DevX
HTML/CSS

Class 11 - Forms and Inputs

Review

We learned about *User Interface Design*:

- Three key areas:
  - Information Architecture
  - Visual Design
  - Interaction Design
- Information Architecture
  - Organizing, simplifying, and managing user interaction/information processing
- Visual Design
  - Balance: Symmetry, asymmetry, & radial
  - Consistency, Whitespace, Scale, Proportion, Golden Ratio, Movement
- Interaction Design
  - Target Audience, Psychographics, Understanding the Industry
- Information Density
- Layouts and Hierarchy
- Fonts & Typography
  - Serif, sans-serif, script fonts.
  - Primary and secondary typefaces
- Iconography
  - Menu icons
  - Icon choices

Questions?

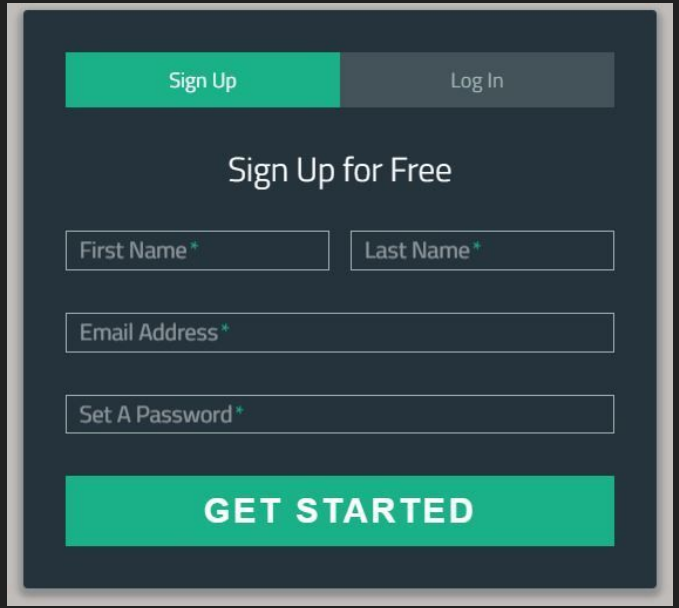
Forms

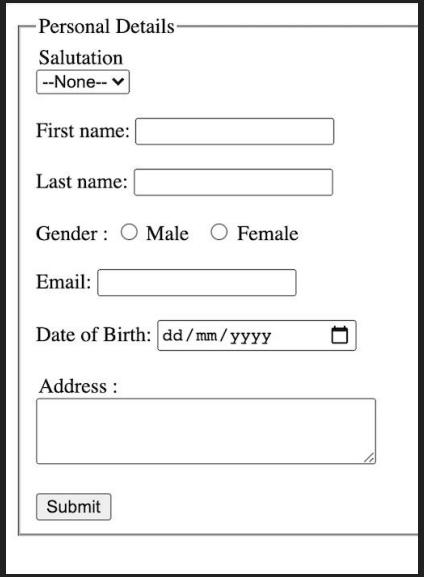
Forms

Forms collect data on the web. You see them everywhere.

Any website that can receive input data has a form.

You will use them more when learning Javascript. For now, we will learn their structure and syntax.





Forms Syntax

(1) A <form> tag on the outside

(2) <label> and <input> tags inside.

(3) (Optional) Other tag types inside.

```
<form>
```

```
</form>
```

Visible Text

<label> provide context to the form fields.

Forms Syntax

(1) The <label> links with the <input> by linking the "for=" attribute with the "id=" attribute.

(2) The <input>'s "name=" attribute labels the input data for storage. (More on this later)

(3) The <input>'s "type=" attribute decides whether the input is a text box, radio button, etc.

```
<form>
  <label for="fName">First Name:</label>
  <input type="text" id="fName" name="firstName"/>
</form>
```

