JAVASCRIPT

WH Questions

MILESTONE 1

- History of JS
- ECMA Script
- How javascript and ECMA are related.
- DOM and Browser Object Model

MILESTONE 2

- Case-sensitivity
- Identifiers
- Comments
- Strict Mode
- Statements
- Keywords and reserved words
- Variable
- The typeof Operator
- undefined
- null
- boolean
- number
- string
- object types
- Arrays / Json Objects

MILESTONE 3

Operators
- Unary Operators
- Bitwise Operators
- Boolean Operators
- Multiplicative Operators
- Additive Operators
- Relational Operators
- Equality Operators
- Conditional Operator
- Assignment Operators
- Comma Operator

MILESTONE 4

Statements

Conditional Statements:-
- The if Statement
- If Else

Looping Statements:-
- The do-while Statement
- The while Statement
- The for Statement
- The for-in Statement

Other Statements :-
- The break and continue Statements
- The with Statement
- The switch Statement

MILESTONE 5

- Functions
- overloading in JS
- arguments/parameters
- JS liniting
- Curring Funtions

--- Coding challenge ---

MILESTONE 6

Mutable / Immutable concepts - How it works
Primitive and Reference Values
- Dynamic Properties
- Copying Values
- Argument Passing
- Determining Type

Execution Context and Scope
- Scope Chain Augmentation
- No Block-Level Scopes

MILESTONE 7

Garbage Collection
- Mark-and-Sweep
- Reference Counting

- Performance
- Managing Memory

MILESTONE 8

FUNCTION EXPRESSIONS
    Recursion
    Closures
        - Closures and Variables
        - The this Object
        - Memory Leaks
    Mimicking Block Scope

Synchronous Programming
Asynchronous Programming
Callback
Avoid callback hell
Promise
Bluebird Promises
Async Await
Convert Callback to promise
Convert promise to async await
Why async needed in js?

MILESTONE 9

JavaScript Date Object
Formatting the dates
Dates comparison
Conversion of UTC to Local Time
Displaying date and time
TimeZone Offset
Epoch time
Date conversion with various time zones including day light time savings
Date conversion without using any third party libraries

MILESTONE 10

OBJECT-ORIENTED PROGRAMMING
- Understanding Objects
- Types of Properties

- Defining Multiple Properties
- Reading Property Attributes
- Object Creation
- The Factory Pattern
- The Constructor Pattern
- The Prototype Pattern
- Combination Constructor/Prototype Pattern
- Dynamic Prototype Pattern
- Parasitic Constructor Pattern
- Durable Constructor Pattern
- Inheritance
- Prototype Chaining
- Constructor Stealing
- Combination Inheritance
- Prototypal Inheritance
- Parasitic Inheritance
- Parasitic Combination Inheritance
- S.O.L.I.D principles

======================= GIt Basic Topics ============================

Basics:-

1) Branches
2) Commits
3) Git Diff
4) Pull Requests
5) Git Patch
6) Conflict fixes

References :-

https://education.github.com/git-cheat-sheet-education.pdf

https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet