**Master Mobile UX**

* In 2007 changed everything for design websites.
* After 2011 exploded and appeared tones of new mobiles devices.
* " The simple guideline is whatever you are doing - do mobile first , " - -Eric Schmidt , World Mobile Congress Keynote 2012.

**Be Useful**

* Only 9 % of users will stay if it doesn't satisfy their needs.
* Reduce image usage throughout sites / apps.
* SVG / Webfonts are lower bandwidth.

Menu

* Good idea to use menu at the bottom
* When taking numbers, ensure the number keypad is used on mobile.

**Object-Oriented Programming in JavaScript**

* Object-oriented programming is often used to model representations of objects in the real world

**Encapsulation**

* The inner workings are kept hidden inside the object and only the essential functionalities are exposed to the end user

**Polymorphism**

* The same process can be used for different objects, this means various objects can share the same method and use with a more specific implementation

**Inheritance**

* Taking the features of one object then adding some new features,  this means we can take an object that already exists and inherit all its properties and methods

**ES6 Class Declarations**

* The ES6 class declarations are preferable to the constructor function syntax because they are more succinct, easier to read and all code in a class definition is implicitly in strict mode

**Is the constructor property used regularly in everyday programming?**

**Static Methods**

* A static method is called by the class directly rather than by instances of the class.

*The prototype can be used to add any new properties and methods after the class has been declared. It should be used to define any properties that will remain the same for every instance of the class.*

**Public and Private Methods**

* This means that any private properties can only be changed in a *controlled* way, so we can stop certain assignments from being made by screening the data before any changes are made to a private property.

**Enumerable Properties**

* Properties of objects in JavaScript are said to be *enumerable* or *non-enumerable*. If they aren't enumerable, this means they will not show up when a for-in loop is used to loop through an object’s properties and methods.

**Inheritance Using**extends

* A class can inherit from another class using the extends keyword in a class declaration.

**Getters and Setters**

* The get() and set() methods can be used to control how a property is set using assignment and the value that is returned when a property is queried.
* The get and set property descriptors are particularly useful for controlling the getting and setting of properties in classes.

**Object methods, "this"**

* A function that is a property of an object is called its *method*.
* To access the object, a method can use ***this*** keyword.
* The value of ***this*** is the object “before dot”, the one used to call the method.
* ***bind*** is a method that is present in every function. It allows you to change the ***this*** context. This method takes in any number of arguments and returns the bound function.

**Modern JavaScript Development**

**Libraries**

* A JavaScript library is a piece of code that provides several methods that make it easier to achieve common tasks.

**jQuery**

* jQuery is the most popular of all the JavaScript libraries used today.
* It has its own testing library: [QUnit](http://qunitjs.com/).

**Libraries**

* Using a library means you can be confident that your code will be as bullet-proof as possible in many browsers.
* Using a library can also make your code slower than using plain vanilla JavaScript*.*

**Coupling**

* Two pieces of code are said to be tightly coupled if one relies on the other to run.

**When to use the modular Js, default exports and NodeJs Modules?**

**MVC**

* Model View Controller – It´s a Design Pattern.
* separates an application into three distinct, independent components that interact with each other.

**Npm**

* Npm allows you to install JavaScript packages onto your machine.
* To find a package, you can use the **search** command. E.g., **npm search test.**
* Also, we can search for a package in the **npm website.**
* When you install a package using npm it will become a dependency of your project by default.
* use the **--yes** or **-y** flag to bypass the questions and use the default options.
* **package.json** file is that it contains all the information about a project's dependencies.
* **npm update**  to update all the packages in the directory.
* **npm update jest** to updated jest.
* **npm outdated**  to find packages that have been updated.
* **npm uninstall --save-dev jest**

**Transpiling Code**

* Code transpilers take JavaScript code and turn it into JavaScript code!
* A code transpiler allows you to write your code in the latest version of ECMAScript.
* Babel is the most popular transpiler.