for

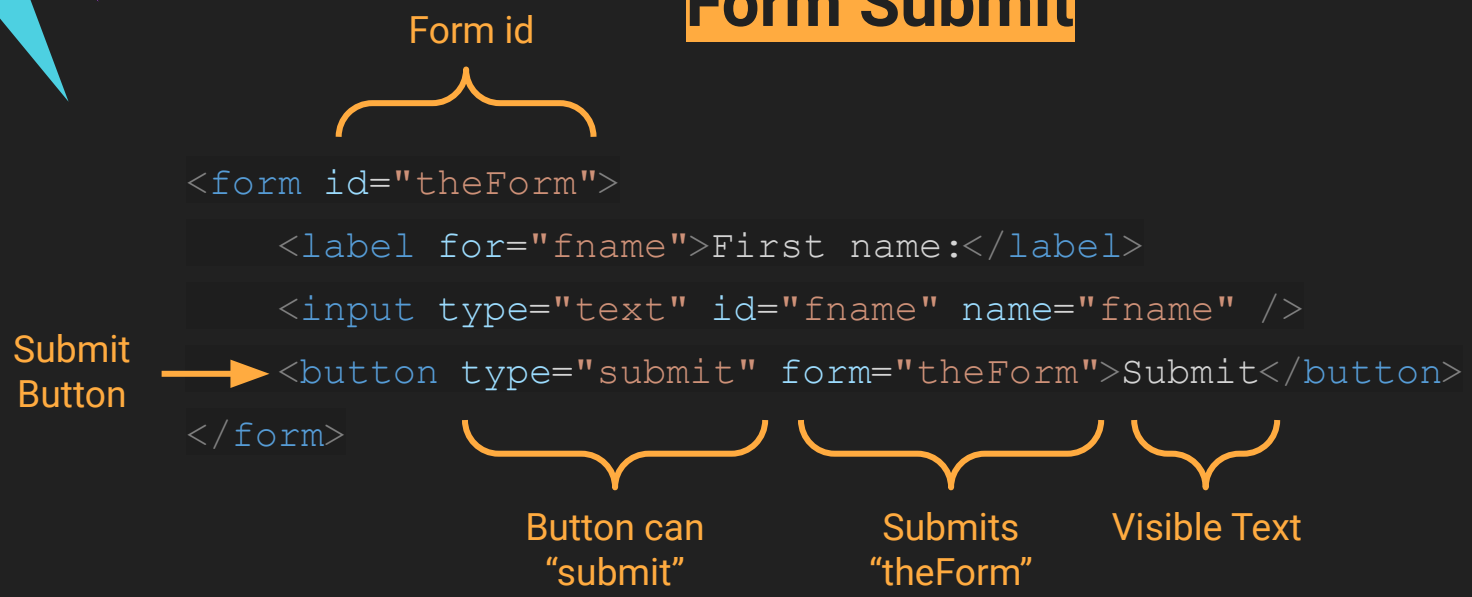
Type of Input

id

data name

Do a quick demonstration.

Form Submit



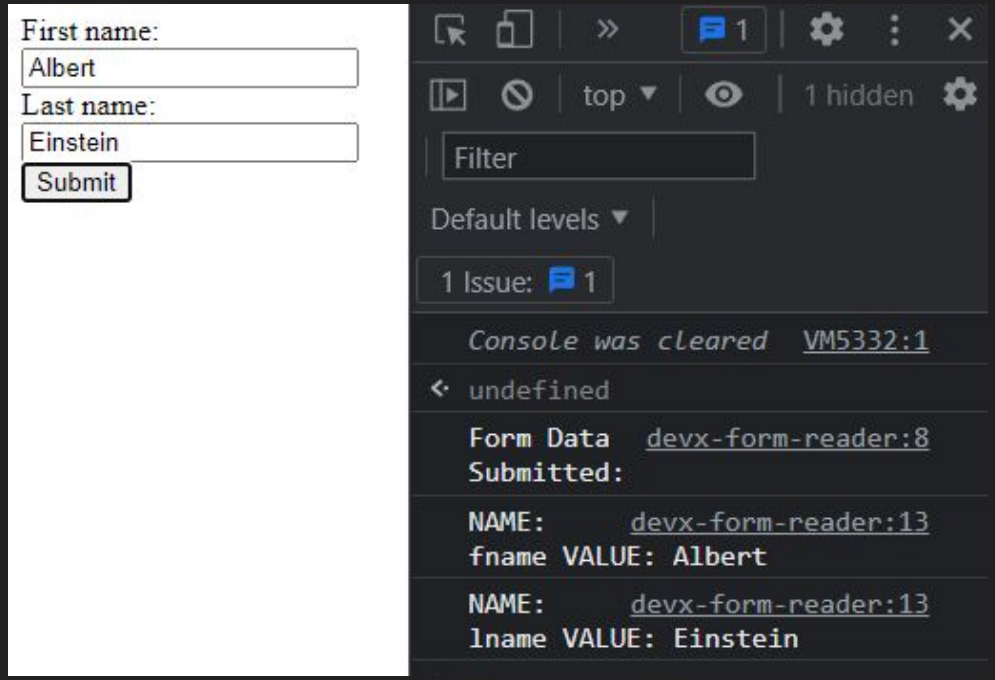
We've added a button to the form from the last page. The button allows us to "submit" the form. That is to say, it collects the data and sends it somewhere.

