**Dungeon System** 

# Dungeon

-mGrid: Grid -mName: String

-mDungeon: Dungeon

-tiles: Tile[,]

-playerLocationRow: int-playerLocationColumn: int

+ property PlayerLocationRow: int+ property PlayerLocationColumn: int

-mGame: Game

-mGoodGuyParty : Party
-itemLocations: int[,]

-view: view

+GetGrid(): Grid

+SetView(View v): void +SetGame(Game g): void +getInstance(): Dungeon

+checkForItem(): bool

+checkIfDragon(): bool

+isWall(DirectionEnum directionEnum): Boolean

-MovePlayerLocation(DirectionEnum locationEnum): void

+getGetDungeonName() : String
+SetDungeonName( name : String )

+getDirection( direction : DirectionEnum ) : void

+getCurrentPartyLocation(): int[]

# Grid

-mNumRows: int-mNumColumns: int

-tiles: Tile[,]

+ property NumRows: int + property NumColumns: int

+createGrid(): void

-createStaticGrid(DungeonEnum[,] grid): void

+GetTiles(): Tile[,]

## TileFactory

+createTile(Random r): Tile

## Tile

#hasAnItem: Boolean
#itemType: DungeonEnum

+ property TileType: DungeonEnum

#size: int

+SetSize(int s): void +hasItem(): Boolean +getSize(): int

+getItem(): Item[]

## DungeonEnum

int: -1: NULL

int: 0: FREESPACE

int: 1: WALL int: 2: ITEM

int: 3: DRAGON