Introduction to HTML

Forms

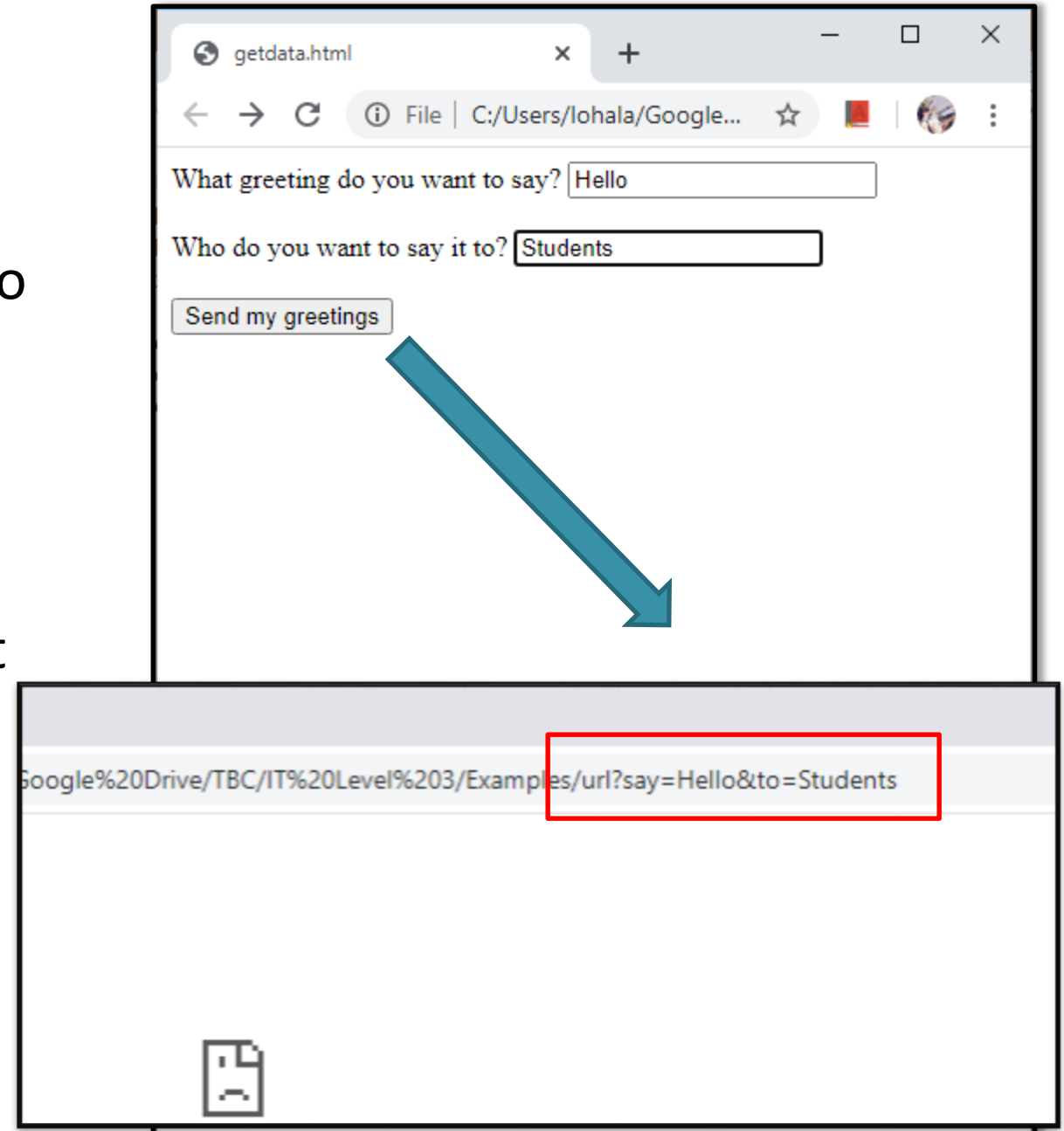Site layout design

Forms

- **<form>** is just another kind of HTML tag that is used to collect user input
- HTML forms are used to create (rather primitive) GUIs on Web pages
  - Usually the purpose is to ask the user for information
  - The information is then sent back to the server
- A form is an area that can contain form elements
  - The syntax is:

  <form parameters> ...form elements... </form>
  - Form elements include: **buttons**, **checkboxes**, **text fields**, **radio buttons**, **drop-down menus**, **etc**
  - A form usually contains a **Submit button** to send the information in the form elements to the server
  - The form's parameters tell JavaScript how to send the information to the server (there are two different ways it could be sent)
  - Forms can be used for other things, such as a GUI for simple programs

