

# Why don't browser dev tools understand your code?



JavaScript  
2023

Steven Schkolne  
[steven@mightymeld.com](mailto:steven@mightymeld.com)

@ MightyMeld

# Overview

Understand Code

Visual C++

Xcode

Unity/Unreal/etc

Don't Understand Code

Chrome Dev Tools

React Dev Tools

# Overview

## Understand Code

Visual C++

Xcode

Unity/Unreal/etc

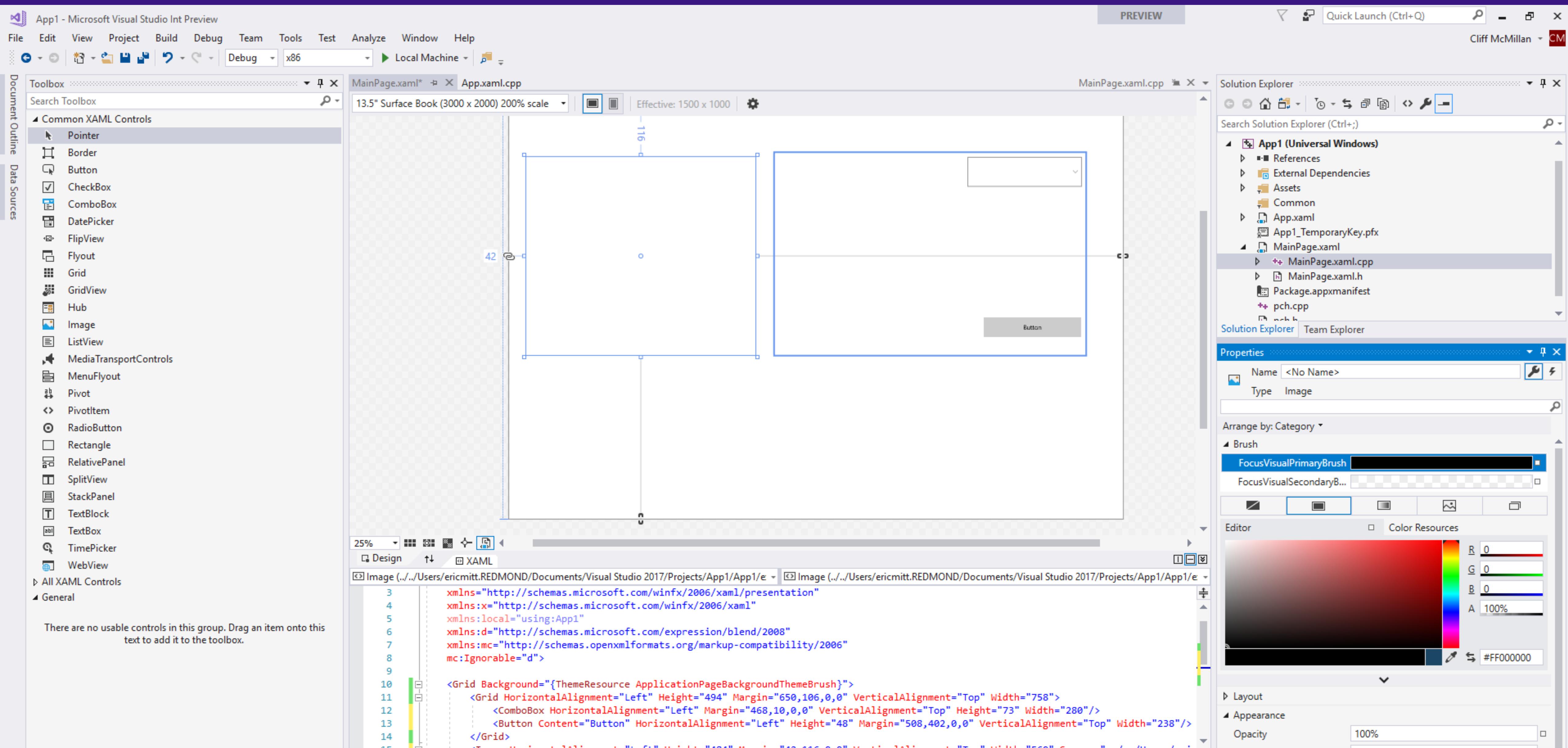
## Don't Understand Code

Chrome Dev Tools

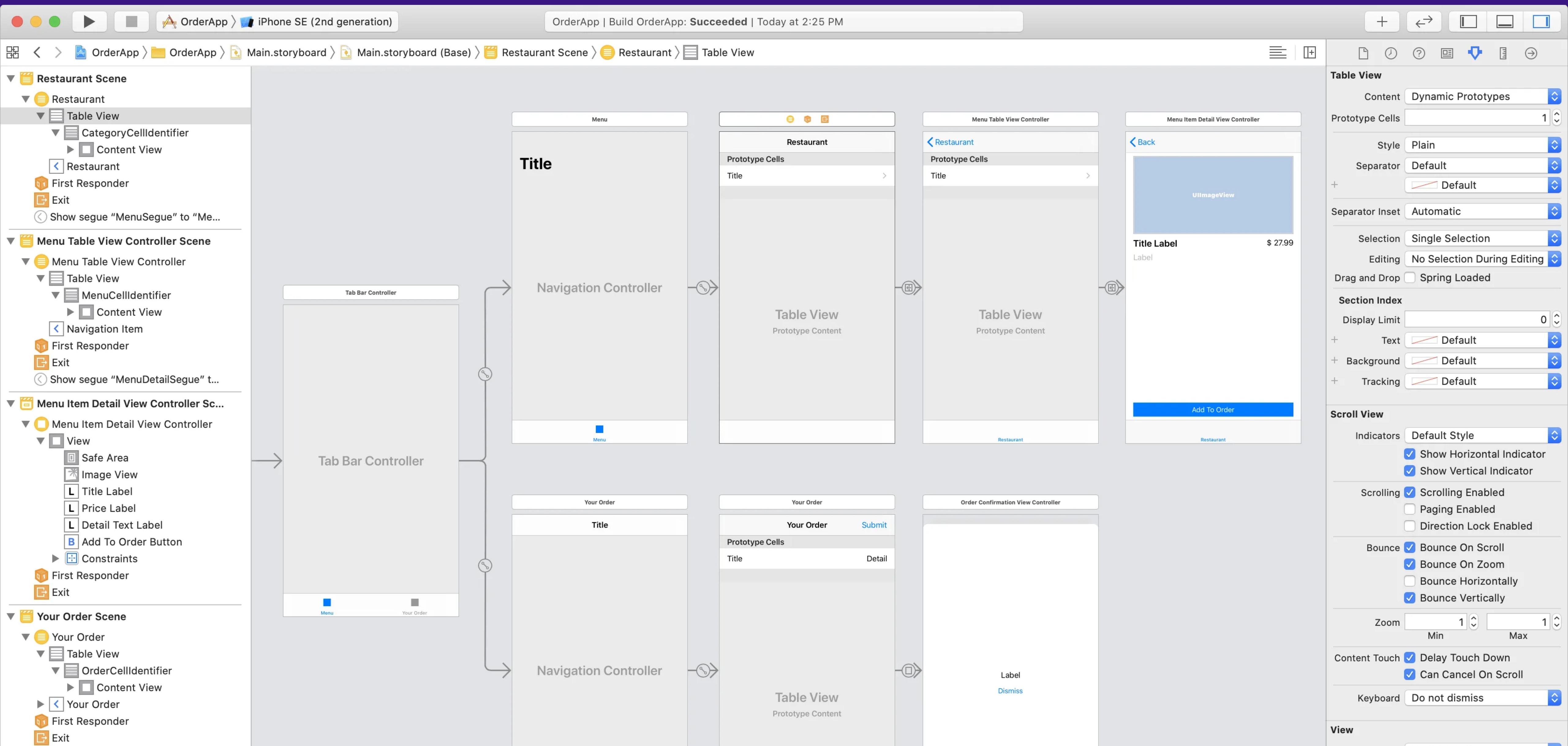
React Dev Tools



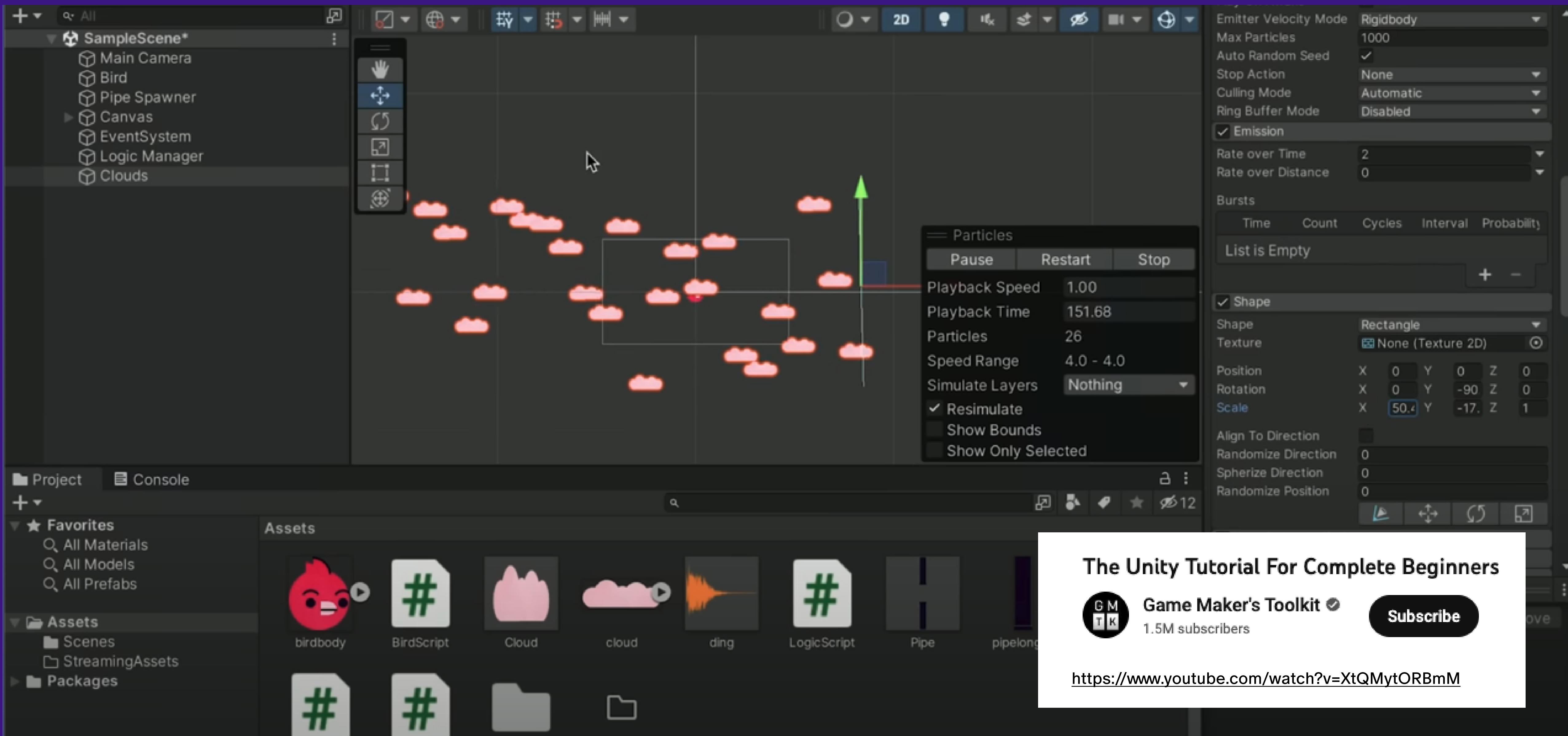
# Visual Studio / Windows Apps



# Interface Builder / iOS Apps



# Unity / Games



# Web App Development

The screenshot shows a movie application interface titled "MovieApp". The top navigation bar includes icons for home, search, and user profile. A search bar is present below the title. The main content area features a "Trending" section with three movie cards: "Beyond Earth" (2019), "Bottom Gear" (2021), and a partially visible third card starting with "Ur". Below this is a "Recommended For You" section with two cards: one showing a landscape and another showing a hand writing on a notepad. The bottom right corner of the screen displays the browser's developer tools "Elements" tab, showing the underlying HTML and CSS code for the current view.

