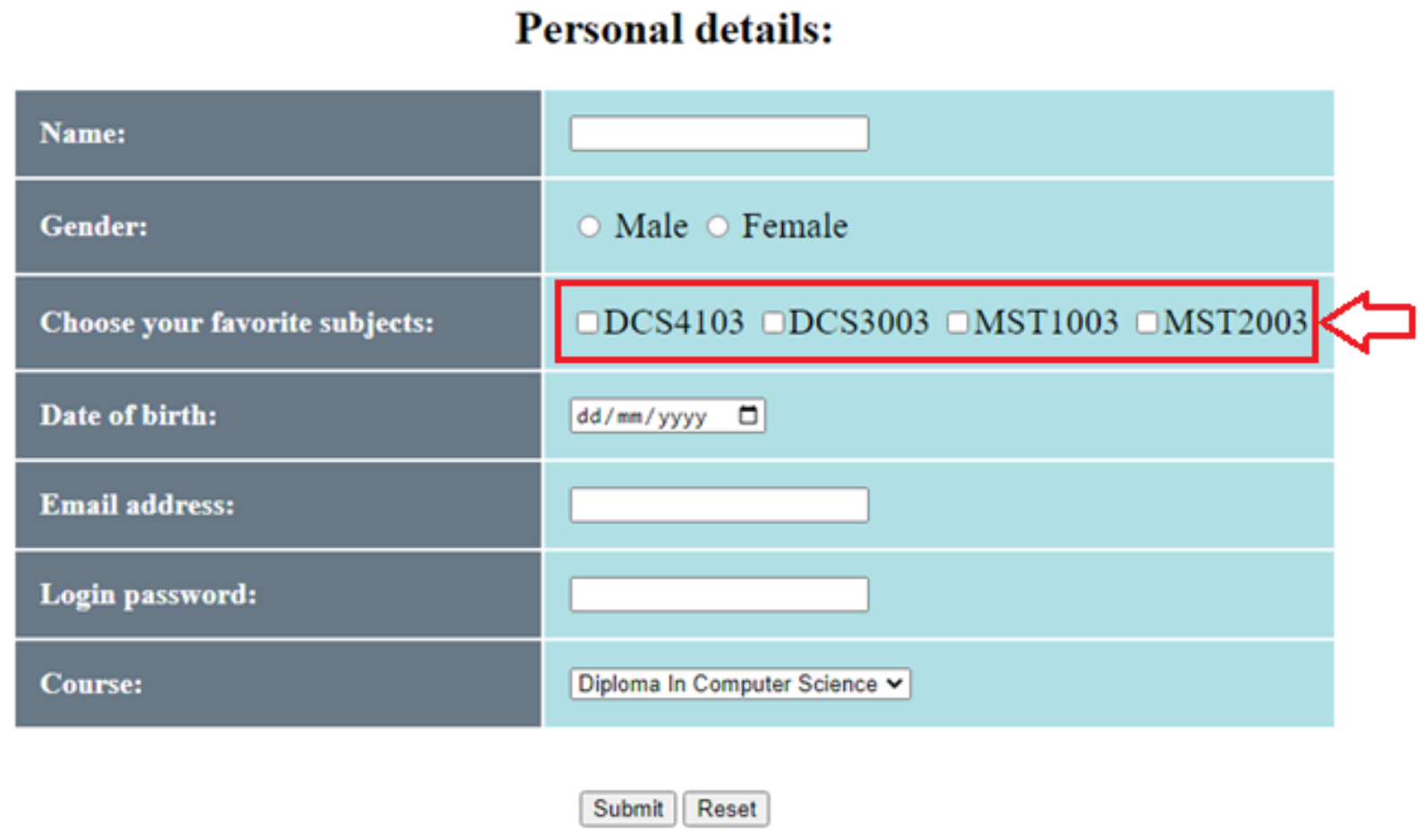
HTML – Form Validation - activity15n.html

