

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Basic JavaScript BOM -  
Developing your tools and  
arsenals of knowledge.  
...programming language of  
HTML and the Web

## Roles - Front End Development

- ▶ HTML - define web page content
- ▶ CSS - set web page layout
- ▶ JavaScript - manipulate web page behavior

## Programming: Tools and Arsenals

- ▶ Programming Arsenals - an array of resources available for a certain purpose.
- ▶ Programming Tools - one should be equipped with tools for production of software.



# Programming Arsenals

- ❑ Create comments: `//` or `/* */`  
`var town = "Monterey"; //my town`
- ❑ declare variables:  
`var xyz = 100;`
- ❑ Know the purpose functions  
`function name() {}`
- ❑ Know the purpose of using Objects  
`var person = {type:"thin", height:"66", eyes:"brown"};`

# Programming Arsenals cont.

- ▶ Collections (container)
  - ▶ Syntax: `var array_name = [item1, item2, ...];`
  - ▶ Array: `var names = ["Jina", "Randy", "Greg", Susan"]`
  - ▶ `var xyz = document.getElementsByTagName("p");`
- ▶ array
- ▶ Loops
  - ▶ While: `while(condition) {}`
  - ▶ For: `for(i=0; i< 12; i++) {}`
  - ▶ For/in: `for(x in array) {}`
  - ▶ Do/while: `do { statements} while (condition)`

# Programming Tools

- ▶ Must know your tools.
- ▶ Get comfortable using it. Why?
- ▶ Learning Style - preferences
  - ▶ Command line, IDE - learn your natural learning preferences
- ▶ Master your environment.

## BOM (Browser Object Model)

- ▶ No official standards for BOM (methods/properties)
- ▶ Control/manipulate/read the browsers' behavior, global variables and functions.

# BOM Purposes

- ▶ Has lots of purposes depending upon what you're doing.
- ▶ Example,
  - ▶ Open another window (modal) /tab
  - ▶ Check the size of the browsers
  - ▶ Close browsers
  - ▶ Make read only
  - ▶ Control not to show the navigations
  - ▶ Control Cookies....etc...etc...etc.

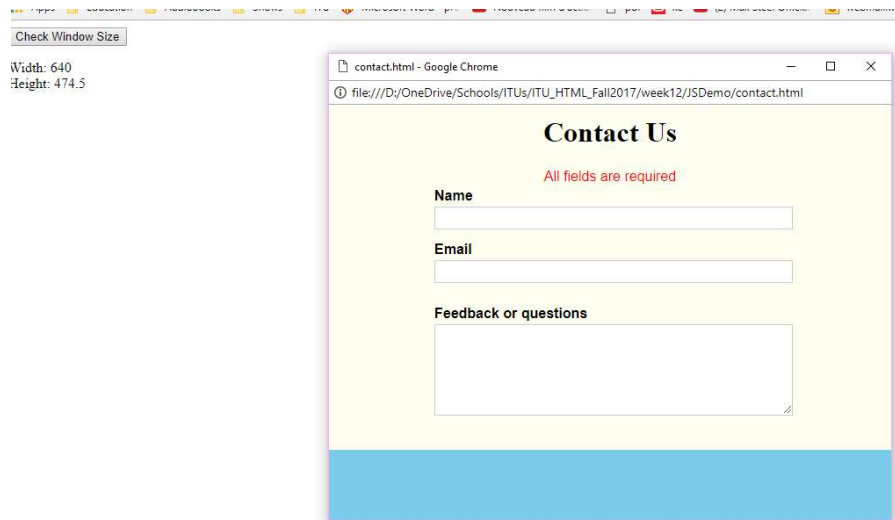


# BOM - Open another window example

- ▶ SYNTAX:
  - ▶ The syntax to open a popup is: `window.open(url, name, params)`:
  - ▶ url - load into the new window
  - ▶ Name - name of the new window
  - ▶ params - configuration string for the new window.
- ▶ Sample Usage (chrome): `openwindow.html` demo
  - ▶ open a window with minimal set of features.
- ▶ Features: menubar, toolbar, status, resizable, scrollbars

## BOM - Purpose: Check the window size. checkwindowsize.html

- Know the size of the screen of your clients and resize your dialogue box accordingly.



## BOM Purpose: Manipulate Cookies/Danger

- ▶ Data stored in your computer.
- ▶ Use to store information about the client.
- ▶ name-value pairs
- ▶ For example:
  - ▶ password=asdf1234
  - ▶ username=david
- ▶ Usage: `document.cookie = "username=david";`
- ▶ Potential Risks
  - ▶ Websites can use cookies to gather/sell info
  - ▶ Track your surfing behavior