The <form> tag

- The <form arguments> ... </form> tag encloses form elements
- The arguments to form tell what to do with the user input
  - action="url"   (required)
    - Specifies where to send the data when the **Submit button** is clicked
  - method="get" (default)
    - the form data is appended to the URL when submitted
  - method="post"
    - the form data is not appended to the URL
  - name ="form_name"
    - Define unique name for the form

Example: Method ="POST"

- <form action="url" method="GET">
-     <label for="say">What greeting do you want to say?</label>
-     <input name="say" id="say">

-     <label for="to">Who do you want to say it to?</label>
-     <input name="to" id="to">

-     <button>Send my greetings</button>
- </form>

Form Elements

- Form elements have properties:
  - Text boxes
  - Password boxes
  - Checkboxes
  - Option(Radio) buttons
  - Submit
  - Reset
  - File
  - Hidden and
  - Image.
- The properties are specified in the TYPE Attribute of the HTML element <INPUT></INPUT>.

Text box

- Used to provide input fields for text, phone numbers, dates, etc.
  <INPUT TYPE= " TEXT " >
- Textboxes use the following attributes:
  - TYPE: text
  - SIZE: determines the size of the textbox in characters. Default=20 characters.
  - MAXLENGTH : determines the maximum number of characters that the field will accept.
  - NAME: is the name of the variable to be sent to the CGI application.
  - VALUE: will display its contents as the default value.

Example: Text Box

```
<BODY>

    <h1> Please enter Contact
Information</h1>

    <FORM name="fome1"  Method= "
get " Action= " URL " >

        Full Name: <INPUT TYPE="TEXT"
NAME="Name" SIZE="25"
MAXLENGTH="25"><BR><BR>

        The Phone Number: <INPUT
TYPE="TEXT" NAME="Phone"
SIZE="15" MAXLENGTH="12"><BR>
 </FORM>
</BODY>
```


Please enter Contact Information

Full Name: `Ram Kumar Lama`

The Phone Number: `44956874`

Password

- Used to allow entry of passwords.

  <INPUT TYPE= " PASSWORD " >

- Text typed in a password box is starred out in the browser display.

- Password boxes use the following attributes:
  - TYPE: password
  - SIZE: determines the size of the textbox in characters.
  - MAXLENGHT: determines the maximum size of the password in characters.
  - NAME: is the name of the variable to be sent to the CGI application.
  - VALUE: is usually blank.

Example: Password

<BODY>

 <h1> Login Page</h1>

 <FORM name="fome1" Method= " get " Action= " URL " >

 User Name: <INPUT TYPE="TEXT" NAME="Name" MAXLENGTH="25">

 Password: <INPUT TYPE="PASSWORD" NAME="pw" SIZE="15" MAXLENGTH="20">

 </FORM>

</BODY>

Form_Text_Type

File | C:/Users/lohala/Google...

Login Page

User Name: ramkumarlama

Password: ●●●●●●●●●●

Check Box

- Check boxes allow the users to select more than one option.

  <INPUT TYPE="CHECKBOX">

- Checkboxes have the following attributes:
  - TYPE: checkbox.
  - CHECKED: is blank or CHECKED as the initial status.
  - NAME: is the name of the variable to be sent to the CGI application.
  - VALUE: is usually set to a value.

