

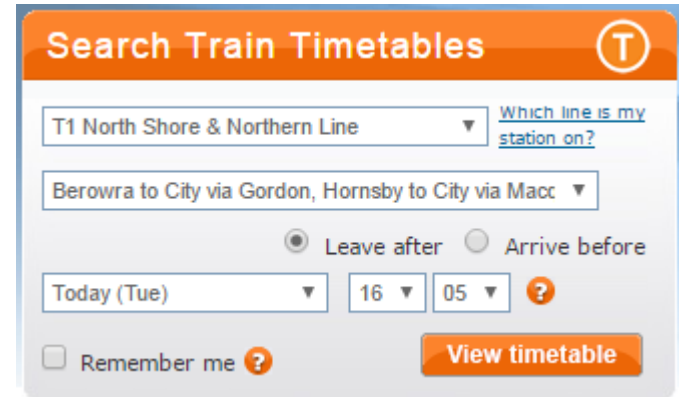
# CSIT128 / CSIT828

## Web Form

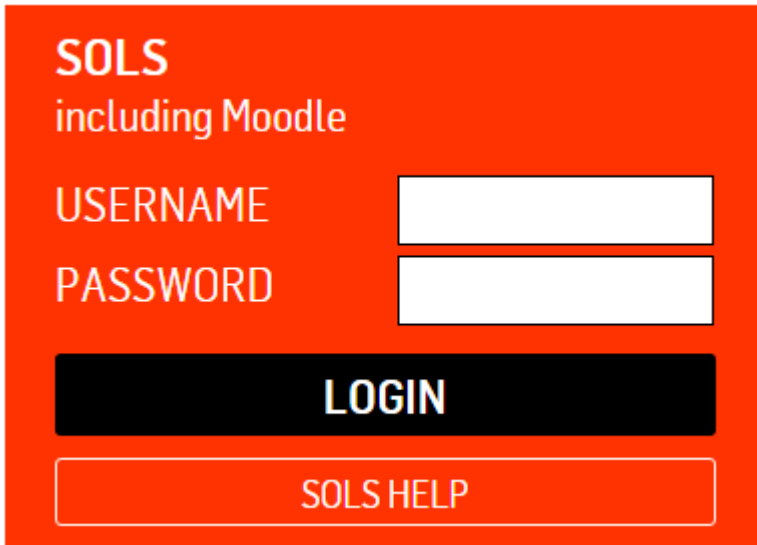
Joseph Tonien

# Form

- HTML forms are used to collect user input.
- HTML forms contain **form elements**.
- Different types of form elements: text field, textarea, checkboxes, radio buttons, option selection, submit buttons, ...
- When user clicks a submit button, user input will be sent to the server to process



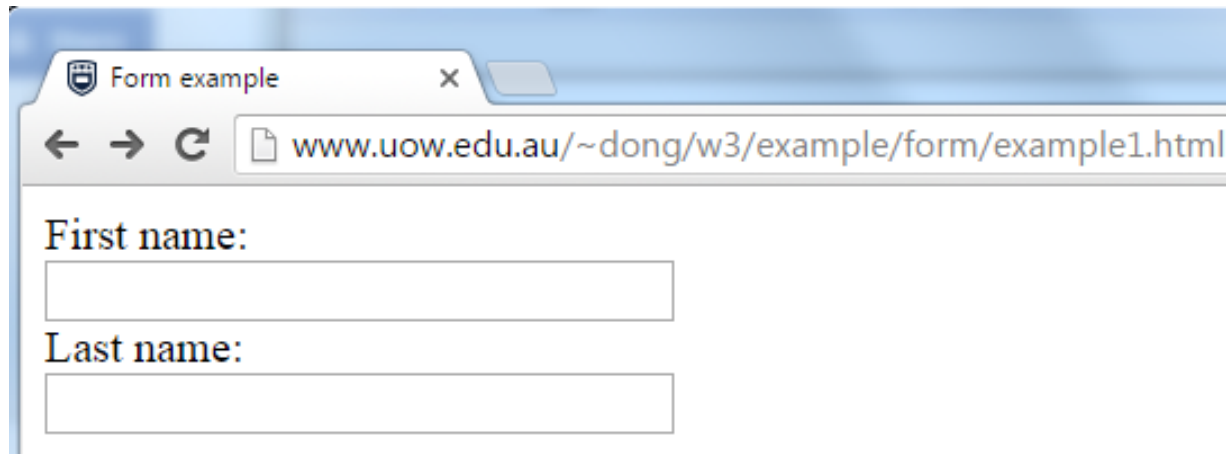
A screenshot of a web form titled "Search Train Timetables" with a train icon in a circle. The form includes a dropdown menu for "T1 North Shore & Northern Line" with a link "Which line is my station on?". Below it is a text field containing "Berowra to City via Gordon, Hornsby to City via Macc". There are radio buttons for "Leave after" (selected) and "Arrive before". A date field shows "Today (Tue)" with time fields for "16" and "05", and a question mark icon. At the bottom, there is a "Remember me" checkbox with a question mark icon and a "View timetable" button.



