

# CS 1410 Object-Oriented Programming

## Final Project

- a class definition: There is a class definition **InMemEventRepository**
- a second class definition: There is a class definition **InFileEventRepository**
- a third-class definition: There is a class **EventsController** to handle the http requests
- a struct definition: instead of structs the program uses records that other value-type data structures.
- inheritance: **InMemEventRepository** and **InFileEventRepository** both inherits from **IEventsRepository**
- polymorphism: Can be seen on the Even class overriding the GetHashCode Function
- throwing an exception and properly catching it **EventsController.GetEvents** tries to retrieve events and catches any error that can be the result it. (in this case the file reader)
- definition of your own generic datatype
- properties: There are properties used in many places, like in the Event record, and the EventDto record and well as in the repositories.
- an interface: **IEventsRepository** allows for dependency injection on the **EventController**
- a second interface: The program uses the interface for controllers build on the .NET library **ControllerBase**
- use of at least two of the built-in generic collection types: the program is using both **IEnumerable** and **List**.
- 5 points extra credit for any of the following:
  - working with file IO  
**InFileEventsRepository** extract events from a json file
  - operator overloading  
**Event** record overrides Equals and GetHashCode methods