5th

- validate the

favorite subjects

-> **Must do selection.**



HTML – Form Validation - activity15n.html

activity15n - Notepad

File Edit Format View Help

```
  if ((MyFirstForm.gender[0].checked == false) && (MyFirstForm.gender[1].checked == false))
  {
  alert ("Please choose Gender: Male or Female");
  return false;
  }

  var group = document.MyFirstForm.fav_sub;
  for (var i=0; i<group.length; i++)
  {
  if (group[i].checked)
  break;
  }
  if (i==group.length)
  {
  alert("No Checkbox is checked");
  return false;
  }

}
</script>
</head>
<body topmargin=50>
<center>
<form name=MyFirstForm onsubmit="return validateForm()" >
<br>
```

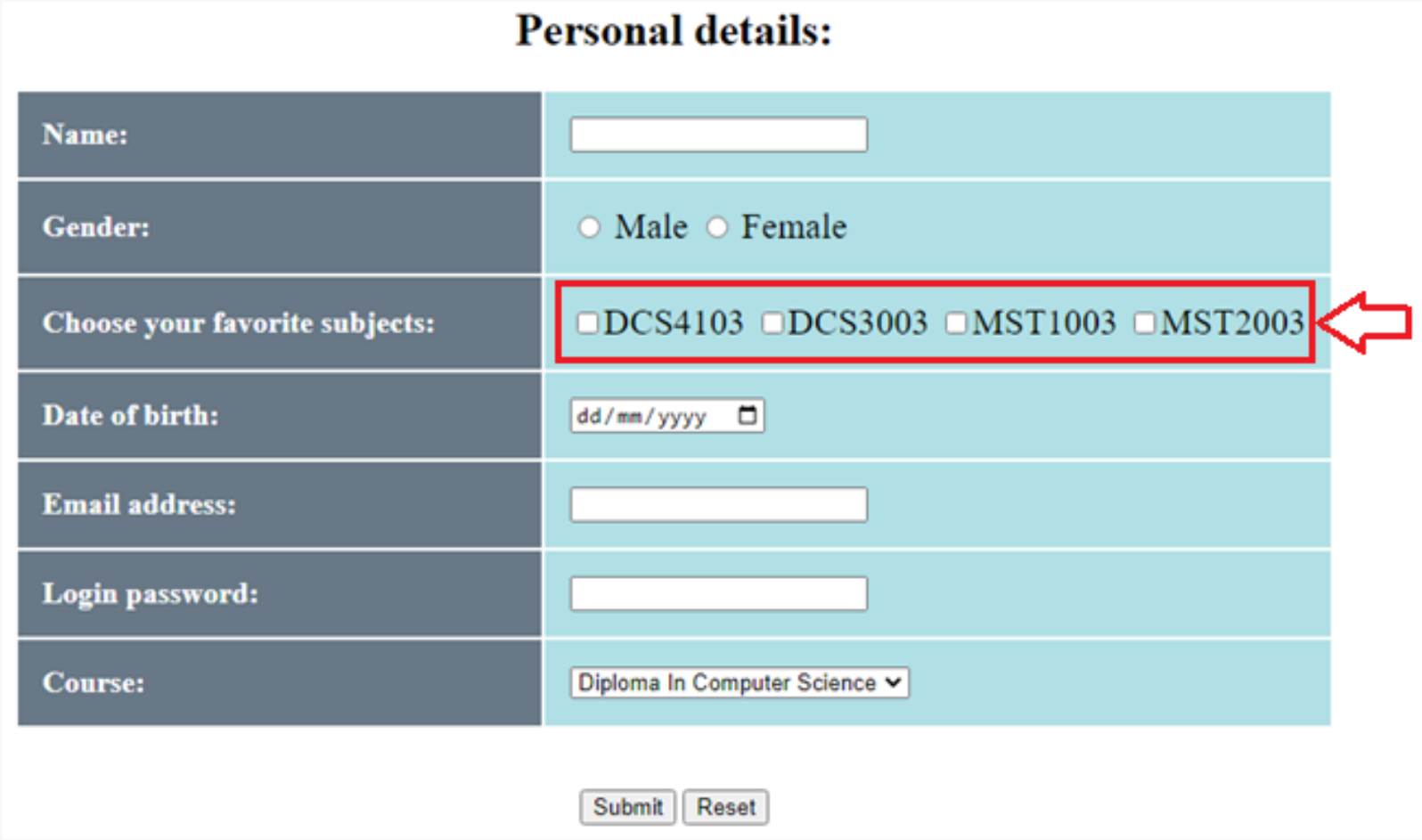
HTML – Form Validation - activity15n.html

5th

- validate the favorite subjects.
- **Must do selection.**

- Do not select subjects

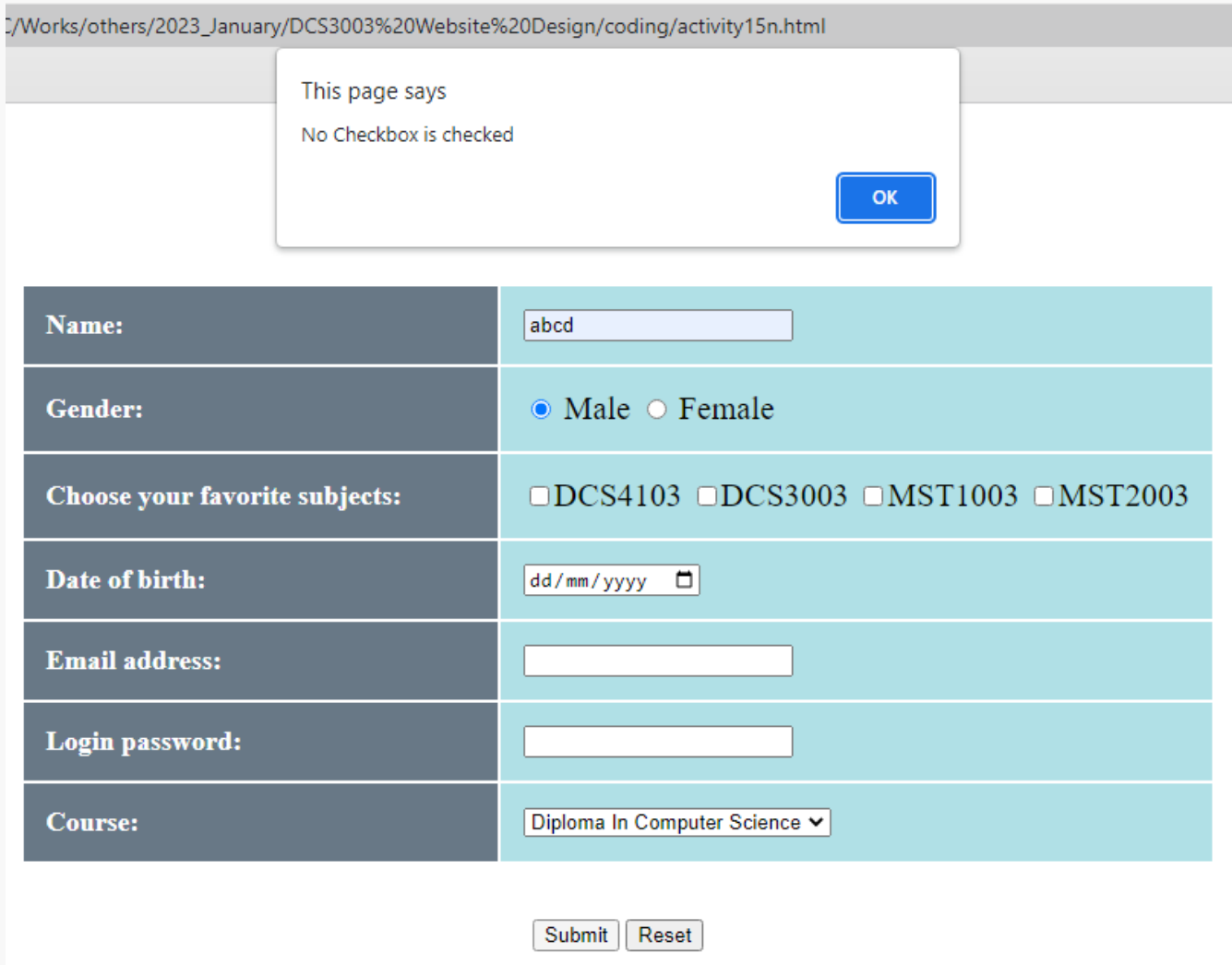
-> Click Submit



HTML – Form Validation - activity15n.html

5th

- validate the favorite subjects.
- Must do selection.

- Do not select subjects

-> Click Submit