A screenshot of a login form on an orange background. The text "SOLS" is in large white letters, with "including Moodle" in smaller white text below it. There are two white input fields for "USERNAME" and "PASSWORD". Below these is a black button with the word "LOGIN" in white. At the bottom is a white button with the text "SOLS HELP" in orange.

# Form - type text

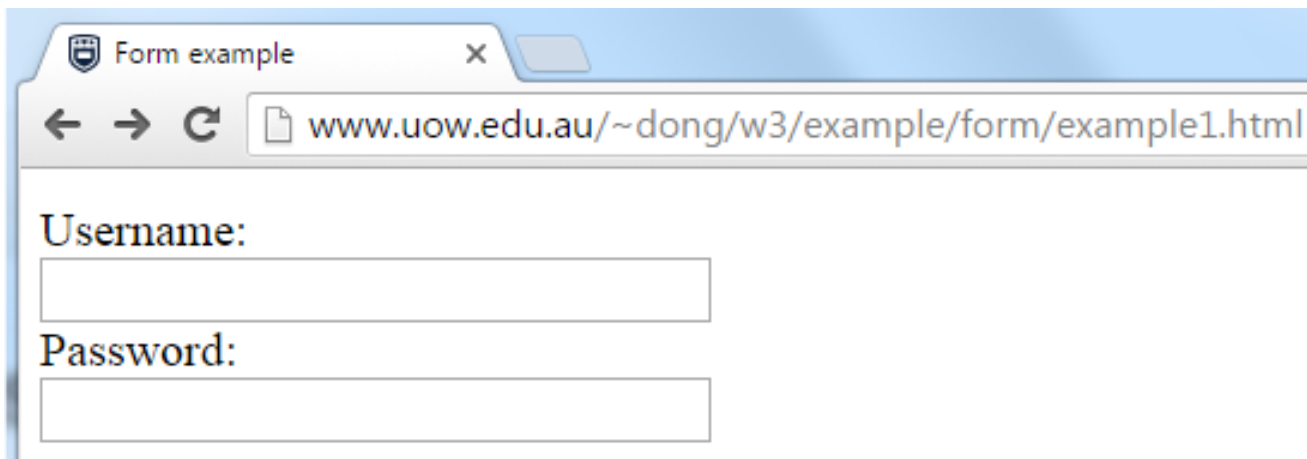
```
<form ...>  
  First name:<br />  
  <input type="text" name="firstname" size="30"><br />  
  Last name:<br />  
  <input type="text" name="lastname" size="30"><br />  
  ...  
</form>
```



A screenshot of a web browser window. The title bar shows 'Form example' with a close button. The address bar shows the URL 'www.uow.edu.au/~dong/w3/example/form/example1.html'. The page content displays a form with two text input fields. The first field is preceded by the label 'First name:' and the second field is preceded by the label 'Last name:'. Both input fields are empty and have a width of approximately 300 pixels.

