**CSE 212 – Programming with Data Structures**

**W10 Prove – Response Document**

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**Question 1: Provide the outline for the data structures tutorial you are creating for the final project. Use the Python Fundamentals Tutorial outline provided in the assignment instructions as an example.**

**WELCOME**

* Introduction
* Contact

**Stack**

* Introduction -What is a Stack?
  + Ice Cream cone Example
  + Flow of data
* When to use a stack?
* Elements of stacks
  + Front
  + Back
  + Push
  + Pop
* Performance
* Example
* Problem to Solve

**Linked List**

* Introduction – What is a Linked List?
  + Structure
* When to use Linked Lists?
* Elements of Linked Lists
  + Inserting
  + Removing
  + Accessing
* Performance
* Example
* Problem to Solve

**Trees**

* Introduction – What is a Tree?
* When to use a Tree?
* Elements of Trees
  + Recursion
  + Binary Search Tree
  + Balanced Binary Search Tree
  + Inserting to a Binary Search Tree
  + Navigating a Binary Search Tree
* Performance
* Example
* Problem to Solve