Example : Checkbox

<h1> What vehicle do you have?</h1>

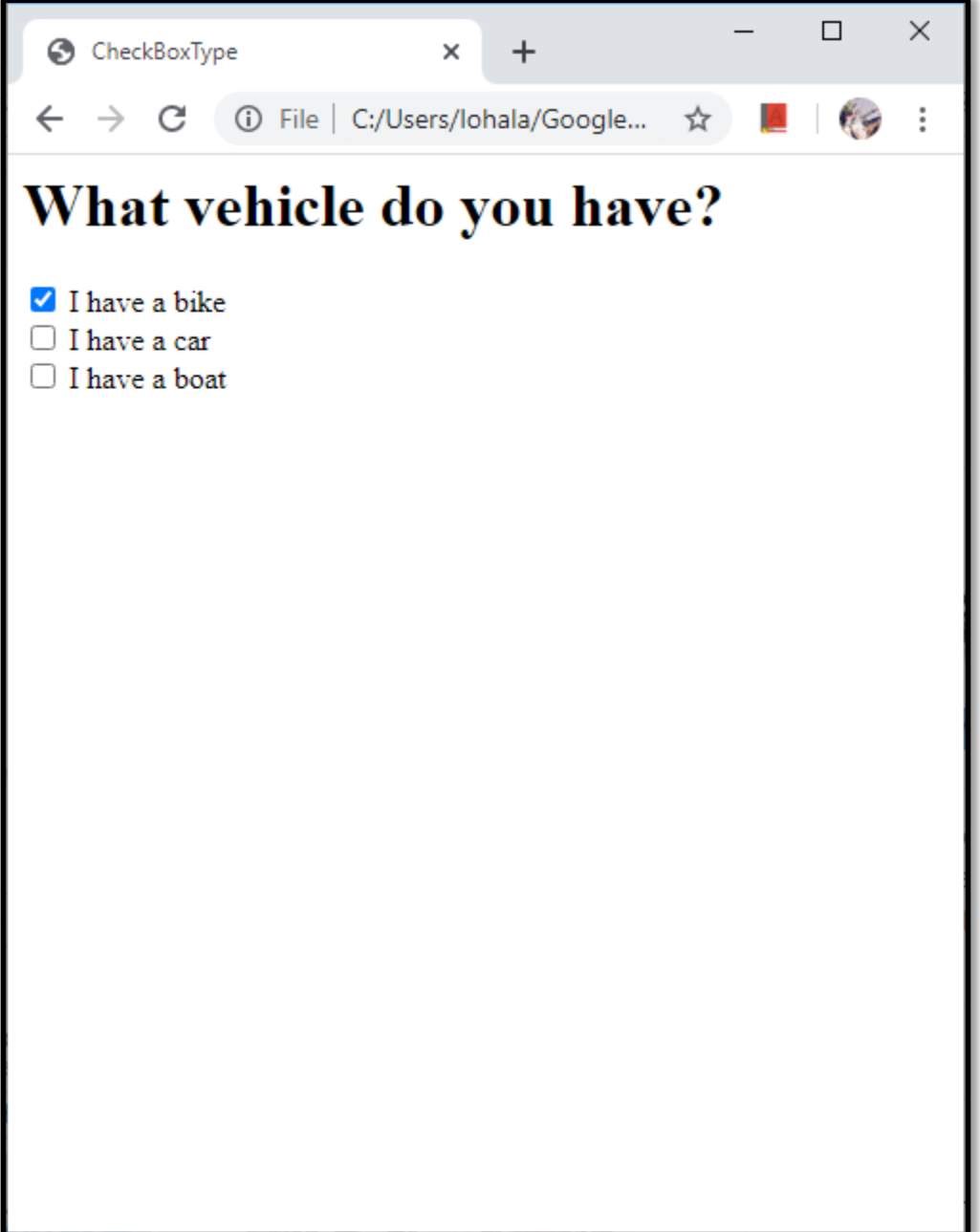<FORM name="fome3" Action="url" method="get">

  <input type="checkbox" name="vehicle1" value="Bike" CHECKED >

  I have a bike

  <input type="checkbox" name="vehicle2" value="Car">

  I have a car

  <input type="checkbox" name="vehicle3" value="Boat">

  I have a boat

</FORM>

Radio Button

- Radio buttons allow the users to select only one option.

  <INPUT TYPE="RADIO">

- Radio buttons have the following attributes:

  ◦ TYPE: radio

  ◦ CHECKED: is blank or CHECKED as the initial status. Only one radio button can be checked

  ◦ NAME: is the name of the variable to be sent to the CGI application.

  ◦ VALUE: usually has a set value.

