

# CSE 3010 – Data Structures & Algorithms

## **Lecture #2**

## What will be covered today

- What are abstract data types
- What are data structures
  - Operations on data structures
  - Algorithms for data structures
- What does software development comprise of
- Different types of data structures

# Definitions

- Data type
    - Set of values and operations defined on them
  - Abstract data type
    - Mathematical model with operations defined
  - Data structure
    - Representation of abstract data types
  - Algorithm
    - Step-by-step procedure or method for solving a problem in a finite number of steps
  - Software development
    - Data structures + algorithms
- [Refer class notes for examples and more detailed notes]