

# Multiplayer trivia game

HTML, CSS, JavaScript basics

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UMN ADC

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## Streaming

- <https://umn.zoom.us/my/adc.workshop>
- Recordings will be posted as unlisted YouTube videos as linked at <https://adcumn.org/meetings>

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## In-person

- Tuesdays 5-6pm
- Tate Hall B20

# Officer openings!

- Workshop instructors

DM us on the discord!

<https://z.umn.edu/ADCdiscord>

# A look ahead...

## Event Schedule

Check here to see our event schedule. Join the discord for the latest event updates. Want a sneak peak? Check out our [GitHub](#).

Event	Time	Place	Guide	Recording
<b>Kickoff: Play a multiplayer trivia game that you'll learn how to make later!</b>	Tue, Sep 21 7pm	Bruininks Hall 230	Slides	N/A
<b>Multiplayer trivia game part 1: Setting up your environment</b>	Tue, Sep 28 5-6pm	Tate Hall B20	Tutorial	
<b>Multiplayer trivia game part 2: HTML, CSS, and Jinja templating</b>	Tue, Oct 5 5-6pm	Tate Hall B20	Tutorial	
<b>Multiplayer trivia game part 3: SocketIO</b>	Tue, Oct 12 5-6pm	Tate Hall B20	Tutorial	
<b>Multiplayer trivia game part 4: More SocketIO</b>	Tue, Oct 19 5-6pm	Tate Hall B20	Tutorial	
<b>Multiplayer trivia game part 5: Open source fest</b>	Tue, Oct 26 5-6pm	Tate Hall B20	N/A	N/A
<b>More workshops (iOS, Mac, React) coming soon!</b>				

# Follow the guide!

<https://z.umn.edu/adc-mtg>

The screenshot shows the GitHub repository page for `ADC-UMN/multiplayer-trivia-game`. The repository is public and has 1 watch, 0 stars, and 1 fork. The main branch is `master` with 1 branch and 0 tags. The repository contains a file tree with the following files and their last commit dates:

File	Last Commit
<code>src</code>	update to match bug fixes on whodaman repo 13 months ago
<code>README.md</code>	link to original project and more challenges 13 months ago
<code>diagram.png</code>	first iteration of tutorial 13 months ago
<code>part-0.md</code>	update to match bug fixes on whodaman repo 13 months ago
<code>part-1.md</code>	update to match bug fixes on whodaman repo 13 months ago
<code>part-2.md</code>	update to match bug fixes on whodaman repo 13 months ago
<code>part-3.md</code>	update to match bug fixes on whodaman repo 13 months ago

The `README.md` file is selected, showing the title "Create your own multiplayer trivia game with Flask and SocketIO". The content includes a note that it may be helpful to look at Part 2 and Part 3 concurrently, and a list of links to the parts:

- Part 0: Overview, Environment, and Directory Structure
- Part 1: Jinja Templating
- Part 2: Client-side Code

The right sidebar contains sections for "About" (a link to `nathanielbd-whodaman.net.app`), "Releases" (no releases published), "Packages" (no packages published), and "Languages" (a bar chart showing the distribution of languages in the repository).

# Jinja Templating

## layout.html

```
<!DOCTYPE html>
<html>
  <head>
    {% block head %}
    <title>{% block title %}{% endblock %}</title>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet" href="/static/style.css">
    <link rel="shortcut icon" href="/static/favicon.ico" type="image/x-icon">
    <link rel="icon" href="/static/favicon.ico" type="image/x-icon">
    {% endblock %}
  </head>
  <body>
    <div class="container" id="content">
      {% block content %}
      {% endblock %}
    </div>
    <script src="//cdnjs.cloudflare.com/ajax/libs/socket.io/2.2.0/socket.io.js"
    integrity="sha256-yr44Rk/GU1ehYJPASBP4)1Igu0hDsp4ZKrx8b0EDC3I="
    crossorigin="anonymous"></script>
    <script src="https://code.jquery.com/jquery-3.4.1.slim.min.js"
    integrity="sha384-J6qa4891E2qPOt4AhnyKhvSvZ55F55P001E1jwvK77imgFAv0wajllyYforS3oZan"
    crossorigin="anonymous"></script>
    {% block scripts %}
    {% endblock %}
  </body>
</html>
```

## admin.html

```
{% extends "layout.html" %}
{% block title %}WhoDaMan - Admin{% endblock %}
{% block head %}
  {{ super() }}
{% endblock %}
{% block content %}
  <form id="start" class="center">
    <main>
      <header>
        <h1>WhoDaMan</h1>
      </header>
      <input id="room" type="text" placeholder="Game Name" />
      <p>Create a game, and start buzzing in!</p>
    </main>
  </form>
  <main>
    <section id="panel">
      <div class="panel_header">
        <h1>WhoDaMan</h1>
        <input id="shareLink" disabled />
      </div>
      <div class="panel">
        <div class="panel_header">
          <div class="panel_label">Leaderboard</div>
          <div>
            <button id="reset">Reset</button>
          </div>
        </div>
        <ul id="leaderboard">
        </ul>
        <div class="panel_header">
          <div class="panel_label">Players &#26; <span id="roomCount"></span></div>
          <div>
            <button id="begin">Begin</button>
            <button id="done" style="display: none;">Done</button>
          </div>
        </div>
        <ul id="qcontent">
        </ul>
        <div class="panel_header">
          <div class="panel_label">Buzzes</div>
          <div>
            <button id="skip" style="display: none;">Skip</button>
          </div>
        </div>
        <ul id="buzzes">
        </ul>
      </div>
    </section>
  </main>
{% endblock %}
{% block scripts %}
  <script src="{% url_for('static', filename='admin.js') %}"></script>
  <script>
    window.onbeforeunload = function(){
      return "Are you sure you want to close the window?"; // Alert the user when they refresh
    }
  </script>
{% endblock %}
```

# Jinja Templating

app.py

```
13
14 @app.route('/')
15 def index():
16     return render_template('index.html')
17
18 @app.route('/admin')
19 def admin():
20     return render_template('admin.html')
21
22 @app.route('/<room>')
23 def play(room):
24     return render_template('play.html')
```



# Running the app yourself

Open the terminal!

Change to `/src`

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❶ **Create virtual environment:** `python3 -m venv env`

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❶ **Create virtual environment:** `python3 -m venv env`

❷ **Activate virtual environment:**

Linux/Mac: `source env/bin/activate`,

Windows: `env\Scripts\activate.bat`

# Running the app yourself

Open the terminal!

Change to /src

- 1 **Create virtual environment:** `python3 -m venv env`
- 2 **Activate virtual environment:**  
Linux/Mac: `source env/bin/activate`,  
Windows: `env\Scripts\activate.bat`
- 3 **Install dependencies:** `pip install -r requirements.txt`

# Running the app yourself

Open the terminal!

Change to /src

- 1 **Create virtual environment:** `python3 -m venv env`
- 2 **Activate virtual environment:**  
Linux/Mac: `source env/bin/activate`,  
Windows: `env\Scripts\activate.bat`
- 3 **Install dependencies:** `pip install -r requirements.txt`
- 4 **Run app:** `python app.py`

# A question

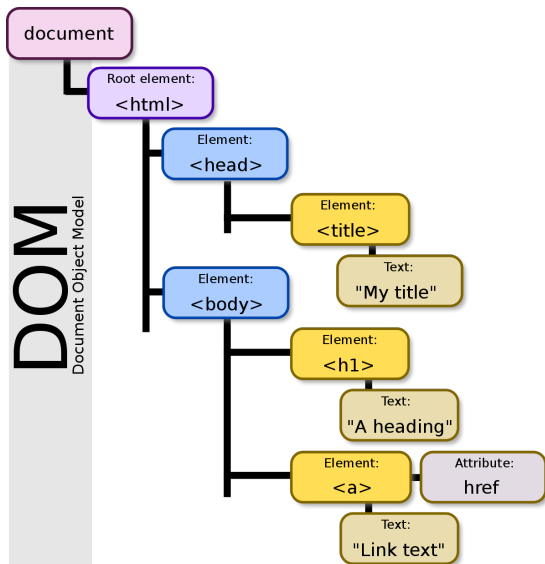
In `admin.html`, how do we make `<form>` visible at the start, then hide it and show `<main>`?

# A question

In `admin.html`, how do we make `<form>` visible at the start, then hide it and show `<main>`?

CSS selectors and JQuery

# DOM manipulations





# DOM manipulations

Notice the Jinja templating!

## admin.html

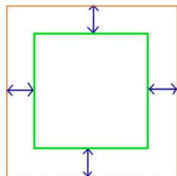
```
1 {% extends "layout.html" %}
2 {% block title %} WhoDaMan - Admin {% endblock %}
3 {% block head %}
4     {{ super() }}
5 {% endblock %}
6 {% block content %}
7     <form id="start" class="center">
8         <main>
9             <header>
10                 <h1>WhoDaMan</h1>
11             </header>
12             <input id="room" type="text" placeholder="Game Name" />
13             <p>Create a game, and start buzzing in!</p>
14         </main>
15     </form>
16 </main>
17 <section id="panel">
18     <div class="panel_header">
19         <h1>WhoDaMan</h1>
20         <input id="shareLink" disabled />
21     </div>
22     <div class="panel">
23         <div class="panel_header">
```

## admin.js

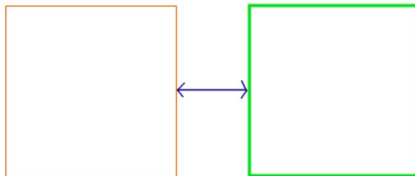
```
1 var socket = io()
2 var $startForm = $('#start')
3 var $roomField = $('#room')
4 var $panel = $('#panel')
5 var $beginButton = $('#begin')
6 var $resetButton = $('#reset')
7 var $shareLink = $('#shareLink')
8 var $buzzes = $('#buzzes')
9 var $roomCount = $('#roomCount')
10 var data = { room: null }
11
31 $startForm.on('submit', function(event) {
32     event.preventDefault()
33     data.room = $roomField.val()
34     socket.emit('create', data)
35 })
36
49 socket.on('create', function(success) {
50     if (success) {
51         $startForm.hide()
52         $panel.show()
53         $shareLink.val(window.location.host+'/' + data.room)
54     }
55     else {
56         alert('That room is taken')
57     }
58 })
59
```

```
selector { attribute: value; }
```

```
selector { attribute: value; }
```

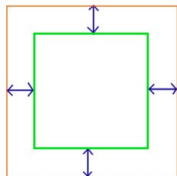


**Padding**

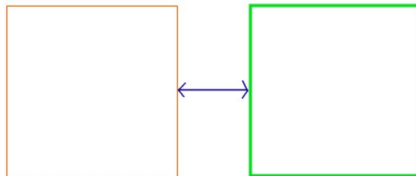


**Margin**

```
selector { attribute: value; }
```



**Padding**



**Margin**

Let's look at `static/style.css`!

# A challenge

Try fiddling around with the HTML and CSS.

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Some ideas:

- Create your own template that extends `layout.html`

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- Create a section in `admin.html` where live chat might go

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Try fiddling around with the HTML and CSS.

Some ideas:

- Create your own template that extends `layout.html`
- Create a section in `admin.html` where live chat might go
- Create a button that switches the page from light theme colors to dark theme colors