Example : Radio button

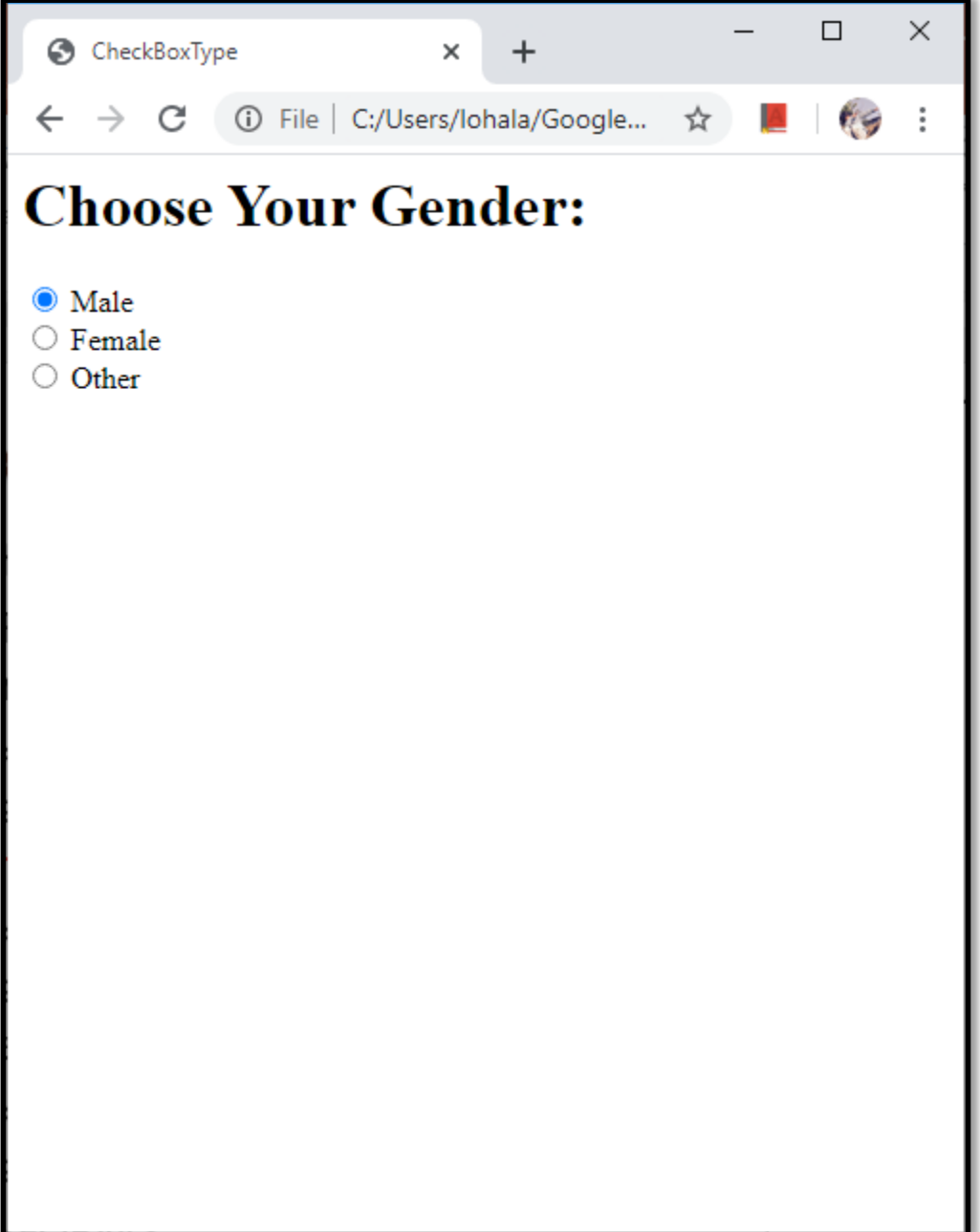<h1> Choose Your Gender: </h1>

<FORM name="fome3" Action="url" method="get">

 <input type="radio" id="male" name="gender" value="male" checked> Male

 <input type="radio" id="female" name="gender" value="female"> Female

 <input type="radio" id="other" name="gender" value="other"> Other

</FORM>

Push Button

- This element would be used with JavaScript to cause an action to take place.

  <INPUT TYPE="BUTTON">

- Push Button has the following attributes:
  - TYPE: button.
  - NAME: is the name of the button to be used in scripting.
  - VALUE: determines the text label on the button.

Submit Button

- Every set of Form tags requires a Submit button. This is the element causes the browser to send the names and values of the other elements to the CGI Application specified by the ACTION attribute of the FORM element.

  <INPUT TYPE="SUBMIT">

- Submit has the following attributes:
  - TYPE: submit
  - NAME: value used by the CGI script for processing.
  - VALUE: determines the text label on the button, usually Submit Query.

Reset

- It is a good idea to include one of these for each form where users are entering data. It allows the surfer to clear all the input in the form.

  <INPUT TYPE="RESET">

- Reset buttons have the following attributes:
  - TYPE: reset.
  - VALUE: determines the text label on the button, usually Reset.

Example : Buttons

\<h1\> Login Page : \</h1\>

\<FORM name="fome3" Action="url" method="get"\>

　User Name:\<input type="text" name="name"\>\<br\>\<br\>

　Password : \<input type="password" name="pw"\>\<br\>\<br\>

　\<input type="submit" value="Submit"\>

　\<input type="reset"\>

　\<input type="button" value="Click Me"\>

\</FORM\>

File Upload

- You can use a file upload to allow surfers to upload files to your web server.

