I360 Web Design

Project 5 Directions

Plugins, Icons, Fonts

RESOURCES:

Navigation Plugin

Use the 'Sidenav with Bkg Fade' navigation demo

Leaflet.JS

http://leafletjs.com/examples/quick-start/

And also use https://www.latlong.net/

Google Fonts

https://fonts.google.com/

Font Awesome Icons

https://fontawesome.com/get-started

Making stripes using gradients in CSS

https://css-tricks.com/stripes-css/

IN THIS PROJECT, YOU WILL NEED TO:

Add semantic structural HTML tags

Add flexbox (two places)

Add a “racing stripe” make from CSS gradients

Adjust styling, including fonts, backgrounds and layout

Add navigation (provided plugin) - including a menu icon

Add a map (leaflet.js)

Use media queries to adjust styles at breakpoints

See the demo video for what the working version look like

1A. Add a map using Leaflet.js

http://leafletjs.com/examples/quick-start/

You don't need to download! Simply use the CDN included in the directions.

Tip #1:

```
accessToken: 'your.mapbox.access.token'
```

Replace with the accessToken below -- make sure you keep the single quote marks, which tell the JS that this is a string data type.

Access Token:

pk.eyJ1IjoibWFwYm94IiwiYSI6ImNpejY4NXVycTA2emYycXBndHRqcmZ3N3gifQ.rJcFIG214AriISLbB6B5aw

1B. Add a map using Leaflet.js

```
TIP: var mymap = L.map('mapid').setView([51.505, -0.09], 13);
```

([latitude, longitude], zoom 1-18)

The higher the zoom number, the more the map is zoomed in.

- Adjust the map so it centers on Bloomington, IN.
  https://www.latlong.net/
- Add a single **marker** above Luddy Hall with a pop-up message:
  Luddy School of
  Informatics, Computing and Engineering

1C. Add a map using Leaflet.js

Tip #2: If the code snippet in the tutorial doesn't look like HTML or CSS, it's JavaScript and it likes to live in a **<script>** tag directly before the close body tag **</body>**.

(FYI -- for this project, since it's only one page and since we have a lot of JS on the page already, feel free to include any JS needed for the menu into a <script> tag before or after your Leaflet JS, rather than in a separate 'main.js' or 'menu.js' page)

Tip #3: You'll need to use **media queries** to adjust the height of the map so it fits well within each viewport height. Start map at 180px tall in narrowest view.

Tip #4: The map and the H1 are both contained inside the <header>

2. Add a menu using a plugin

We've given you the complete navigation:

- **Goal: Add in the navigation without messing up your other plugin**
- FYI, you may need to adjust the margin / padding on the <body> to get it to look just right

Things to notice about the menu icon:

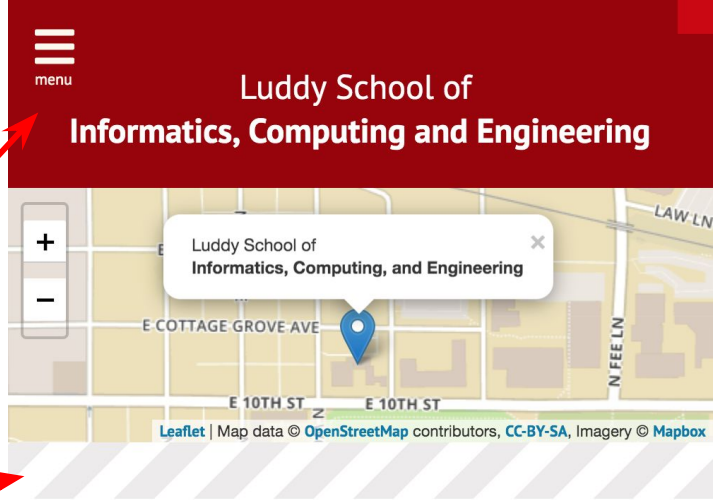
- The menu icon is positioned absolutely in the upper left corner
- We used Font Awesome Icons (JS/SVG version) for the bars
  - https://fontawesome.com/get-started
- We used the Google Font "PT Sans" for the "menu" font
  - https://fonts.google.com/

3. Adjust the styling (tips)

You'll need to mess with the **z-index** to get the **#mySidenav** menu to appear over the map -- set it to be **10,000**.

Add a "racing stripe"
https://css-tricks.com/stripes-css/

All text and titles should be in 'PT Sans' (400 or 700)



menu

Luddy School of
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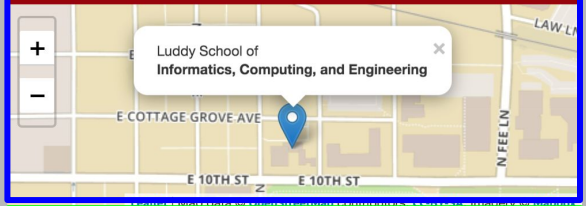

The school of tomorrow

The Indiana University Luddy School of Informatics, Computing, and Engineering is one of the world's largest, broadest, and best technology and information schools.

