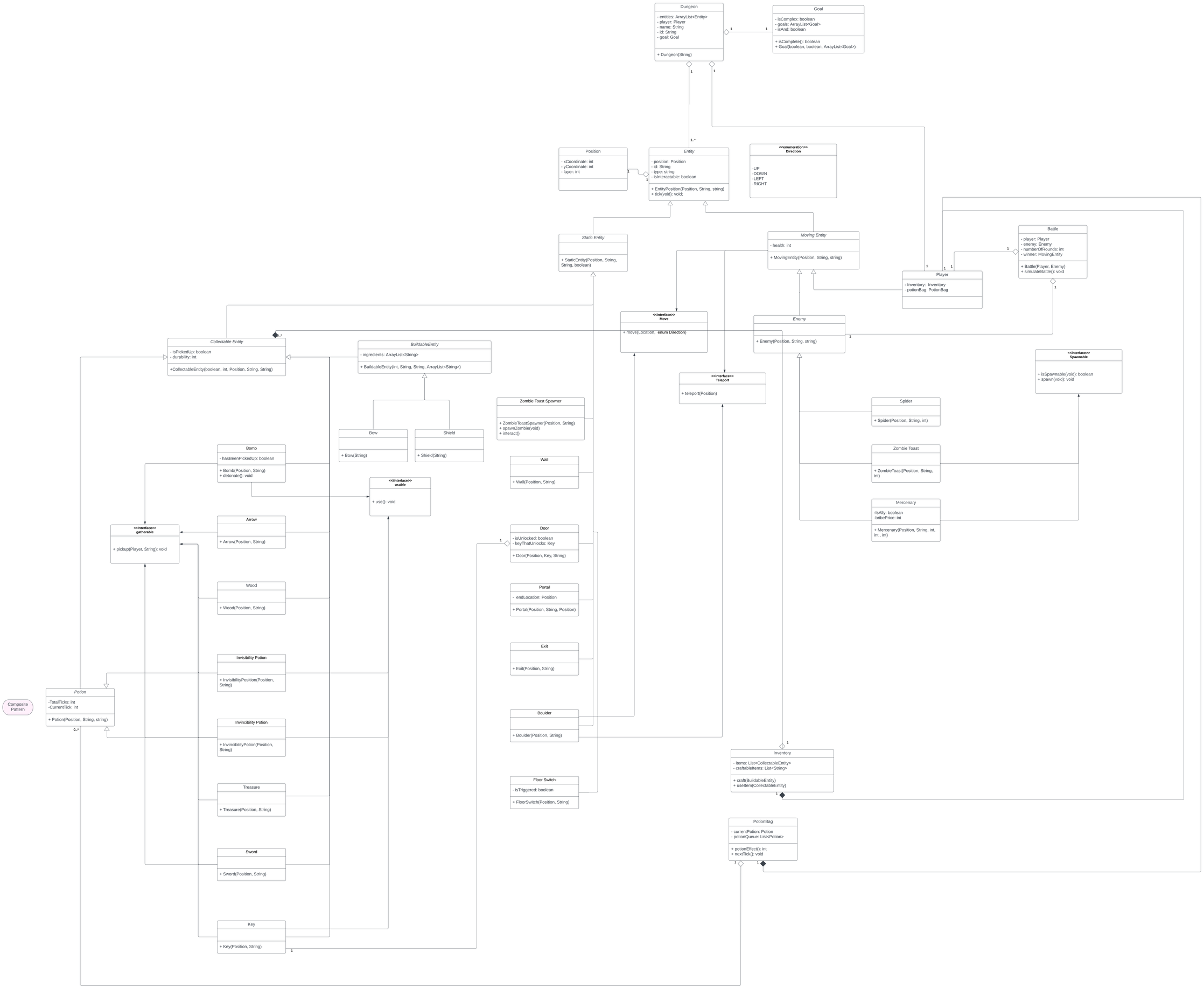
Dungeon
- entities: ArrayList<Entity>
- player: Player
- name: String
- id: String
- goal: Goal
+ Dungeon(String)
Goal
- isComplex: boolean
- goals: ArrayList<Goal>
- isAnd: boolean
+ isComplete(): boolean
+ Goal(boolean, boolean, ArrayList<Goal>)
Position
- xCoordinate: int
- yCoordinate: int
- layer: int
Entity
- position: Position
- id: String
- type: string
- isInteractable: boolean
+ EntityPosition(Position, String, string)
+ tick(void): void;
<<enumeration>>
Direction
-UP
-DOWN
-LEFT
-RIGHT
Static Entity
+ StaticEntity(Position, String, String, boolean)
Moving Entity
- health: int
+ MovingEntity(Position, String, string)
Battle
- player: Player
- enemy: Enemy
- numberOfRounds: int
- winner: MovingEntity
+ Battle(Player, Enemy)
+ simulateBattle(): void
Player
- Inventory: Inventory
- potionBag: PotionBag
<<interface>>
Move
+ move(Location, enum Direction)
Enemy
+ Enemy(Position, String, string)
Collectable Entity
- isPickedUp: boolean
- durability: int
+CollectableEntity(boolean, int, Position, String, String)
BuildableEntity
- ingredients: ArrayList<String>
+ BuildableEntity(int, String, String, ArrayList<String>)
<<interface>>
Teleport
+ teleport(Position)
<<interface>>
Spawnable
+ isSpawnable(void): boolean
+ spawn(void): void
Zombie Toast Spawner
+ ZombieToastSpawner(Position, String)
+ spawnZombie(void)
+ interact()
Spider
+ Spider(Position, String, int)
Bow
+ Bow(String)
Shield
+ Shield(String)
Bomb
- hasBeenPickedUp: boolean
+ Bomb(Position, String)
+ detonate(): void
Zombie Toast
+ ZombieToast(Position, String, int)
Wall
+ Wall(Position, String)
<<interface>>
usable
+ use(): void
Mercenary
-IsAlly: boolean
-bribePrice: int
+ Mercenary(Position, String, int, int., int)
<<Interface>>
gatherable
+ pickup(Player, String): void
Arrow
+ Arrow(Position, String)
Door
- isUnlocked: boolean
- keyThatUnlocks: Key
+ Door(Position, Key, String)
Wood
+ Wood(Position, String)
Portal
- endLocation: Position
+ Portal(Position, String, Position)
Exit
+ Exit(Position, String)
Invisibility Potion
+ InvisibilityPosition(Position, String)
Composite Pattern
Potion
-TotalTicks: int
-CurrentTick: int
+ Potion(Position, String, string)
Boulder
+ Boulder(Position, String)
Invincibility Potion
+ InvincibilityPotion(Position, String)
Inventory
- items: List<CollectableEntity>
- craftableItems: List<String>
+ craft(BuildableEntity)
+ useItem(CollectableEntity)
Treasure
+ Treasure(Position, String)
Floor Switch
- isTriggered: boolean
+ FloorSwitch(Position, String)
PotionBag
- currentPotion: Potion
- potionQueue: List<Potion>
+ potionEffect(): int
+ nextTick(): void
Sword
+ Sword(Position, String)
Key
+ Key(Position, String)
1
1..*
0..*