  <INPUT TYPE="FILE">

- File Upload has the following attributes:
  - TYPE: file.
  - SIZE: is the size of the text box in characters.
  - NAME: is the name of the variable to be sent to the CGI application.

Example : File upload

- <H1>Please attach your file here: </H1>
- <FORM name="fome3" Action="url" method="get">
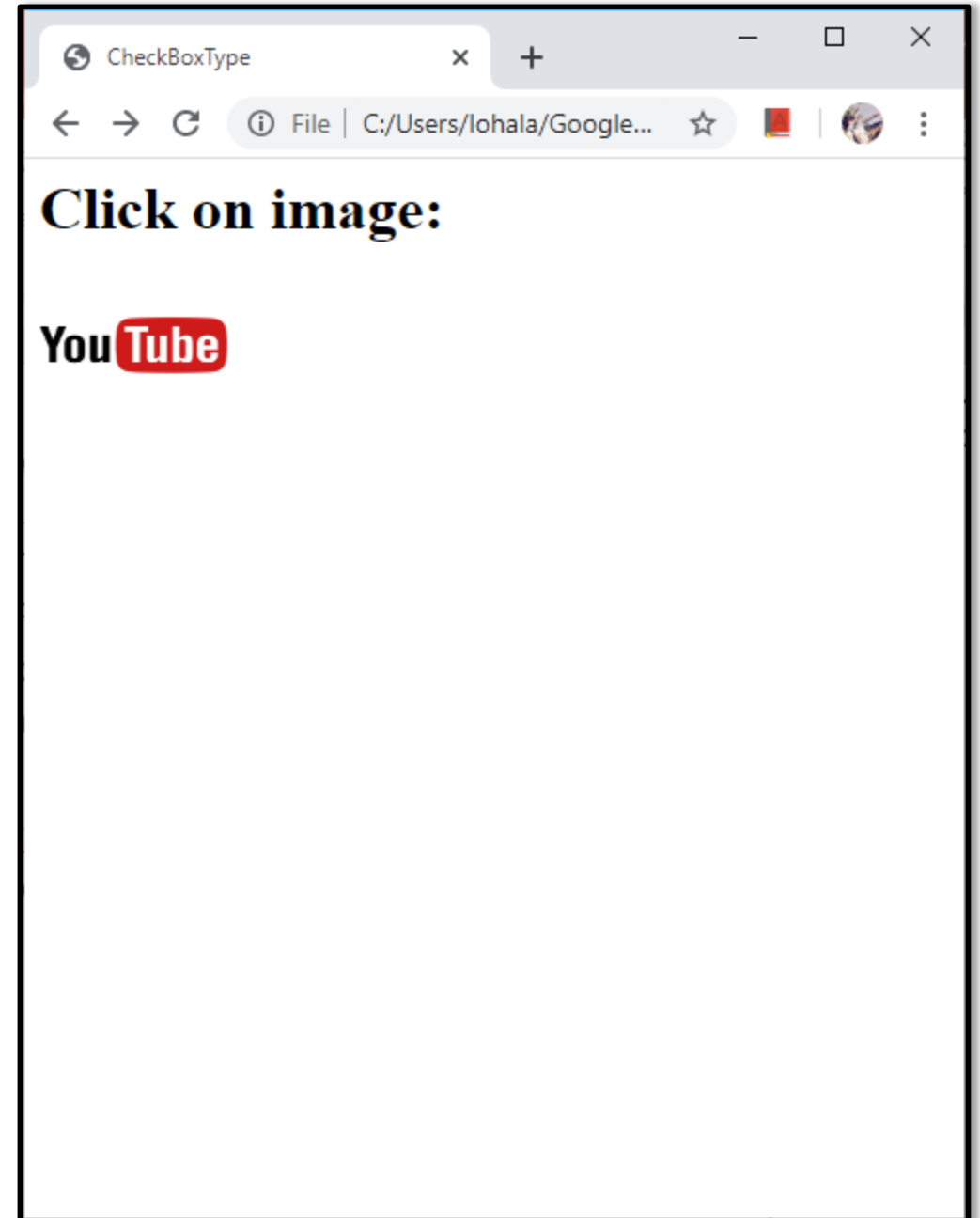- <INPUT TYPE="File" name="myFile">
- </FORM>

Image Submit Button

- Allows you to substitute an image for the standard submit button.

  <INPUT TYPE="IMAGE" SRC="abc.jpg">

- Image submit button has the following attributes:
  - TYPE: Image.
  - NAME: is the name of the button to be used in scripting.
  - SRC: URL of the Image file.