We shape the future through interdisciplinary research and education that make the impossible possible and solve the problems of tomorrow today.

Degrees for evolving jobs

Our programs are broad, ranging from the technical to the societal and often blending the two. A Luddy education prepares students to thrive in today's jobs and to adapt as technology careers change in the decades ahead.

Undergraduate programs

Graduate programs

Career services

Research that defies boundaries

No challenge is too big for us. Our faculty, researchers, and students team up to explore the frontiers of what technology and information can do in areas ranging from artificial intelligence to medicine. And they use what they discover to make life better for all of us.

Explore our research

and to adapt as technology careers change in the decades ahead.

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Explore our research

MOBILE VIEW

STRUCTURE

Nav & div.openbtn control the menu (pink)

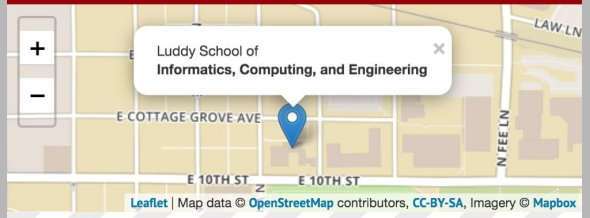
Header contains an H1 for the title and the map (blue)

Main contains a striped bar, three articles, and a footer (green)

Each article has a .container to control the max-width (not shown)

menu

Luddy School of
Informatics, Computing and Engineering



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MOBILE VIEW

CONTENT

The H1 is 24px

The map is 180px tall

The stripes are 40px tall and made from IU grey and white

The "Degrees" buttons wrap

The "Research" image and text stack in the narrow view

menu

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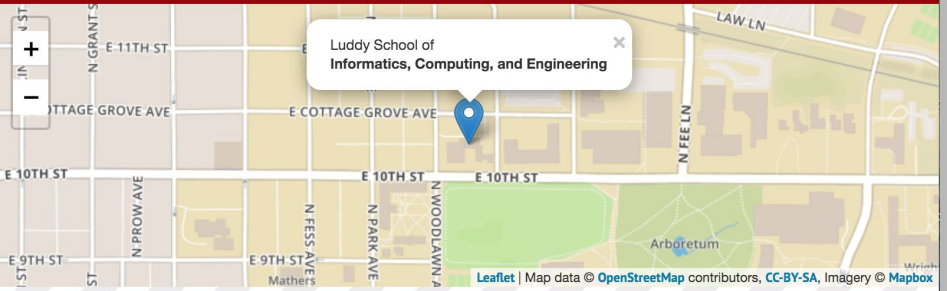

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Explore our research

SMALL VIEW The H1 is 36px • The map is 240px tall • "Degrees" buttons sit next to each other • "Research" image and text + button sit next to each other

menu

Luddy School of
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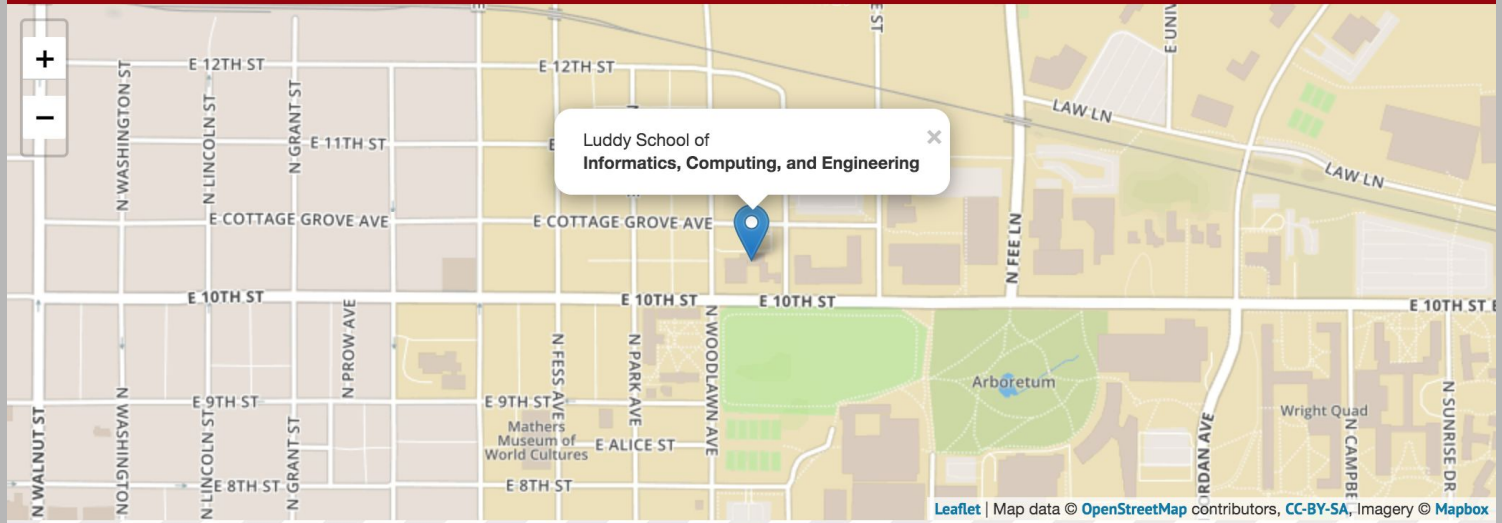