By default, this redirects the page. But there are ways to prevent that, and observe the data.

Do a quick demonstration.

Form Data

```
<script src="https://tinyurl.com/devx-form-reader"></script>
```



Do a quick demonstration.

For this class I made a little form-reading script. It uses Javascript, which we aren't covering in this class. But that's OK, we can still use it to learn about forms.

When this <script> is added to a page, submitting a form will display the data in the inspector's console.

You can get to the inspector by right-click on the page and picking "inspect".
Or CTRL + SHIFT + "i".
Or CMD + SHIFT + "i" for Mac.

Activity: Make a Form

Activity: Make a Form

We're going to make a simple form page! And use a tiny bit of Javascript to read the form data.

(1) Open a boilerplate HTML file
(2) Put this content in the boilerplate HTML file
(3) Open with live server
(4) Add some data to the form,
(5) Click Submit.

```
<form action="" method="" id="myForm">
  <label for="First Name">First Name</label>
  <input type="text" name="First Name" />
  <label for="Last name">Last Name</label>
  <input type="text" name="Last Name" />
  <button type="submit" form="myForm" value="Submit">Submit</button>
</form>

<script src="https://tinyurl.com/devx-form-reader"></script>
```

Activity: Make a Form (2)

Let's add some additional fields to the form. Radio buttons!

```
<br />
<input type="radio" id="html" name="favoriteLanguage" value="HTML" />
<label for="html">HTML</label><br />
<input type="radio" id="css" name="favoriteLanguage" value="CSS" />
<label for="css">CSS</label><br />
<input
  type="radio"
  id="javascript"
  name="favoriteLanguage"
  value="JavaScript"
/>
<label for="javascript">JavaScript</label>
<br />
```

Notice they have type="radio".

Also the labels are after the button.

Activity: Make a Form (3)

Now let's try a phone field!

Don't worry about the "pattern" attribute. You can google various ways to handle a phone "pattern". Also, you'll learn more about how to write them when you learn Javascript.

```
<br />
<label for="phone">Enter your phone number (### ### ####):</label>
<input
  type="tel"
  id="phone"
  name="phone"
  pattern="[0-9]{3}[\s-]+[0-9]{3}[\s-]+[0-9]{4}"
/>
<br />
```

This is called Regex. We'll learn it later, in Javascript. For now, just copy/paste it.

Activity: Make a Form (4)

Now try it yourself! Go online and find another type of input field to use in the form.

Try this resource on W3Schools:

https://www.w3schools.com/html/html_forms.asp

https://www.javatpoint.com/html-form-input-types

Some suggestions:

- Color
- Date
- Email
- Number
- Url
- Password
- Reset
- Checkbox
- Search
- Tel

File and Image input types might be too complicated for now. But feel free!

Other Form Elements

Select

Select is used when you want to make a dropdown menu.

The tag requires both a specific structure, and the value attribute on the inner items.

The <option> tags need to be inside the <select> tag, and there can be multiple.


```
<select name="cars" id="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</select>
```

Activity: Select

Activity: Select

Let's make a select dropdown!

Copy this format, and change the values!

```
<select name="cars" id="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</select>
```

Show how to do vsCode boilerplate HTML document. Try out some tags.

Tables

```
<table>
  <tr>
    <th>Company</th>
    <th>Contact</th>
    <th>Country</th>
  </tr>
  <tr>
    <td>Amazon</td>
    <td>Maria Anders</td>
    <td>USA</td>
  </tr>
  <tr>
    <td>Tencent</td>
    <td>Li Chang</td>
    <td>China</td>
  </tr>
</table>
```

Tables are… tables. They have rows and columns. They are not used that often, and you can look up the structure when you need to.

They have a complex structure of tags:

- <table> The outer table.
- <tr> Table Row
- <th> Table Header
- <td> Table Data

Company	Contact	Country
Amazon	Maria Anders	USA
Tencent	Li Chang	China

Forms

Forms can be very complex. They combine groups of <input> tags into a dataset. They are everywhere on the internet.