Example: image submit button

<H1>Click on image: </H1>

<FORM name="fome3"
Action="http://www.youtube.com"
method="get">

<INPUT TYPE="image" name="youtube"
src="logo.png">

</FORM>

Hidden

- Used to send data to the CGI application that you don't want the web surfer to see, change or have to enter but is necessary for the application to process the form correctly.

  <INPUT TYPE="HIDDEN" value="Kathmandu">

- Nothing is displayed in the browser.

- Hidden inputs have the following attributes:

  ◦ TYPE: hidden.

  ◦ NAME: is the name of the variable to be sent to the CGI application.

  ◦ VALUE: is usually set a value expected by the CGI application.

List of input types

```
<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">
```

The <select> Element

- The two following examples are <SELECT></SELECT> elements, where the attributes are set differently.

- The Select elements attributes are:
  - NAME: is the name of the variable to be sent to the CGI application.
  - SIZE: this sets the number of visible choices. (By default size is 1)
  - MULTIPLE: the presence of this attribute signifies that the user can make multiple selections. By default only one selection is allowed.
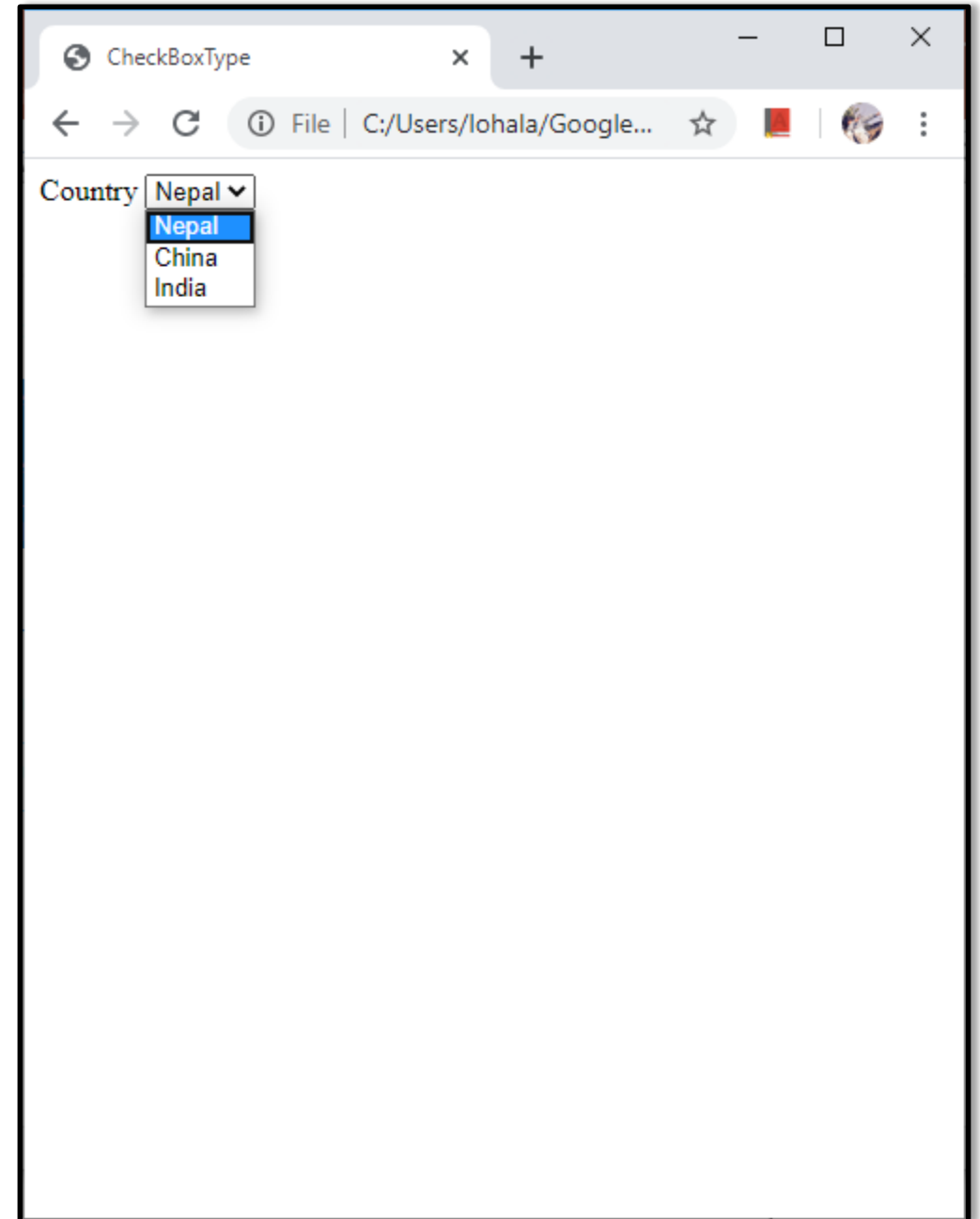
Example 1: drop down menu