```
Components > ChakraProvider22
  ChakraProvider
    ThemeProvider3
    ThemeProvider2
      EmotionThemeContext.Provider
        CSSVars
          EmotionGlobal
        ColorModeProvider
          ColorModeContext.Provider
            CSSReset
              EmotionGlobal
            GlobalStyle
              EmotionGlobal
        EnvironmentProvider
          EnvironmentContext.Provider
            ToastOptionsContext.Provider
              App
                MovieProvider
                  Context.Provider
                    RouterProvider
                      DataRouter.Provider
                        DataRouterState.Provider
                          ViewTransition.Provider
                        Router
                          Navigation.Provider
                            Location.Provider
                              DataRoutes
                                RenderErrorBoundary
                                RenderedRoute
                                  Route.Provider
                                    Home
                                    Layout
                                      Box
                                        div Styled
                                          Insertion6
                                        Sidebar
```

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# Answer #1 We Tried That

Dw File Edit View Insert Modify Format Commands Site Window Help DESIGNER

index3.html X Path: C:\Users\Tom\Documents\Hiking Club\chap14\index3.html

Source Code hiking.css SpryCollapsiblePanel.js SpryCollapsiblePanel.css

Code Split Design Live View Live Code Title: Hiking Club Home Page Check Page

0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

**HIKING CLUB**

**Meetings**  
Our meetings are held on the second Thursday of each month, at the Senior Center downtown.

**Hikes**  
Hikes take place on the 1st and 3rd Saturdays of the month at 8 AM.

**Hiking Club**

Get up off of that couch! Join The Hiking Club and enjoy exciting outdoor adventures throughout the year. We do hiking, technical rock climbing, backpacking, camping, snowshoeing, skiing, and cycling. Whether you want something easy or

**Common**

- Hyperlink
- Email Link
- Named Anchor
- Horizontal Rule
- Table
- Insert Div Tag
- Images : Fireworks HTML
- Media : Plugin
- Date
- Server-Side Include
- Comment
- Head