# Form - type password

```
<form ...>
  Username:<br />
  <input type="text" name="username" size="30"><br />
  Password:<br />
  <input type="password" name="password" size="30"><br />
  ...
</form>
```



A screenshot of a web browser window. The title bar shows 'Form example' with a close button. The address bar contains the URL 'www.uow.edu.au/~dong/w3/example/form/example1.html'. The page content displays a form with two input fields. The first field is labeled 'Username:' and is a text input. The second field is labeled 'Password:' and is a password input (masked with dots). Both input fields are empty and have a width of approximately 30 characters.

# Form - type checkbox

```
<form ...>
```

```
  Choose journals to subscribe:<br />
```

```
    <input type="checkbox" name="journal" value="AMM">American  
Mathematical Monthly<br />
```

```
    <input type="checkbox" name="journal" value="CMJ">College  
Mathematics Journal<br />
```

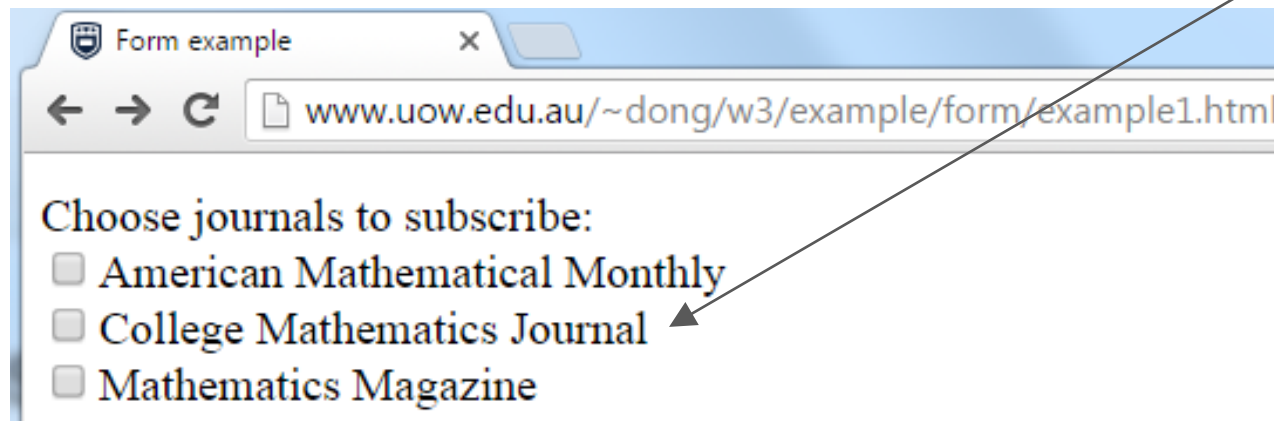
```
    <input type="checkbox" name="journal" value="MM">Mathematics  
Magazine<br />
```

```
    ...
```

```
</form>
```