<label > Country </label>

<select name="country">

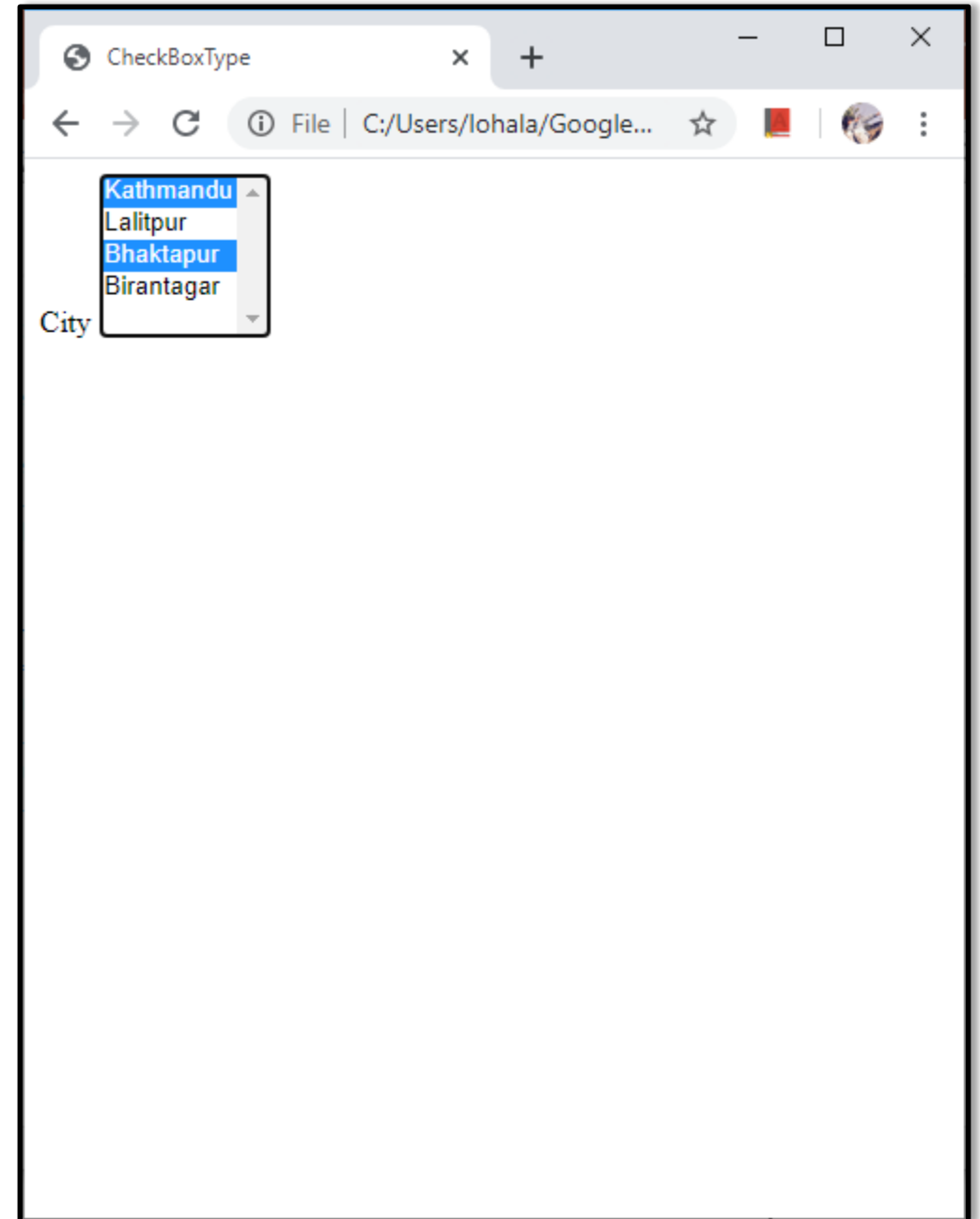 <option value="C1" > Nepal   </option>

  <option value="C2"> China </option>

  <option value="C3"> India </option>

</select>

Example 2: list

<label> City </label>

<select name="city" size=5 multiple>

 <option value="C1" > Kathmandu </option>

 <option value="C2"> Lalitpur </option>

 <option value="C3"> Bhaktapur </option>

 <option value="C1" > Birantagar </option>

</select>

The <textarea> Element

- The <textarea> element defines a multi-line input field (**a text area**):