We'll have a class on them later, as they are a bigger topic. They usually involve Javascript.

```
<form action="/">
  <label for="firstName">First name:</label><br>
  <input type="text" id="firstName" name="firstName" value="John"><br>
  <label for="lastName">Last name:</label><br>
  <input type="text" id="lastName" name="lastName" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

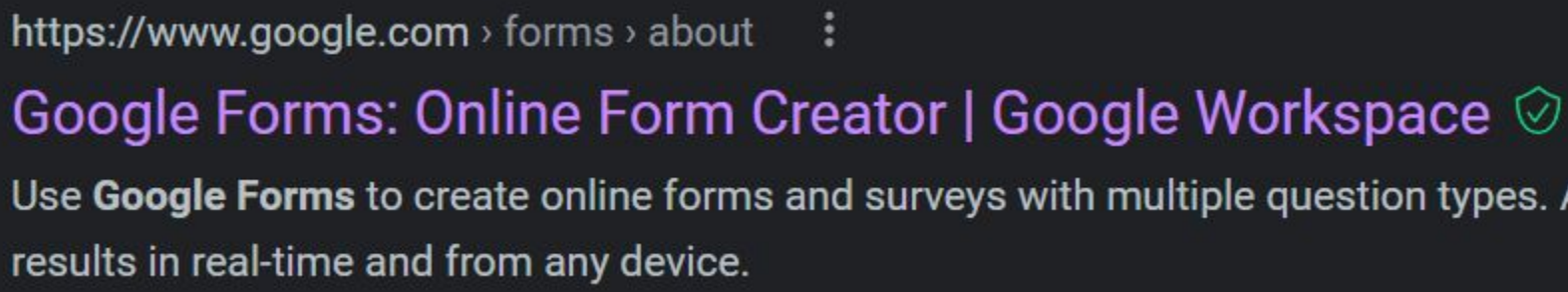
Google Forms

Google Forms

Google forms are another way to add some functionality to your webpages without too much code.

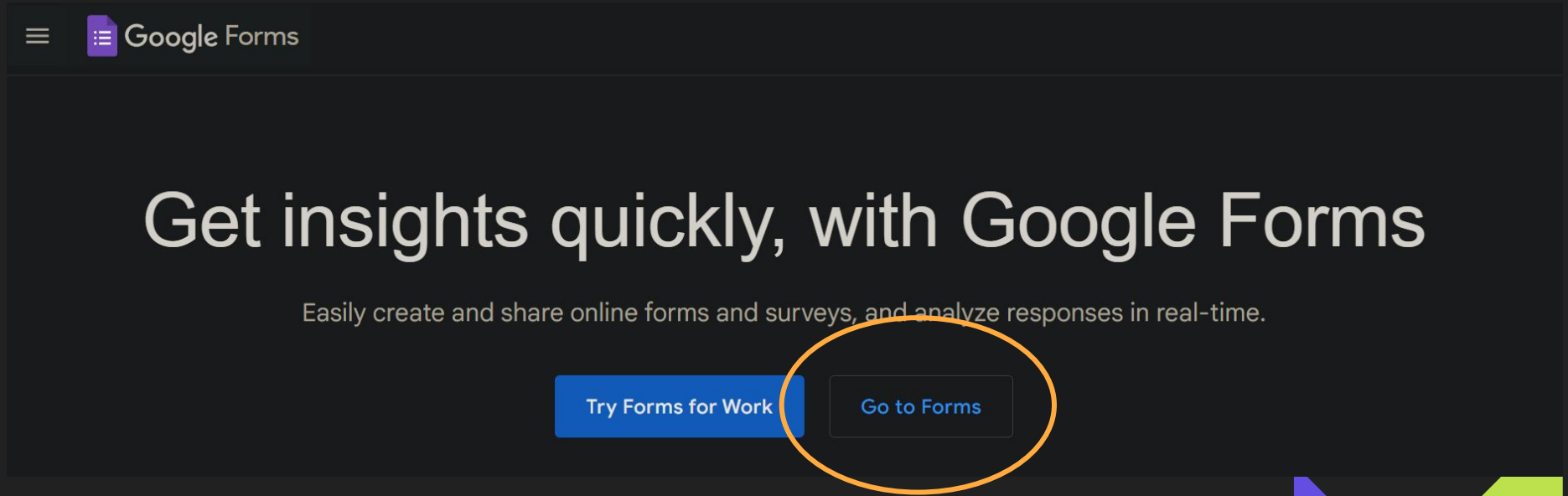