This is the value that sent to server

This is the value that get displayed

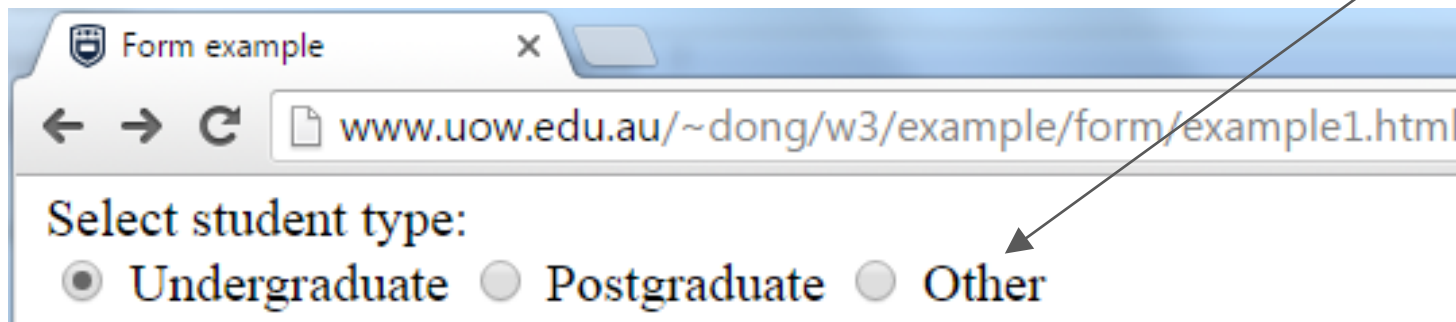


# Form - type radio

This is the value that sent to server

```
<form ...>  
  Select student type:<br />  
  <input type="radio" name="studentType" value="u">Undergraduate  
  <input type="radio" name="studentType" value="p">Postgraduate  
  <input type="radio" name="studentType" value="other">Other  
  ...  
</form>
```

This is the value that get displayed

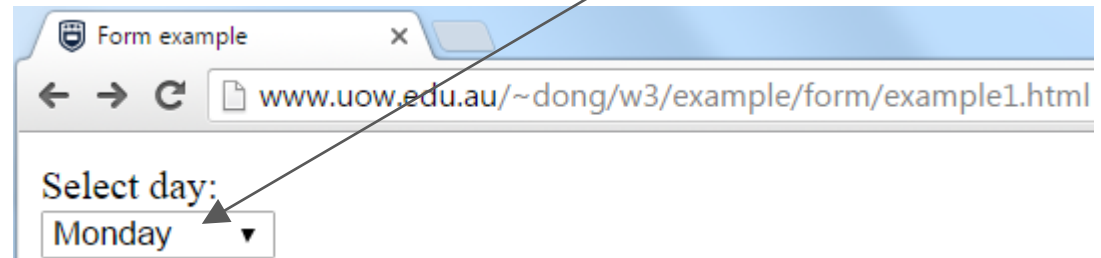


# Form - select

This is the value that sent to server

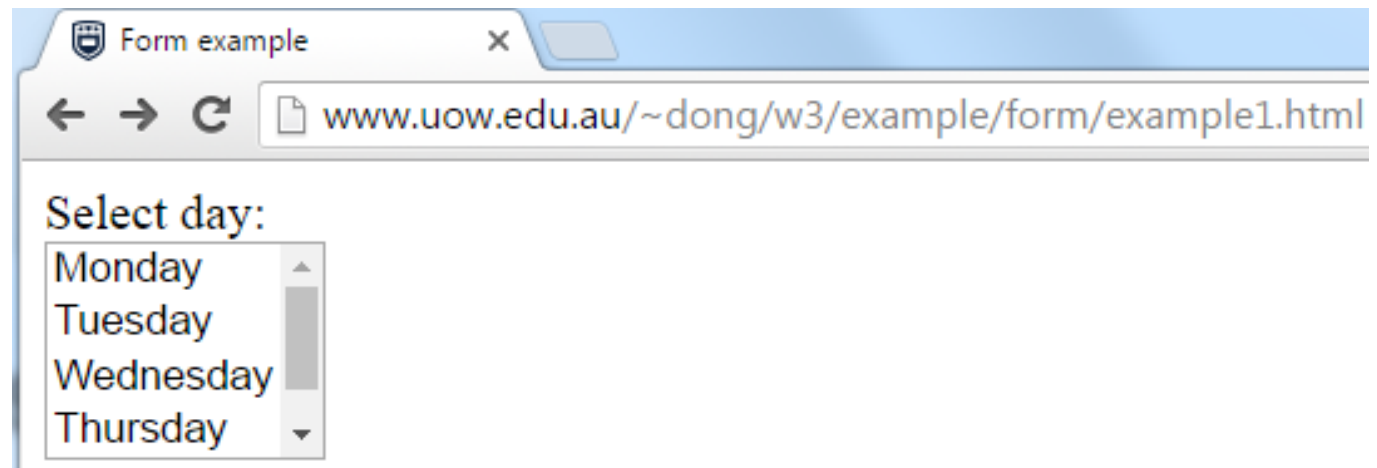
```
<form ...>
  Select day:<br />
  <select name="day">
    <option value="mon">Monday</option>
    <option value="tue">Tuesday</option>
    <option value="wed">Wednesday</option>
    <option value="thu">Thursday</option>
    <option value="fri">Friday</option>
  </select>
  ...
</form>
```