- The Select elements attributes are:
  - NAME: is the name of the variable to be sent to the CGI application.
  - ROWS: specifies the visible number of lines in a text area
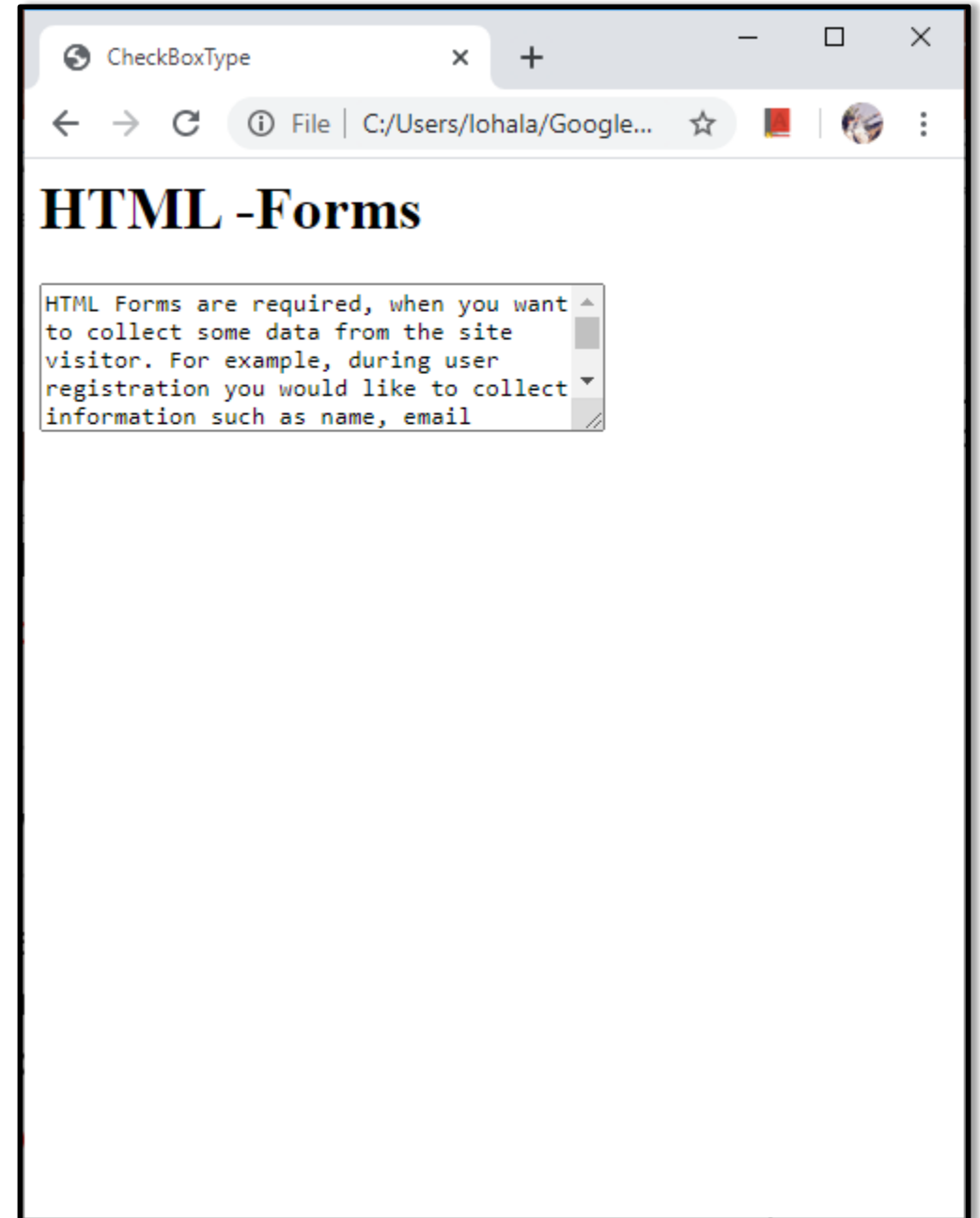 - COLS: specifies the visible width of a text area.

Example : Textarea

<h1>HTML -Forms</h1>

<TEXTAREA COLS=40 ROWS=5 Name="comments" >

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

</TEXTAREA>

Class work

- Use table and FORM elements to make this registration form
- You can add any color or design in this