Google has created an online tool that allows you to use, share, and add forms to webpages with just a little bit of HTML code.

I would consider using Google forms for small projects, but not for larger ones. In those cases you probably want to use a custom for with custom styling.



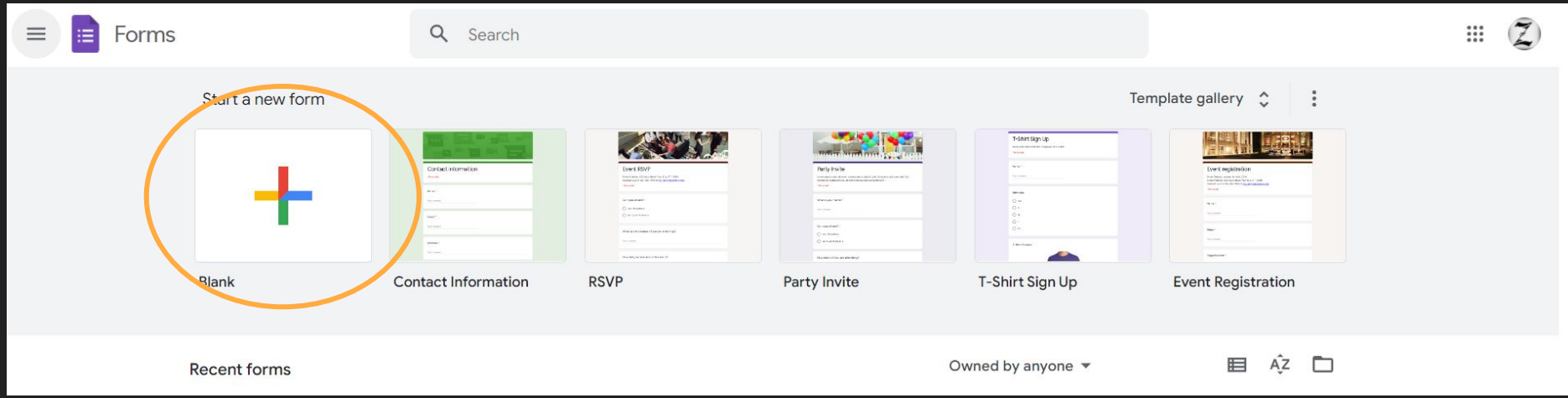
Google Forms

From there, “Go to Forms”



Google Forms

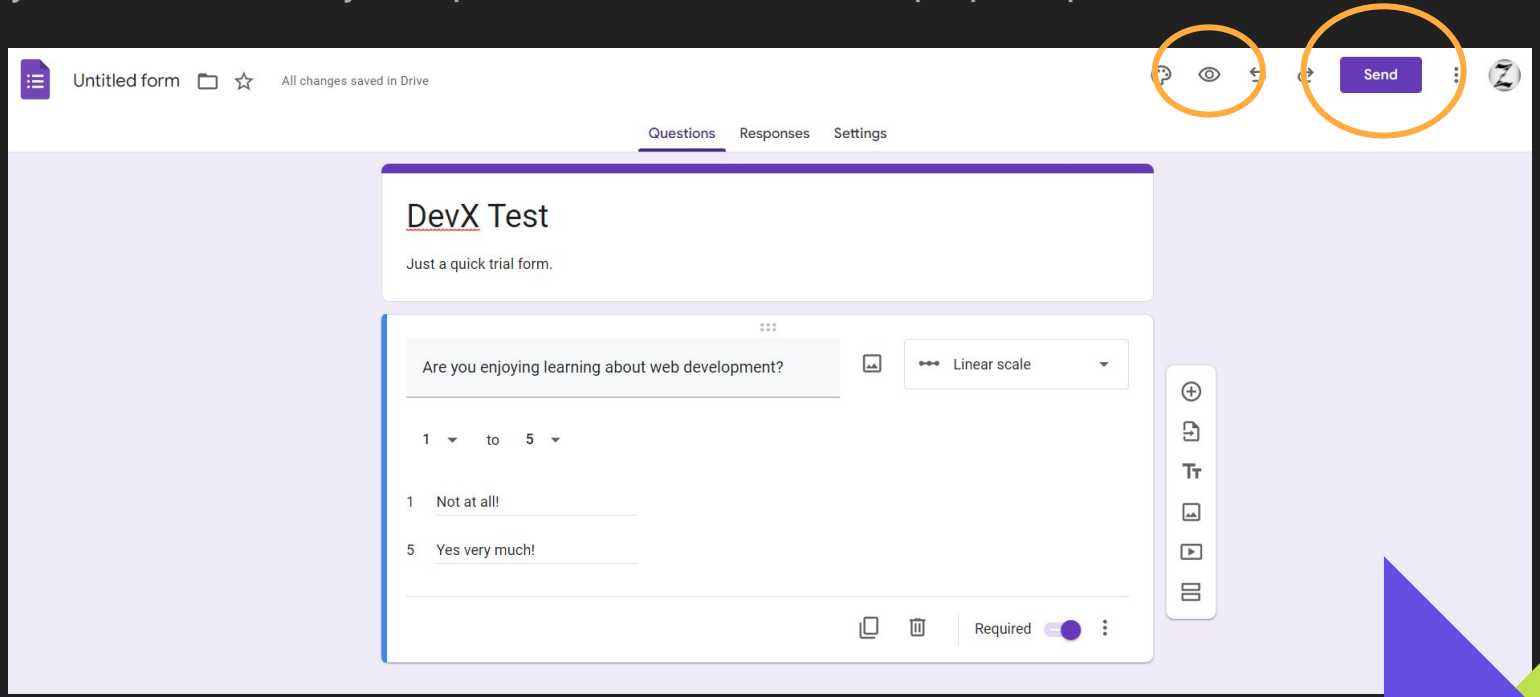
Choose a form type that fits your needs. Try “Blank” for now.



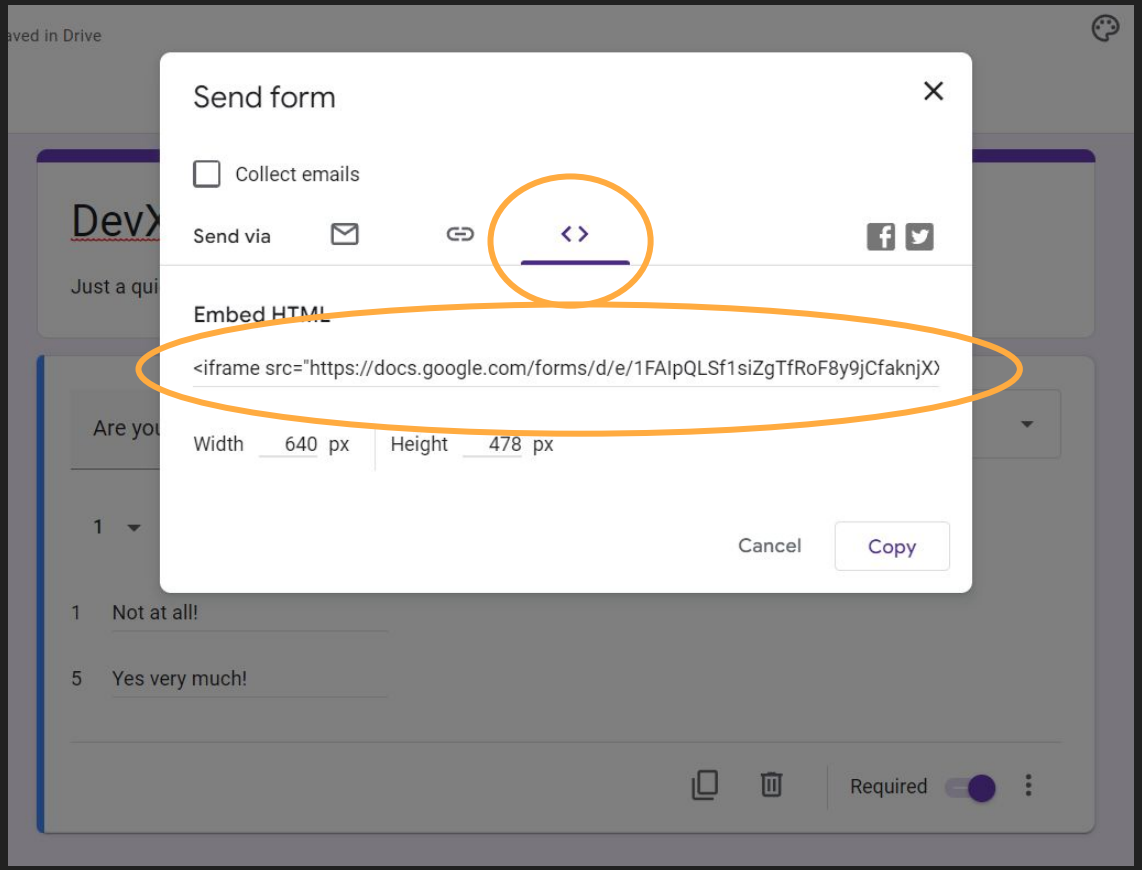
Google Forms

Here you can build the questions. It takes a little time to get used to all the possible settings.