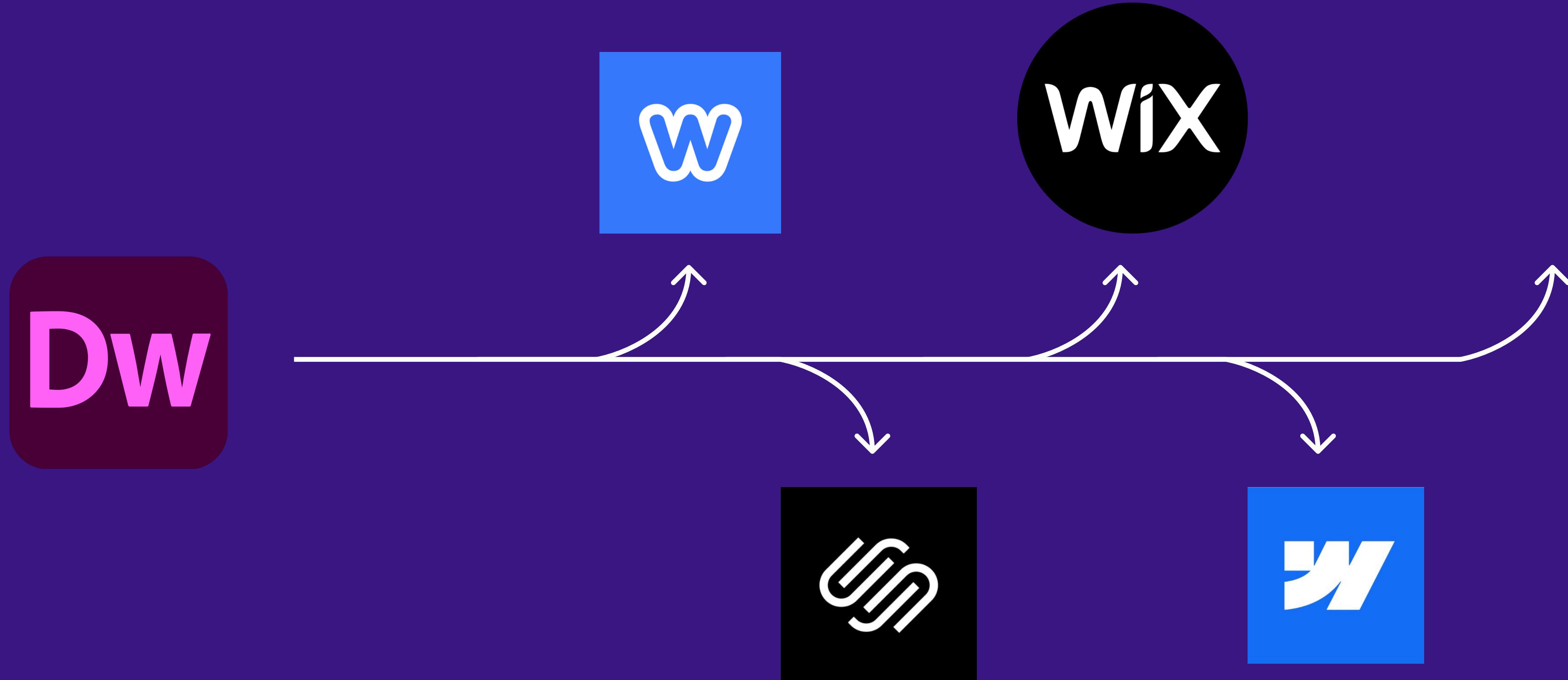
CSS STYLES AP ELEMENTS

FILES ASSETS

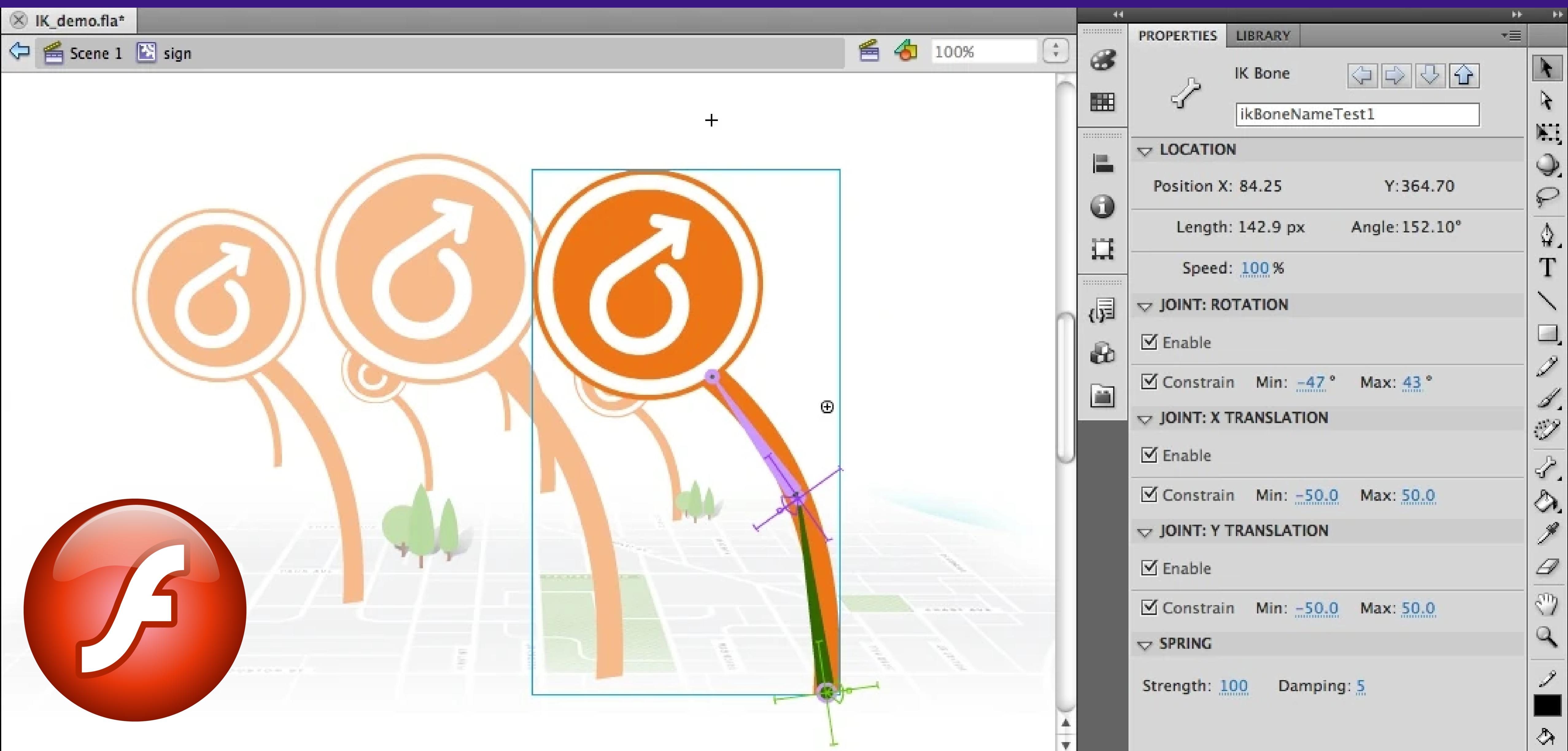
Hiking Club Local view

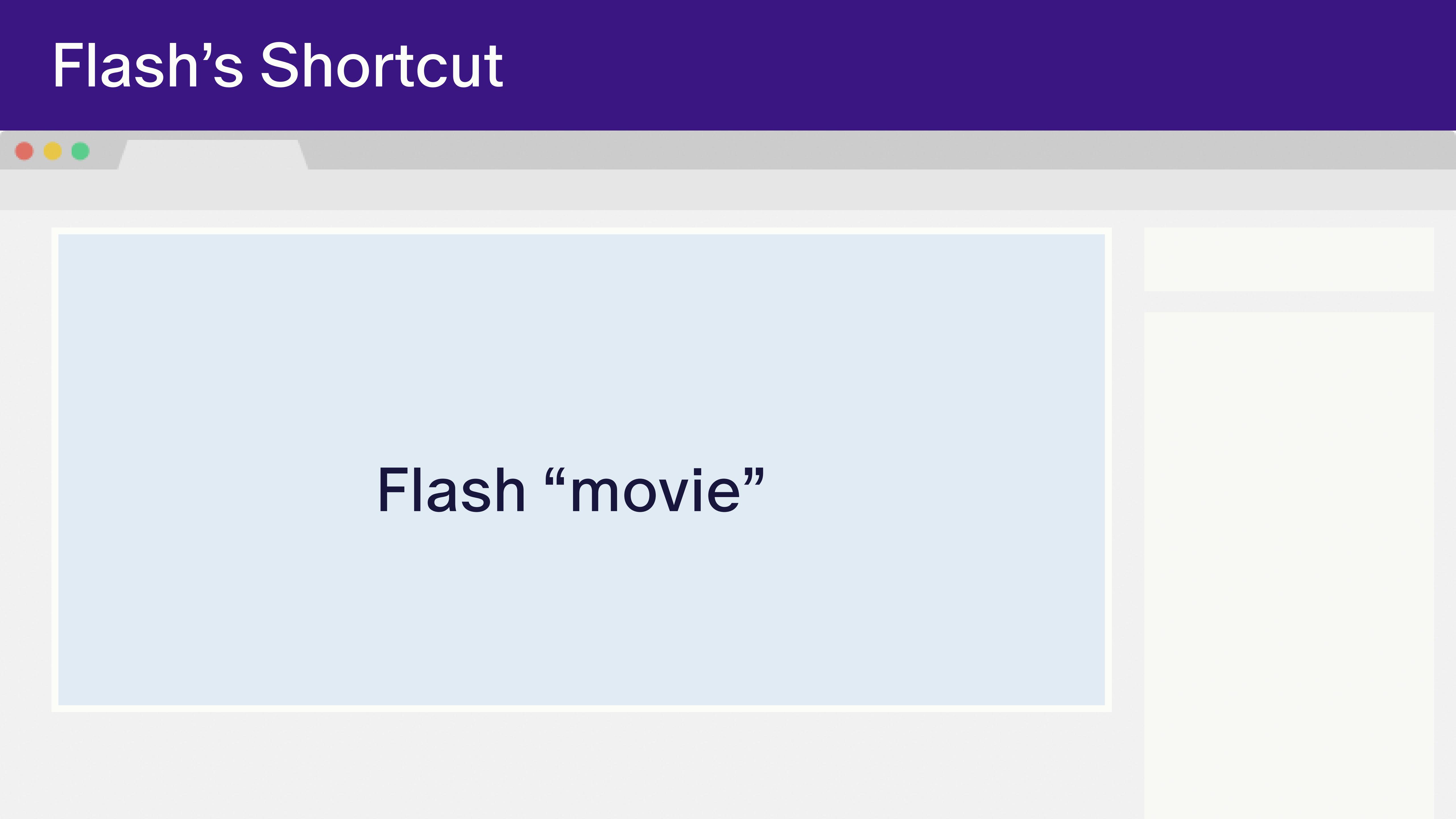

# No Code is Huge



# Answer #2 We Had That



# Flash's Shortcut



Flash “movie”

# Answer #3 Now We Can

The time is right for web  
dev tools to understand  
your code

# Visual Part of the Code

**Environment**

---

Unity

Interface Builder

Flash

**Scene File**

---

.unity

.xib

.fla

**Owner**

---

Unity

Apple

Adobe

# Visual Part of the Code

**Environment**

---

Unity

Interface Builder

Flash

Web

**Scene File**

---

.unity

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.fla

?