This is the value that get displayed



# Form - select multiple

```
<form ...>  
  Select day:<br />  
  <select name="day" multiple>  
    <option value="mon">Monday</option>  
    <option value="tue">Tuesday</option>  
    <option value="wed">Wednesday</option>  
    <option value="thu">Thursday</option>  
    <option value="fri">Friday</option>  
  </select>  
  ...  
</form>
```





# Form - textarea

```
<form ...>
```

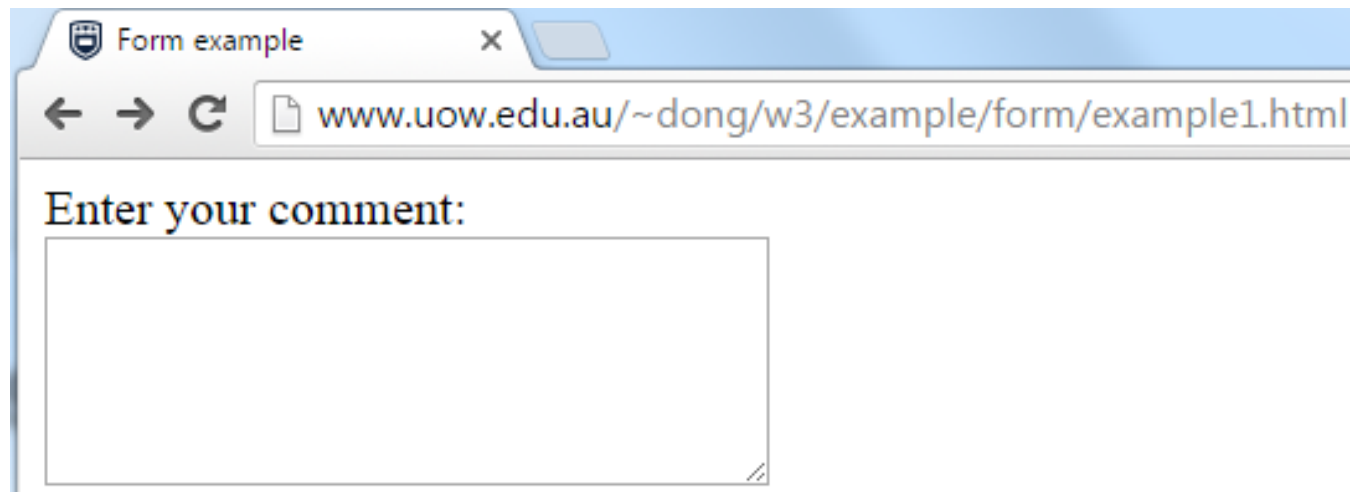
```
  Enter your comment:<br />
```

```
  <textarea name="comment" rows="5" cols="30">
```

```
  </textarea>
```

```
  ...
```

```
</form>
```



