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FORMS AND DYNAMIC WEB PAGES

WEB DEVELOPMENT

OBJECTIVES

- ▶ Dynamic Web Pages
- ▶ Forms
- ▶ Intro to Project

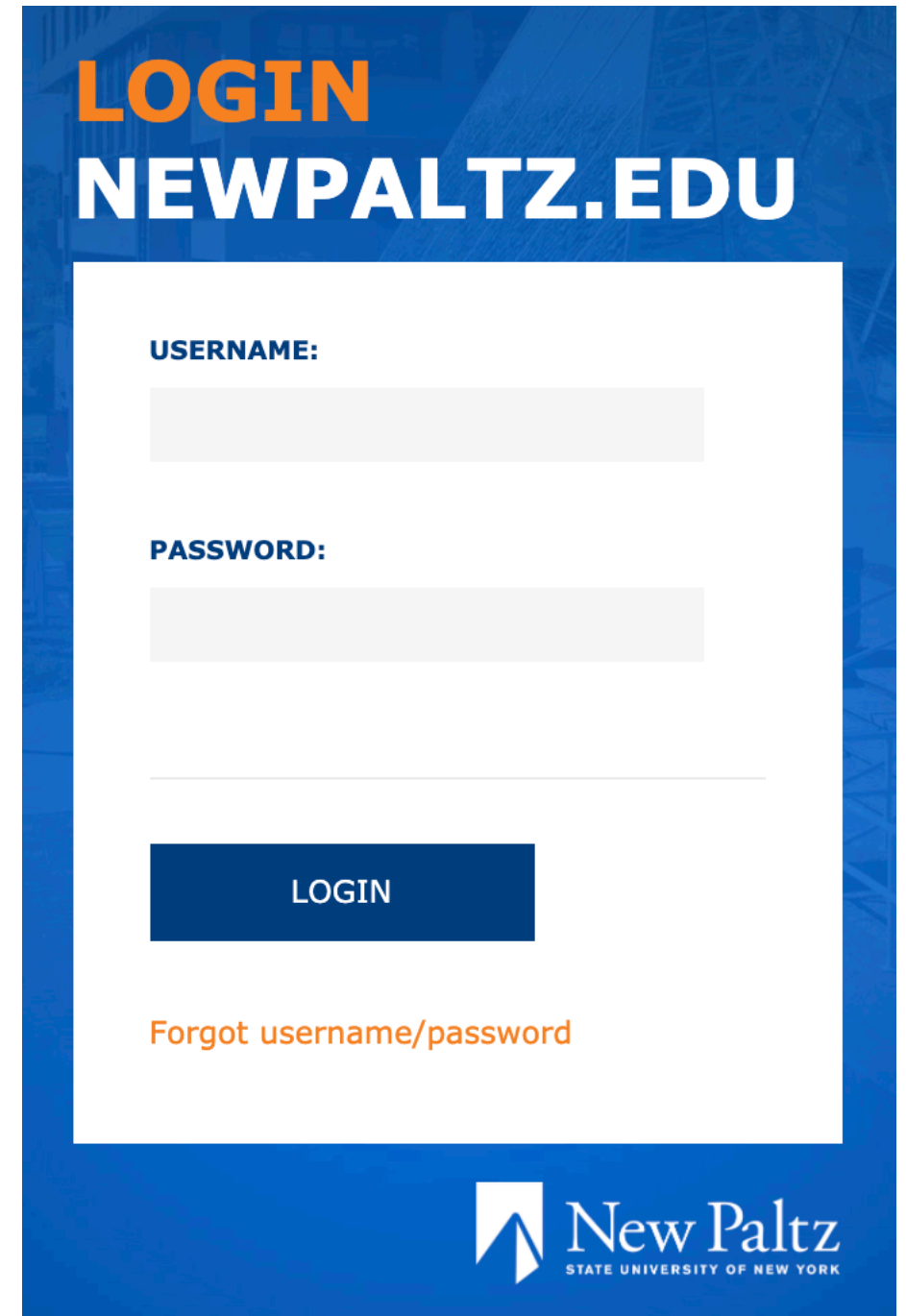


DYNAMIC WEB PAGES – STATIC VS DYNAMIC

- ▶ So far, we have been creating **static** web pages in this course.
- ▶ Static web pages look exactly the same for every visitor no matter who visits the web site.
- ▶ **Dynamic** web pages can display different content and provide user interaction, by making use of **advanced programming** and **databases** in addition to HTML and CSS.
- ▶ Databases hold data for a site in a separate server from where your HTML and CSS files are kept.
 - **For example**, when a user registers on a site like Facebook, your data (name, email and password) is kept inside a database away from the rest of your files.