**Owner**

---

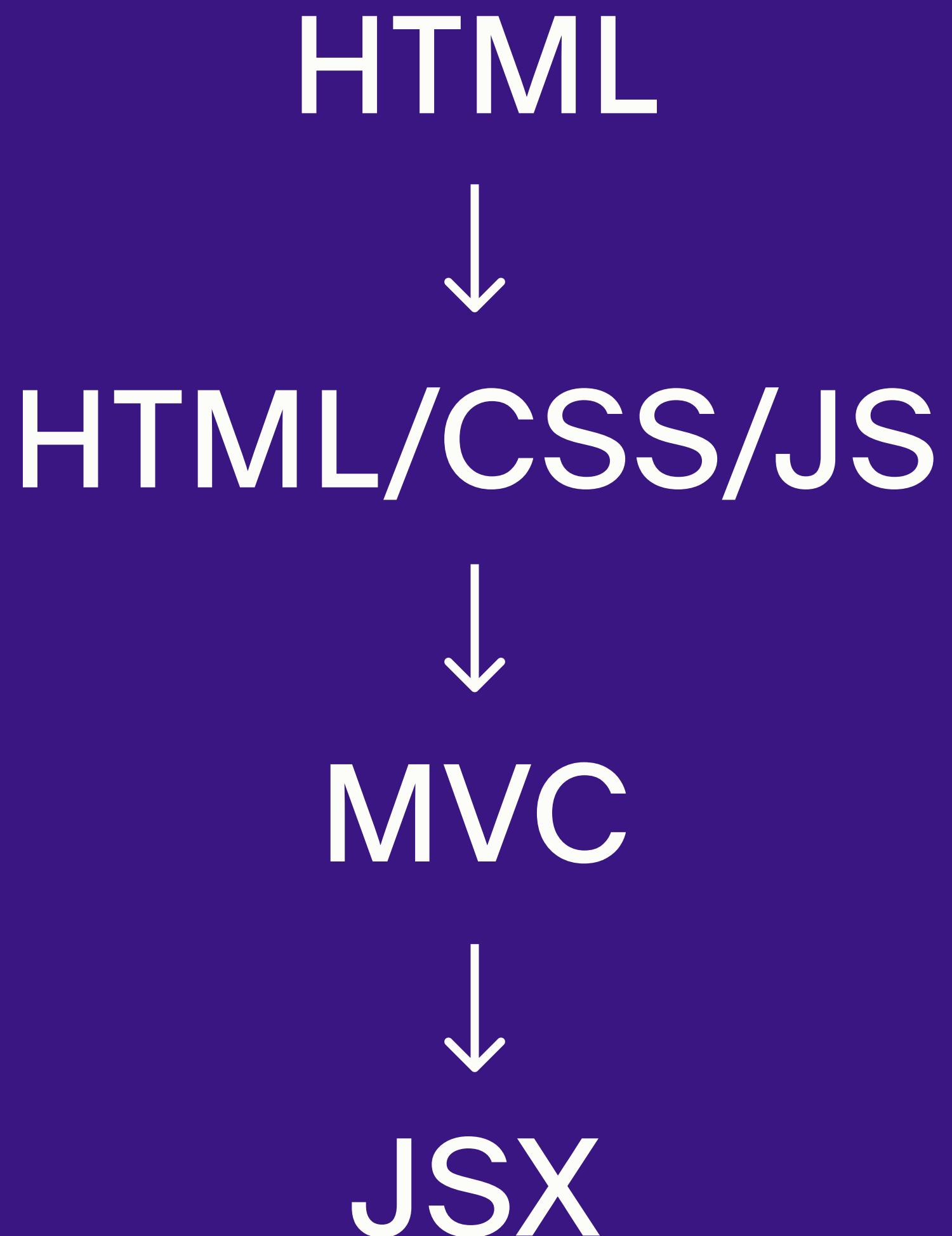
Unity

Apple

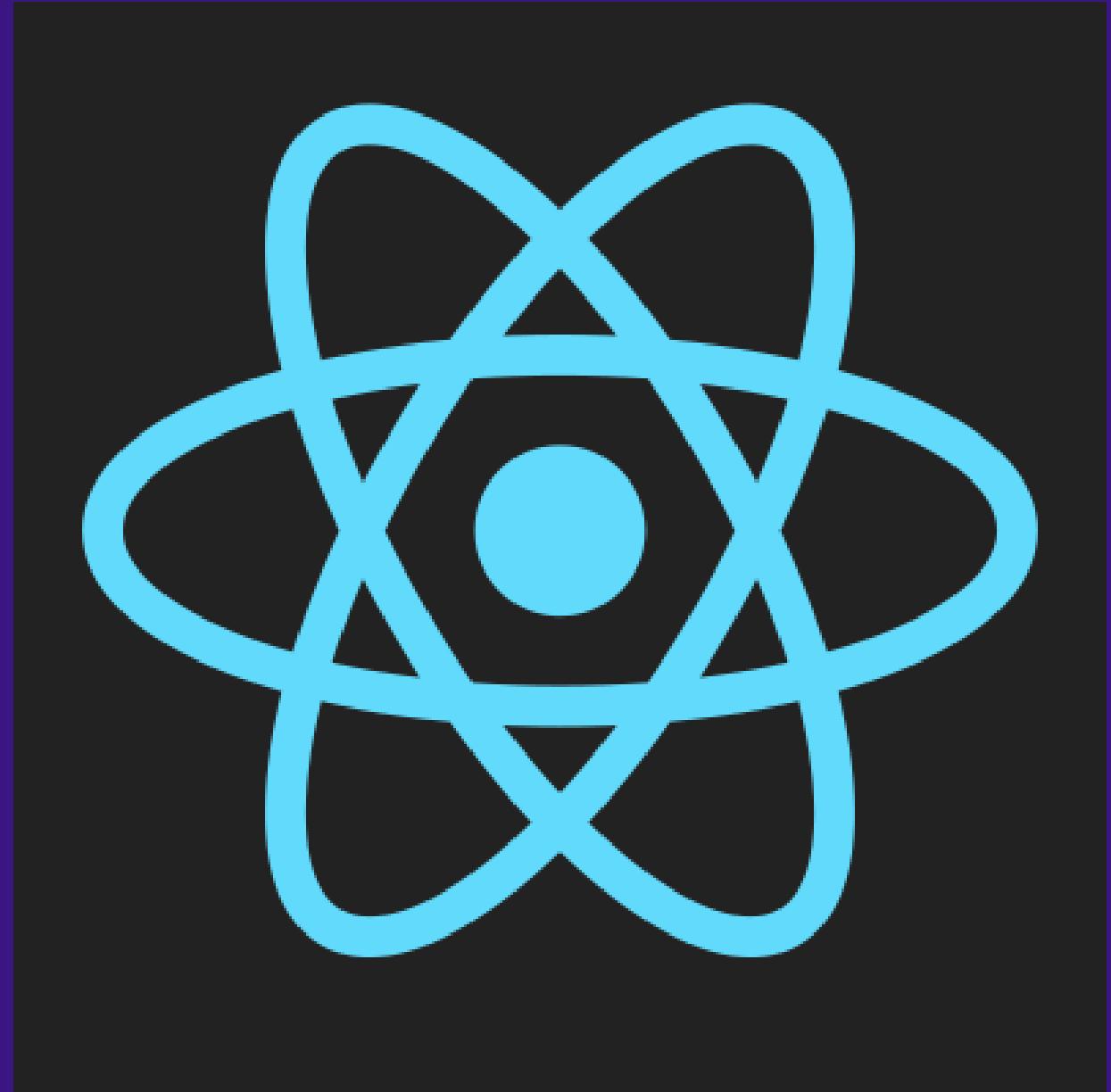
Adobe

?

# “Scene File” of the Web



# Code-aware Dev Tool



JSX (and styles)



MightyMeld

# Demo

Home

Layout

Box

InputGroup

InputLeftElement

Image

Input

Box

? search === ""

Box

Box

Heading

Trending

a Trending

MovieTrendList

Box

Heading

a Recommended For You

MovieList

Box

Heading

a Found

10 searchList.length

a results for "

10 search

a "

External Component

imported as InputGroup from @chakra-ui/react

Tag

InputGroup

Props

display

flex

justifyContent

center

+ Add Prop

Generative AI Assist

Update

MovieApp

Home

Movies

TV Series

Bookmarks

Search for movies or TV series

801.14 x 40

Trending

Beyond Earth

2019 • Movie • PG

Bottom Gear

2021 • Movie • PG

Undiscovered

2019 • TV Series

Recommended For You

Found

results for "

search

"

