Where normally OOP is a tool to achieve the desired functionality, this project flips the concept, in that the project is intended as a demonstration of OOP principles.

(Originally parts of this document were more detailed, but scaled back on detail to avoid overcomplicating the planning stages)

# Creature

Has fields/properties like float HitPoints, float speed. Has methods like Move(), Attack(), Die().

## Player

Controlled by player input, dying triggers game over, stats affected by equipment.

## Monster

Attempts to attack and kill player. See also: ILootable.

### Orc

Extra damage when low on health.

### Skeleton

Chance to resurrect on death.

### Slime

Splits into smaller, weaker versions on death.

### Bat

Can fly over obstacles.

# Object

See also: IOpenable, ILootable, IBreakable.

## Door

Implements IOpenable.

## Crate

Implements ILootable, IBreakable.

## Chest

Implements ILootable, IOpenable.

# Equipment

Has fields/properties like enum EquipSlot.

## Armour

Has fields/properties like float DefenceFlat, float DefencePercent, float SpeedPenalty.

### Shield

Can only be used with one-handed weapon.

## Weapon

Has fields/properties like float AttackRange, float AttackSpeed, float MinDamage, float MaxDamage.

# Item

Key required to open lock, Potion restores some health.