DYNAMIC WEB PAGES – THE FORM ELEMENT

- ▶ The most important html element that is used for obtaining data from users is the **form element**.
- ▶ You use forms all of the time, whether you are logging into blackboard or registering a new account for a website, those all use a form.
- ▶ Even though we'll be creating the form, are pages will still be static until we link them to a server and database!

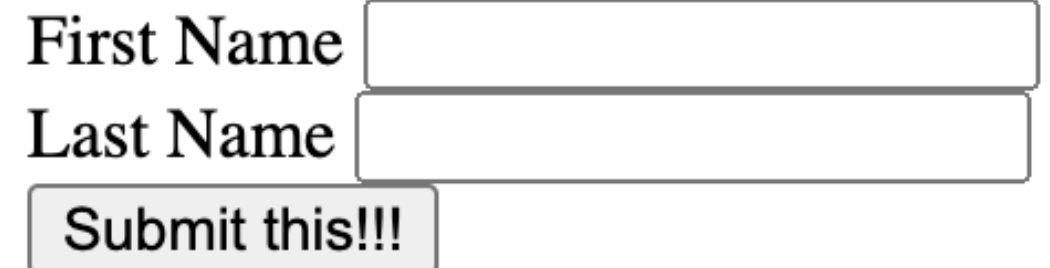


The image shows a login form for NEWPALTZ.EDU. The form is set against a blue background with a subtle pattern. At the top, the text "LOGIN" is in orange and "NEWPALTZ.EDU" is in white. Below this, there are two input fields: one for "USERNAME:" and one for "PASSWORD:". Both fields are light gray. Below the password field is a horizontal line. Underneath the line is a dark blue button with the word "LOGIN" in white. At the bottom of the form area, there is a link that says "Forgot username/password" in orange. In the bottom right corner of the blue background, there is the New Paltz State University of New York logo, which consists of a stylized 'N' and the text "New Paltz STATE UNIVERSITY OF NEW YORK".

THE FORM ELEMENT

- ▶ We need at least 3 elements to create our form:
 1. Form
 2. Label (inside the form)
 3. Input (inside the form, after the label element)
- ▶ The Form has two main attributes, **action** and **method**, which we won't be getting into right now. Just know it exists.
- ▶ The **label** just tells the user what each input is for, such as a name, password, email, etc.
- ▶ The **input** element is where users can input their data. Notice how the label's **for attribute** and the input's **id** and **name attributes** are the same.

```
<form action="#to-some-server" method="POST">  
  <label for="fname">First Name</label>  
  <input type="text" id="fname" name="fname">  
  <br>  
  <label for="lname">Last Name</label>  
  <input type="text" id="lname" name="lname">  
  <br>  
  <input type="submit" value="Submit this!!!">  
</form>
```



First Name

Last Name

THE FORM ELEMENT – INPUT

- ▶ There are a bunch of input types. We previously saw the **submit** (creates a button) and the **text** input (creates a text box).
- ▶ You can also have radio buttons, check boxes, and much more. Another important input type you should know is the **password** type.
 - ✱ The password input type will make it so the text can't be seen when written by a user.

Example

```
<form>
  <label for="username">Username:</label><br>
  <input type="text" id="username" name="username"><br>
  <label for="pwd">Password:</label><br>
  <input type="password" id="pwd" name="pwd">
</form>
```

Try it Yourself »

This is how the HTML code above will be displayed in a browser:

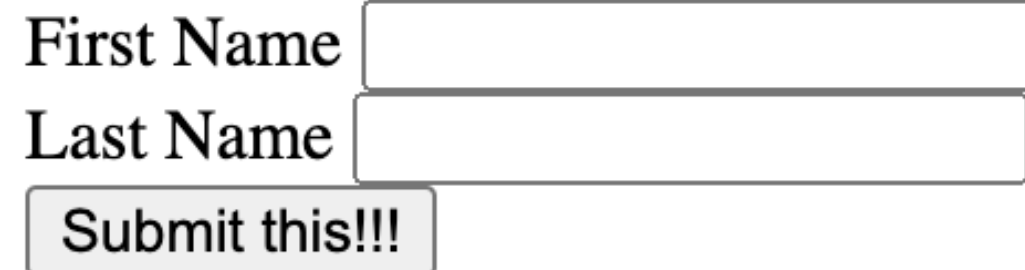
Username:

Password:

The characters in a password field are masked (shown as asterisks or circles).