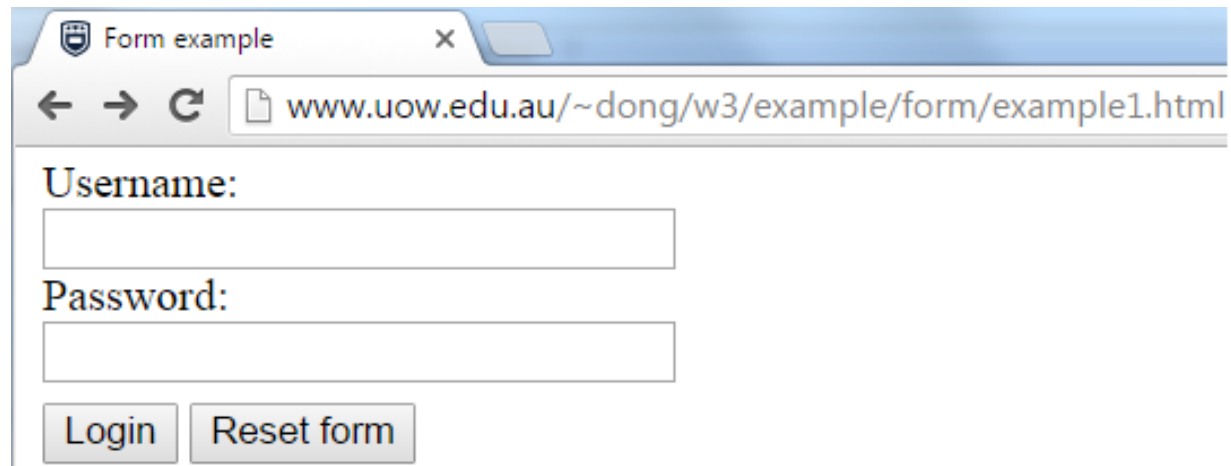
# Form - submit

this is the program in the server that processes the form

```
<form action="handle_login" method="post">
  Username:<br />
  <input type="text" name="username" size="30"><br />
  Password:<br />
  <input type="password" name="password" size="30"><br /><br />

  <input type="submit" value="Login">
  <input type="reset" value="Reset form">

</form>
```



The screenshot shows a web browser window with the title "Form example". The address bar displays the URL "www.uow.edu.au/~dong/w3/example/form/example1.html". The form contains two input fields: "Username:" and "Password:". Below the input fields are two buttons: "Login" and "Reset form".

# Form method

```
<form action="handle_login" method="post">
```

	method="get"	method="post"
Visibility	Data is visible in the URL	Data is not displayed in the URL
History	Parameters remain in the browser history	Parameters are not saved in browser history
Bookmarked	Can be bookmarked	Cannot be bookmarked
<b>Security</b>	<p>get is less secure compared to post because data sent in part of the URL.</p> <p><b>Never use get when sending passwords or other sensitive information.</b></p>	
Back button/ Reload	Harmless	Data will be re-submitted. Browser should alert the user about resubmission.

# Form method

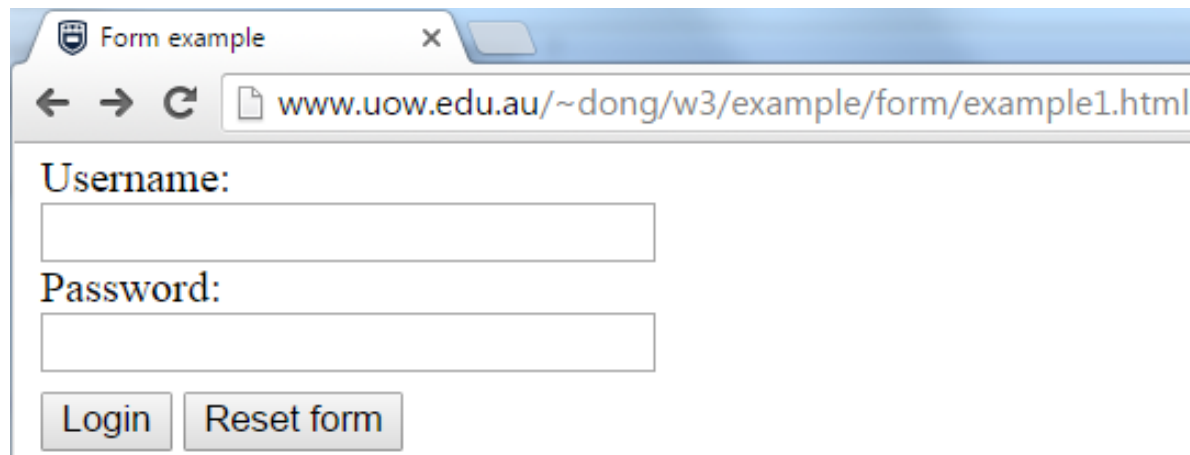
```
<form action="handle_login" method="post">
```

