

# C# Console Game — Project Reference

## Classes, Structs, Enums

```
enum EnemyType { Goblin, Orc, Dragon } struct Stats { public int Health; public int Strength; } class Player { public Stats Stats; }
```

## Inheritance & Abstract Classes

```
abstract class Enemy { public abstract void Attack(); } class Goblin : Enemy { public override void Attack() { Console.WriteLine("Goblin attacks!"); } }
```

## Game Loop Pattern

```
bool running = true; while (running) { ShowMenu(); HandleInput(); }
```

## Switch Menus

```
switch (choice) { case "1": StartGame(); break; case "2": SaveGame(); break; case "q": running = false; break; }
```

## File I/O (Save / Load)

```
File.WriteAllText("save.txt", data); string data = File.ReadAllText("save.txt");
```

## Lists & Collections

```
List inventory = new List(); inventory.Add("Sword");
```

## LINQ (Optional)

```
var strongEnemies = enemies.Where(e => e.Level > 5);
```

## Null Safety

```
string input = Console.ReadLine() ?? "";
```

## Common Errors

```
// ReadLine takes NO arguments Console.ReadLine(); // Infinite loop guard while (running) {  
}
```