The school of tomorrow

MEDIUM VIEW

The H1 is 42px

The map is 360px tall

The racing stripes are now 60px tall

menu

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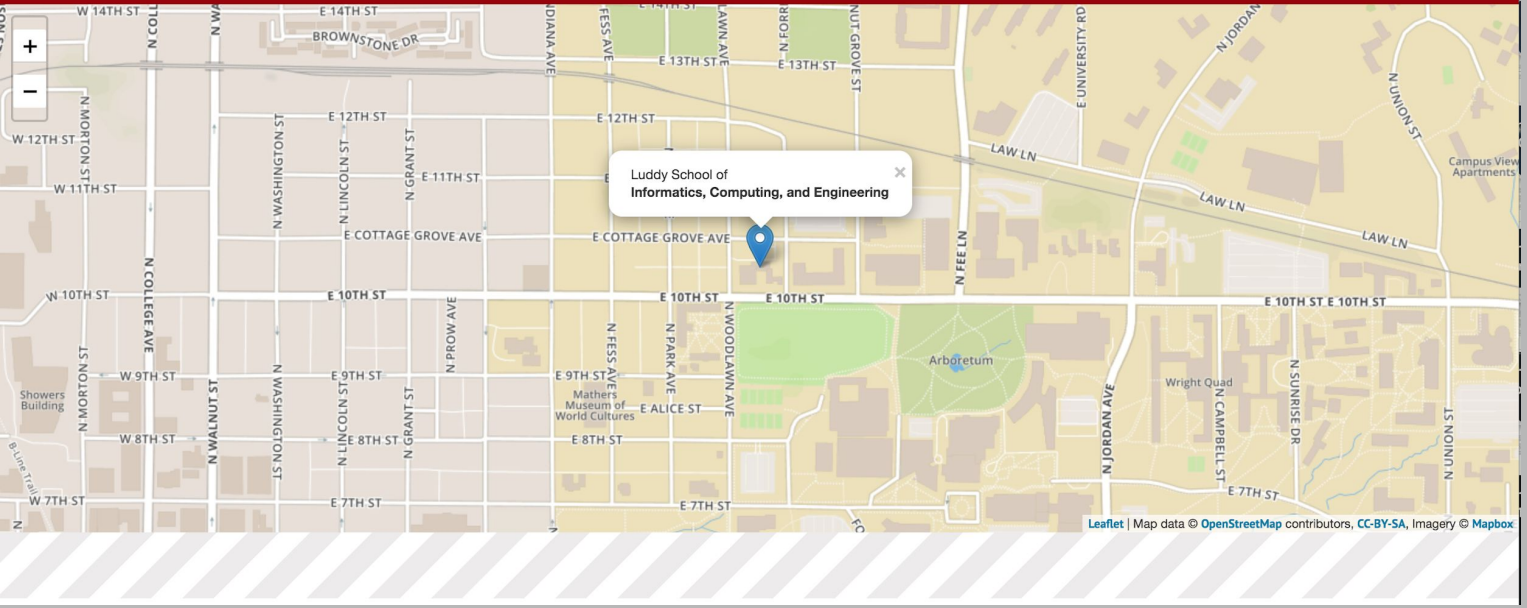
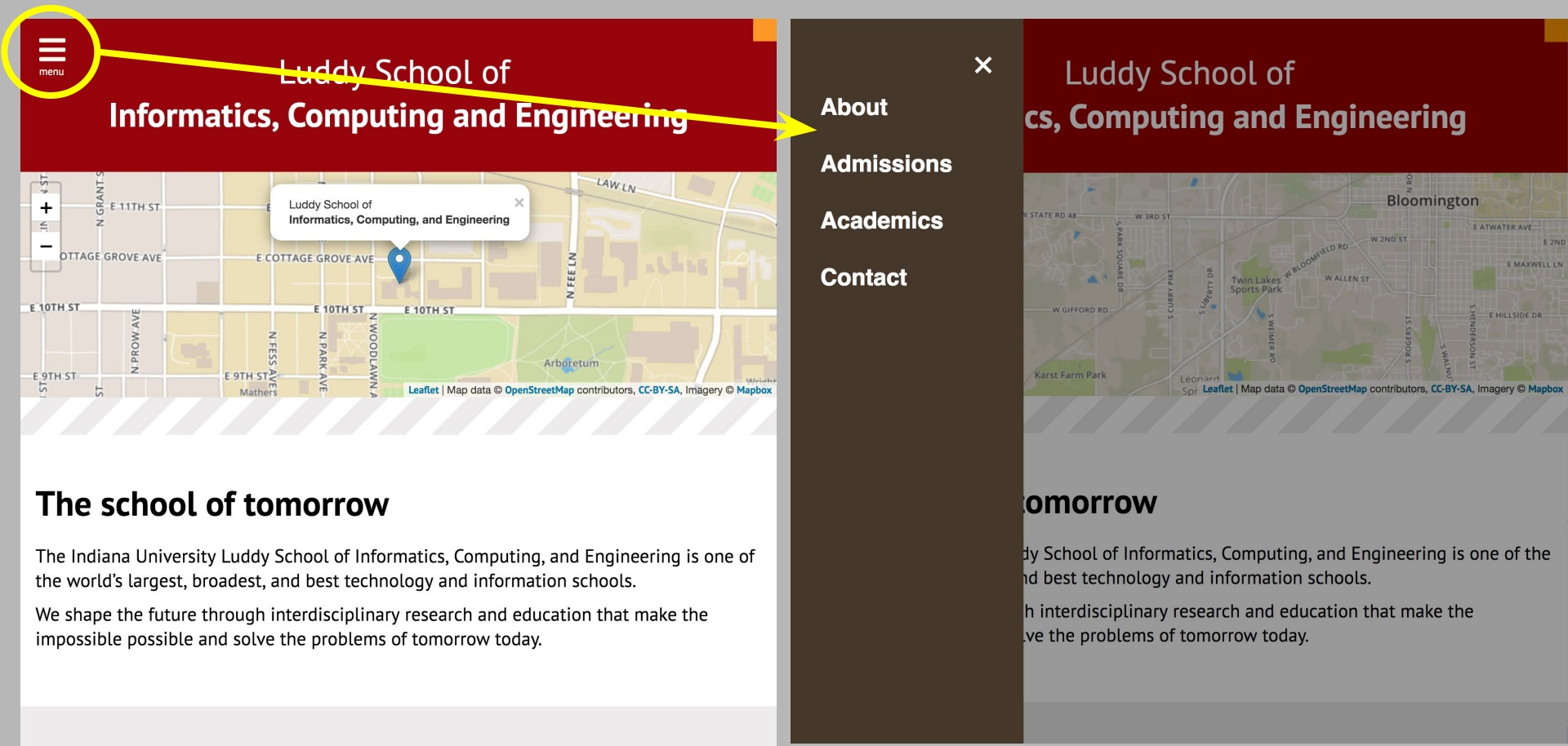


