**Mobile Web App Development Week 1**

* Typescript
  + An open-source language developed by MS, it’s a strict syntactical superset of JavaScript
  + Designed for dev of large applications and trans-compiles to JS, meaning JS apps can be TypeScript apps
  + Type safety
  + JS is interpreted not compiled, is used for scripting client-side and server-side
* JS Review
  + JS Used in This Class
    - document.querySelector(“selector”)
      * returns and object for the first element matching the selector
    - document.querySelectorAll(“selector”)
      * returns a NodeList of document elements matching the selector
  + HTML Collection
    - Array-like collection of elements that uses indexing
  + Let, var
    - Var declares variables that stay in memory even In functions
    - Let declares variables in functions that cant be called out of the functions
  + For loops
    - For…of loop
      * Iteration
  + Template literals
    - Using backticks allows us to inject variables into strings using ${x+y}
  + Arrow Functions
    - Uses =>
    - var ageTest = (name, age) => { if (age >18
  + Classes
    - Not hoisted, you have to declare before use
  + Rest parameters
    - …
    - Allow the passing of many parameters to a function
* Mobile Intro
  + Responsive design: A site will fill the screen properly and present info clearly
  + Responsive is preferred over Adaptive design, which is creating multiple versions of a page and serve based on device used
  + Mobile First design is standard
* Mobile Features
  + Portable
  + Easy to use
* Mobile Design
  + Include viewport meta for responsive design <meta name=”viewport” content=”width=device-width, initial-scale=1.0>
  + Do not reduce accessibility
  + Remove excess clutter
  + Use custom css for responsive design, grids, media queries
  + Keep it simple
  + Most frequent should be displayed first
  + No more than 3 levels of navigation
  + Reduce user input
  + Avoid horizontal scrolling
  + Consistency across pages
  + Visual separation of sections
* Mobile Definitions
  + Page weight: the sum of bytes for a specific HTML page plus the byte count of every resource the page uses
  + Bandwidth: The rate of data transfer, bit rate, or throughput measured in bits per second (bps)
  + Smart Client: Client can maintain their functionality even when disconnected
  + Latency: Network latency is measured either one-way (the time from the source sending a packet to the destination) or round-trip latency, measured from single points