

Game	
<ul style="list-style-type: none">• Holds levels• Holds Game Manager• Handles GUI• Handles game loop	<ul style="list-style-type: none">• GameManager• GUI• Level

GameManager	
<ul style="list-style-type: none">• Handles audio and music• Handles collision• Handles data operations such as saving player data into a .txt file	<ul style="list-style-type: none">• Game• GUI• TileMap

GUI	
<ul style="list-style-type: none">• Handles GUI and events• Updates and renders itself	<ul style="list-style-type: none">• Game• GameManager

Level	
<ul style="list-style-type: none">• Generates the current level• Loads the next level• Holds Tile Map• Loads Tile Map• Holds Player and enemies• Spawns Player and enemies• Updates and renders itself	<ul style="list-style-type: none">• Game• TileMap• Entity

TileMap	
<ul style="list-style-type: none">• Holds different tiles• Loads and updates the Tile Map• Detects collision• Renders itself	<ul style="list-style-type: none">• Level• Tile• Game Manager

Tile	
<ul style="list-style-type: none">• Holds different textures and sprites for different tile types• Sets the tile type• Renders itself	<ul style="list-style-type: none">• TileMap• HazardousTile

HazardousTile		Tile
<ul style="list-style-type: none">• Holds different textures and sprites for different hazardous tile types• Sets the tile type• Renders itself• Damages the player	<ul style="list-style-type: none">• Tile• TileMap• Player	

Entity		Abstract
<ul style="list-style-type: none">• Holds different textures and sprites for different entity types• Holds data like hp, maximum hp, position, velocity, acceleration, gravity, etc. for different entity types• Initializes variables• Initializes textures• Initializes physics• Initializes animation• Renders and updates itself	<ul style="list-style-type: none">• Level• Player• Enemy• Enemy_A• Enemy_B• Enemy_C	

Player		Entity
<ul style="list-style-type: none">• Handles player input• Moves• Loses HP• Gains HP• Shoots Bullet• Jumps• Collides with the enemies and the environment		<ul style="list-style-type: none">• Level• Entity• Enemy• Enemy_A• Enemy_B• Enemy_C• Bullet

Abstract Enemy		Entity
<ul style="list-style-type: none">• Moves• Attacks player character• Takes damage• Collides with the player and the environment		<ul style="list-style-type: none">• Level• Entity• Player• Enemy_A• Enemy_B• Enemy_C• Bullet

Enemy_A		Enemy
<ul style="list-style-type: none">• Moves• Jumps• Attacks player character• Takes damage• Shoots a Bullet• Collides with the player and the environment		<ul style="list-style-type: none">• Level• Entity• Enemy• Player• Bullet

Enemy_B		Enemy
<ul style="list-style-type: none">• Moves• Attacks player character• Takes damage• Collides with the player and the environment	<ul style="list-style-type: none">• Level• Entity• Enemy• Player	

Enemy_C		Enemy
<ul style="list-style-type: none">• Shoots a bullet• Attacks player character• Takes damage• Collides with the player and the environment	<ul style="list-style-type: none">• Level• Entity• Enemy• Player	

Bullet		
<ul style="list-style-type: none">• Moves along the x-axis• Gives damage to the enemies• Gives damage to the player character• Holds data like position, speed, damage, lifetime, etc.• Detects collision• Renders and updates itself	<ul style="list-style-type: none">• Player• Enemy_A• Game Manager	