

# Assignment 1: VGP125 – Data Classes

**Due: Actual Week 3 (Must be completed and checked in by the beginning of class)**

## Project Description:

- Using your new Unity project created in class, set up the following:
  - o A Main Scene
  - o create the following data classes and public properties:
    - BasicObject
      - id (int)
    - PlayerObject
      - id (int)
      - position (Vector3)
      - displayName (string)
      - speed (float)
    - EnemyObject
      - id (int)
      - position (Vector3)
      - displayName (string)
      - damage (int)
      - speed (float)
    - EnemyMeleeObject
      - id (int)
      - position (Vector3)
      - displayName (string)
      - damage (int)
      - speed (float)
    - EnemyRangedObject
      - id (int)
      - position (Vector3)
      - displayName (string)
      - range (float)
      - damage (int)
      - speed (float)
  - o Use whatever inheritance hierarchy that seems to make sense given the structures above (feel free to add more classes in between if it seems needed)
  - o In your Main unityScene, in the Main GameObject create 3 lists
    - 2 players
    - 5 melee enemies
    - 5 ranged enemies
  - o Write a separate function for each list to populate the respective list with data that represents a variety of different values
  - o Bonus: use unity ui to display the data from the items and/or unity objects to represent the data. Examples:
    - Make the object shape and size correspond to the data for range and damage
    - Use color to represent type
    - Make the objects move around at different speeds

## Marking (10 total):

- Class Hierarchy (3)
- Data Lists (3)
- Functions for data creation (4)

## Bonus (up to 2 more points, total max of 10)

- UI (1)
- Objects (1)