When you are done, the eye to “preview” or click “Send” top open up a modal.



Google Forms

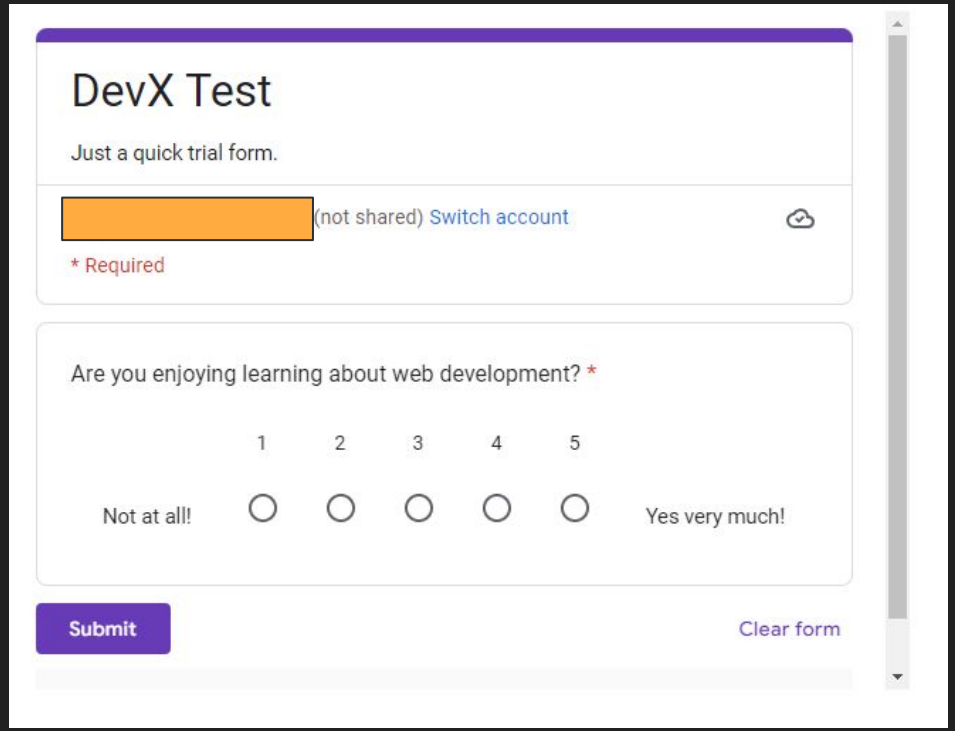


In this modal, you can click on the “Embed” icon, then copy the <iframe> tag provided.

Google Forms

```
<iframe
    src="https://docs.google.com/forms/d/e/1FAIpQLSf1siZgTfRoF8y9jCfaknjXXOX4BJGzWIvqPKCiy_PI5701ow/viewform?embedded=true"
    width="640"
    height="478"
    frameborder="0"
    marginheight="0"
    marginwidth="0"
>
    Loading…
</iframe>
```

Add the <iframe> to your HTML file and boom! You have a form.



Activity: Make a Google Form

Activity: Make a Google Form

This time we're going to use a google form.

Follow the steps from the previous slides.

1. Sign into google (if you haven't)
2. Search for Google Forms
3. Go to the Google Forms site
4. Go to Forms
5. Create a blank form
6. Create a few questions
    a. Multiple Choice
    b. Short Answer
    c. Linear Scale
7. "Preview" the form (to check)
8. "Send" the form
9. Find the "embed" tab
10. Copy the "embed" HTML tag
11. Create an HTML file
12. Add the HTML tag to the file
13. Live-Server and fill out/submit the form
14. Back on the form page, check your "Responses"

Q&A