CMPE 273 – Enterprise Distributed Systems

Programming Homework: JavaScript, HTML5 and Java Refresher Assignment

Due Date: 10th February 2019

This assignment covers basics of JavaScript, HTML5 and Java to serve as a refresher for this course. This is assignment is graded for **25 points** and is an individual effort (e.g.: No teamwork allowed)

Do not use google to search for the problems and copying other's work (including web site) is not allowed

You have to come up with one programming question for each of the topics mentioned below and use Vscode for JS and Eclipse IDE for Java to solve them.

Screenshots must be provided for the output of the problem, using Vscode/Eclipse IDE. Points will be deducted if output is shown in the browser

Be creative in coming up with the programming questions

Make full use of arrow function and Promise, Asynch-await

Your report must contain the following for each question:

- **Introduction to the topic**
- **Programming Question**
- **Code**
- **Output of Execution (Screenshot)**

JavaScript (ES6):

- Functions
- Events
- Arrays
- Regular Expressions
- Strict mode
- Errors
- Default Params
- Includes and typeof
- Use of import and export
- Type Conversions
- JSON
- Object and Classes
- Object.assign
- Static method
- Inheritance using sub-classes in JavaScript.
- Method overriding
- Use of get (In Classes)
- fetch() (Use any open-source API for fetching data)

HTML5:

- Local Storage
- Media (Video and Audio)
- Input Type (make use of different input property options in HTML5 like patterns, autofocus, required, email etc. Place types you want, mention the properties used in your Introduction to Topic section) – 3 points
- Geolocation

Java (Use JUnit Framework for testing the application):

- Queues
- Stacks
- Arrays
- Interfaces
- Collections
- Generics
- Multithreading

Submissions must be one Canvas with one MS Word file as submission with screenshots. Do not wait until the last minute on the due date, as canvas servers lag or delays may result in late submissions.