LARGE VIEW

The map is 480px tall

The menu icon opens up a sidebar navigation, which covers up part of the page and fades out the background. Use the navigation starter provided to add this plugin.



If you liked adding a map and think that's a neat feature, familiarize yourself with the **Mapbox SDK** (free to use at the level you would use it for in school) https://www.mapbox.com/

TERMINOLOGY, OR THE ANSWER TO WHAT'S THE DIFFERENCE BETWEEN A PLUGIN, API and SDK?

SDK = *Software Development Kit* - allows a developer to write an entire system using their technology, and not just adjust options.

API = *Application Program Interface* - allows a developer to set options and interact with the interface for a program. SDKs sometimes include APIs. For example the Google Maps API allows you to control what a google map looks like on your page.

Plugin = *An programmed interaction or tool* - written in a way that it can be dropped into your project easily. Some options can be set. In web dev, it's usually done in JavaScript, or using a JS-based library of code (like jQuery).

In your final project - you will choose one interactive element to add:

(your 'plugin' -- code not written by you -- should include JS or jQuery, and not just be CSS)

- Make sure to update the styles / color choices to fit your site's look and feel
- You may add more, but we're only requiring you to add one
- Choose any we've provided in class, including the navigation
- Or feel free to find a different plugin / snippet / interactive piece online