	<code>method="get"</code>	<code>method="post"</code>
Restrictions on data length	Yes, when sending data, the <code>get</code> method adds the data to the URL; and the length of a URL is limited (maximum URL length is 2048 characters)	No restrictions
Restrictions on data type	Only ASCII characters allowed	No restrictions. Binary data is also allowed.

# Form - reset

```
<form action="handle_login" method="post">  
  Username:<br />  
  <input type="text" name="username" size="30"><br />  
  Password:<br />  
  <input type="password" name="password" size="30"><br /><br />  
  
  <input type="submit" value="Login">  
  <input type="reset" value="Reset form">  
  
</form>
```

When reset button is clicked  
all input in the form will be  
cleared



The screenshot shows a web browser window titled "Form example". The address bar displays the URL "www.uow.edu.au/~dong/w3/example/form/example1.html". The form contains two input fields: "Username:" and "Password:". Below the input fields are two buttons: "Login" and "Reset form". The "Reset form" button is highlighted, indicating it is the focus of the demonstration.

# Form - submission

```
<form ...>
  First name:<br />
  <input type="text" name="firstname" size="30"><br />
  Last name:<br />
  <input type="text" name="lastname" size="30"><br />

  Select day:<br />
  <select name="day">
    <option value="mon">Monday</option>
    <option value="tue">Tuesday</option>
    <option value="wed">Wednesday</option>
    <option value="thu">Thursday</option>
    <option value="fri">Friday</option>
  </select>
  ...
</form>
```

**What is the purpose of the attribute `name` ?**

```
<html>
<body>
<form action="handle_login" method="get">
```

Choose journals to subscribe:<br />

```
<input type="checkbox" name="journal" value="AMM">American Mathematical Monthly<br />
<input type="checkbox" name="journal" value="CMJ">College Mathematics Journal<br />
<input type="checkbox" name="journal" value="MM">Mathematics Magazine<br />
```

Select student type:<br />

```
<input type="radio" name="studentType" value="u">Undergraduate
<input type="radio" name="studentType" value="p">Postgraduate
<input type="radio" name="studentType" value="other">Other
<br />
```

Select day:<br />

```
<select name="day" multiple>
  <option value="mon">Monday</option>
  <option value="tue">Tuesday</option>
  <option value="wed">Wednesday</option>
  <option value="thu">Thursday</option>
  <option value="fri">Friday</option>
  <option value="hel">hello</option>
</select>
<br />
```

```
<input type="submit" value="Login">
<input type="reset" value="Reset form">
```

```
</form>
</body>
</html>
```

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Choose journals to subscribe:

☒ American Mathematical Monthly

☒ College Mathematics Journal

☐ Mathematics Magazine

Select student type:

☐ Undergraduate ☐ Postgraduate ☒ Other

Select day:

Monday  
Tuesday  
Wednesday  
Thursday

Login Reset form

```
file:///D:/demo/handle_login?
journal=AMM&
journal=CMJ&
studentType=other&
day=mon&
day=wed
```

# Examples

## Google search

`http://www.uow.edu.au/~dong/w3/example/form/google-search.html`

## Google translation

`http://www.uow.edu.au/~dong/w3/example/form/google-translation.html`

How can we find out the parameters for Google search and Google translation?



# References

`http://www.w3schools.com/html`

Robert W. Sebesta, *Programming the World Wide Web*, Pearson.