OOP Fundamental Principles - Part 1

Abstract Classes
- mix between class and interface
- abstract keyword
- no instances
- child must implement all abstract methods or be abstract too

Abstract Data Types
- IList<T>

Inheritance Hierarchies
- UML diagrams

Encapsulation
- private fields
- public properties
- interface is aways public
- ensures correct behaiviour

Inheritance
- Class
  - Inherits — base
  - is-a relationshp
  - implements — Interface
- Interface
  - extends
  - has-a relationship to class
- single class inheritance
- multiple interface implementation

Access levels
- public
- private
- protected
- internal
- protected internal

Abstraction
- managing complexity
- only relevant
- Interface - contract
- invoke abstract actions