demo

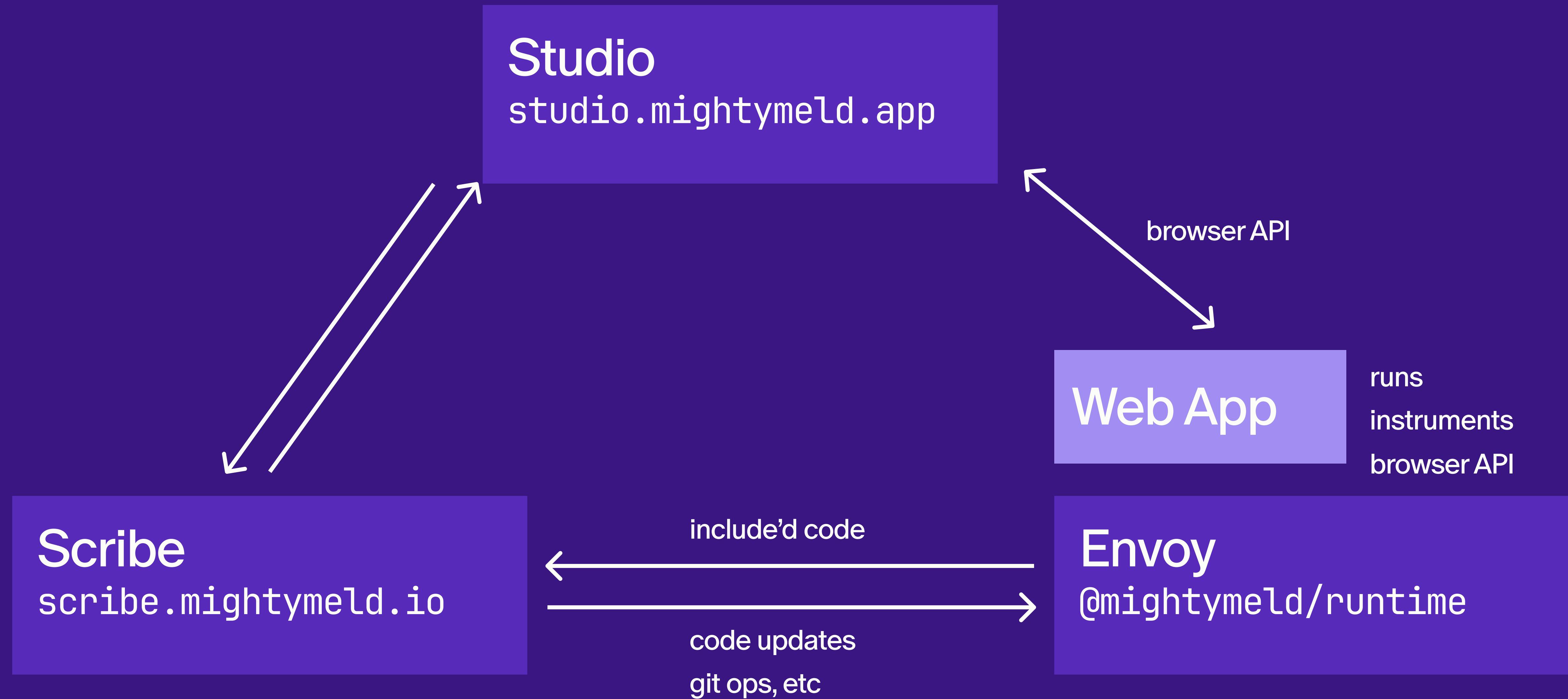
Edit

Drive

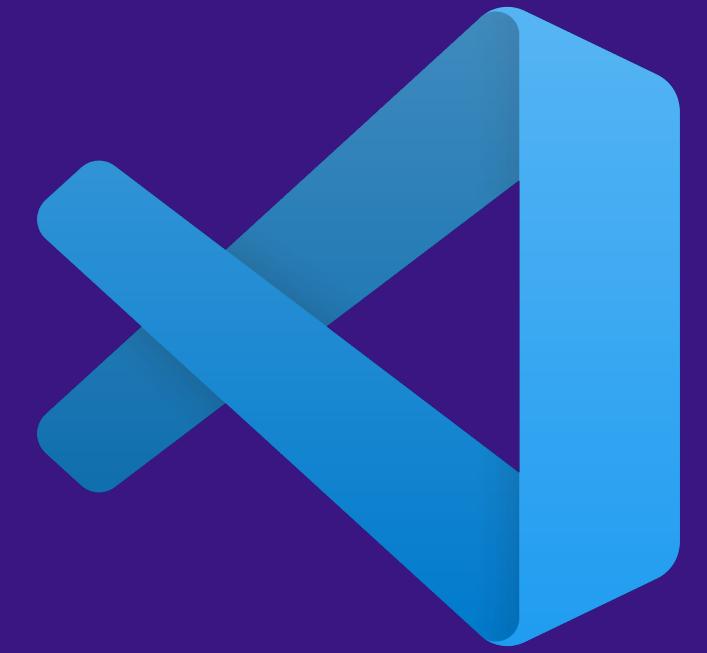
http://localhost:5173/

This screenshot shows a developer tool interface for a movie application. On the left, a sidebar displays the component tree for the 'Home' screen. It includes components like Layout, Box, InputGroup, InputLeftElement, Image, Input, Heading, and MovieList. In the center, the application's UI is displayed at the URL http://localhost:5173/. The UI features a dark header with navigation links for 'MovieApp', 'Home', 'Movies', 'TV Series', and 'Bookmarks'. Below the header is a search bar with the placeholder 'Search for movies or TV series'. A 'Trending' section shows three items: 'Beyond Earth' (2019, Movie, PG), 'Bottom Gear' (2021, Movie, PG), and 'Undiscovered' (2019, TV Series). At the bottom, a 'Recommended For You' section is partially visible. On the right, a detailed view of the 'InputGroup' component is shown, with its tag set to 'InputGroup' and its display prop set to 'flex'. The 'justifyContent' prop is set to 'center'. There is also a 'Generative AI Assist' section and a 'Update' button.

# MightyMeld Architecture



# Visual Dev Workflow



vsCode

Visual code

Non-visual code



MightyMeld

React Codebase

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