W1D1: The internet is a global computer network that uses the IP protocol to  
uniquely identify computers on the network. While The Web is the collection of web sites and pages around the world. HTML Describes the content and structure of information on a web page

W1D2: CSS describes the appearance and layout of information on the page. Keeping content separate from presentation is a very important web design principle. The CSS Properties for color, font, text, background, and lists are the basic properties used on almost every page.

W1D3: The box model is a description of how every element has a basic width and height, outside of which it has padding, a border, and margin. A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can). Whereas A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

W1D4: Responsive designis the strategy of making a site that responds to the browser and device width. Flex box is a layout design without position and float, and it is a one-dimensional layout model. CSS Grid offers a grid-based layout system, with rows and columns, making it easier to design web pages without having to use floats and positioning.

W1D5: JavaScript is a loosely typed language. It has types but does no compile time type checking. Client-side script: code runs in browser *after* page is sent back from server. JavaScript allows us to declare anonymous functions and we can assign the to a variable. The DOM is an API so the JavaScript programmer can conveniently access and manipulate the HTML elements  
in code.

W1D6: Every JavaScript object runs inside the global window object. In JavaScript we have 6 global objects these are: Window, Navigator, Location, Document, History, Screen. Unobtrusive JavaScript promotes separation of web page content into 3 different concerns: content (HTML), presentation (CSS), and behavior (JS). Client-side JavaScript is included in HTML pages and executes on the browser when it loads

W2D1: Functional programming methods map, filter, reduce make code more understandable and error free by automating details of general-purpose looping mechanisms, indicating their intent by their name, and not changing the state of the original array. Both Rest and Spread allow the programmer to treat multiple items as one. Regular Expressions are an industry standard way of performing pattern matching.

W2D2: JavaScript has global scope and local scope within functions when variables are declared with var, and now has block scope with const and let. Variables and function declarations with var keyword are hoisted or up raised to the nearest function or global block. Closures are created whenever an inner function with free variables is returned or assigned as a callback.

W2D3: Objects in JavaScript are like associative arrays. Keys are strings and the value can be any type. Objects are a widely used encapsulation mechanism in JavaScript. The revealing module pattern is widely used to provide a public API to an underlying implementation of private methods and properties. Immediately invoked function expression (IIFE), used to create a new scope and closure around it, can help to avoid declaring global variables/functions and used by JavaScript libraries to keep global namespace clean.

W2D4: Prototypal inheritance allows object to inherit properties from a ‘prototype’ parent object. The main purpose of inheritance is to promote code reuse and avoid duplication. In JavaScript every object has special hidden property [[Prototype]]. Constructor functions are helpful when we need to create many similar objects. They are also used in establishing prototype relations and underly JavaScript classes

**STC: The unified field is the source of all possibilities and when we think from this level our actions are spontaneously responsive to whatever situation we encounter.**