A form without styling doesn't look great. Let's use some CSS to make it look better.

```
<form action="#to-some-server" method="POST">  
  <label for="fname">First Name</label>  
  <input type="text" id="fname" name="fname">  
  <br>  
  <label for="lname">Last Name</label>  
  <input type="text" id="lname" name="lname">  
  <br>  
  <input type="submit" value="Submit this!!!">  
</form>
```



First Name

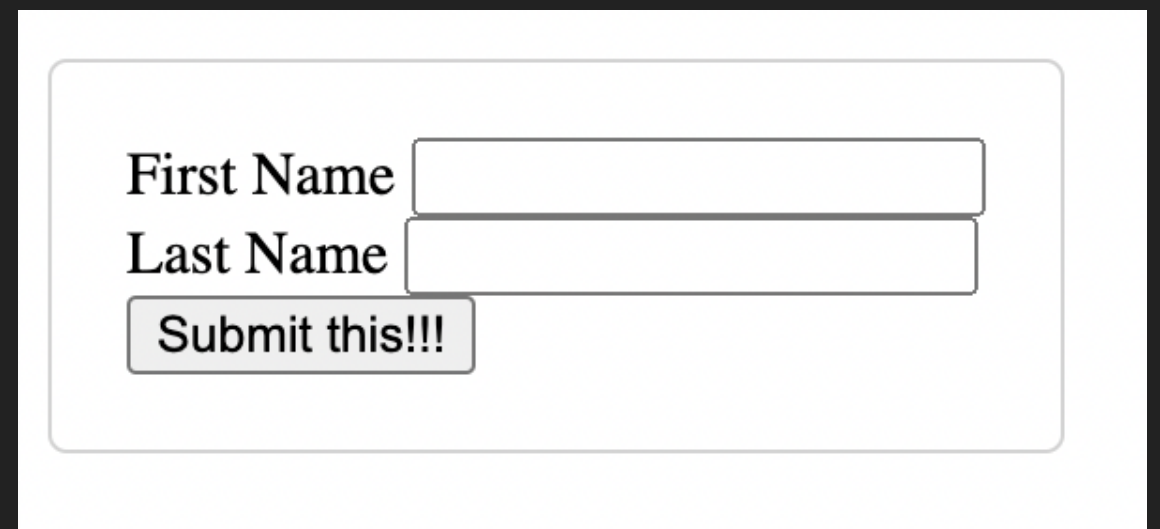
Last Name

Submit this!!!

STYLING OUR FORMS

- ▶ Easy ways to style is to add some kind of border (you could even use a box-shadow instead which always looks pretty modern).
- ▶ Don't forget to add padding around your form or else it will look smushed.
- ▶ The width of a form will take up the entire page since a form is a **block level element**. To fix this, you can either specify a width, or you can use **width: max-content;**
 - ▶ This will force the width to only be wide as the content is.

```
form {  
  border: 1px solid lightgray;  
  border-radius: 5px;  
  padding: 20px;  
  width: max-content;  
}
```



First Name

Last Name

STYLING OUR FORMS

- ▶ Still doesn't look amazing, so let's add some padding around our inputs.
- ▶ I switched to box-shadow for a more modern look.
- ▶ I also added a h2 title inside of our form.



```
input {  
  margin: 10px; /* this creates space between each input*/  
  padding: 5px; /* this makes the text area larger */  
  border-radius: 5px; /* this makes the text area more rounded */  
}
```

STYLING OUR FORMS

- ▶ Almost there! The button is kind of ugly. We can style that too!
- ▶ You can either use a class on the submit button OR you can use an **attribute selector**. (Don't worry about this on a test, but you may be interested in using it.)
 - ✱ With an attribute selector, you just use brackets which specify the input type inside like the example to the right.

```
input[type="submit"] {  
  display: block;  
  background-color: darkcyan;  
  color: white;  
  border: none;  
  padding: 10px 20px;  
  border-radius: 15px;  
  font-size: 18px;  
  text-transform: uppercase;  
  margin: 30px auto 10px auto;  
}
```

What's Your Name?

First Name

Last Name

SUBMIT THIS!!!

MUCH BETTER!

First Name

Last Name

Submit this!!!

What's Your Name?

First Name

Last Name

SUBMIT THIS!!!

EXAMPLE

- ▶ Follow along or just watch the demo.

EXERCISE

- ▶ Under **Lecture 3** in folder: File called ***Exercise on Forms***

ASSIGNMENT 3 AND PROJECT RUBRIC

- ▶ Be sure to check out the Project Description and Project Rubric under the **Project** tab on Blackboard.
- ▶ Assignment 3 is due **Thursday 02/17** before class.