*Assumptions: Player dies when he touches a harpy or a skeleton. Enemies can be killed by one hit from the sword of the player. We have an enumeration with all entity types. The hook can only hit walls.*

## Entity Manager
```
-------------------------------------------------------
p2List<j1Entity*> entities
-------------------------------------------------------
j1Entity* CreateEntity(ENTITY_TYPES type)
void DestroyEntites()
void AddEnemy(int x, int y, ENTITY_TYPES type)
void CreatePlayer()
void SpawnEnemy()
```

Game

1

\*

## Entity
```
---------------------------------------------------------
ENTITY_TYPES type
fPoint position
fPoint initialPosition
float speed
Animation* animation
Collider* collider
SDL_Texture* sprites
---------------------------------------------------------
void OnCollision(Collider* c1, Collider* c2)
void Update(float dt, bool do_logic)
void Draw(SDL_Rect r, bool flip, int x, int y)
void CleanUp()
void Start()
```

virtual

1

## Player
```
-----------------------------------
uint currentJumps
iPoint playerSize
Animations
State bools
Audios
-----------------------------------
void OnCollision()
void Update()
void Draw()
void LoadPlayerProperties()
```

1

## Hook
```
-----------------------------------
int objectivePosition
iPoint hookSize
bool thrown
Animations
Audios
-----------------------------------
void OnCollision()
void Update()
void Draw()
void LoadHookProperties()
```

1 ~ *

## Harpy
```
-----------------------------------
Movement direction
p2DynArray<iPoint>* path
bool path_created
Animations
iPoint colliderSize
-----------------------------------
void OnCollision()
void Update()
void Draw()
void LoadHarpyProperties()
void Move(p2DynArray<iPoint>& path, float dt)
```

1 ~ *

## Skeleton
```
-----------------------------------
Movement direction
p2DynArray<iPoint>* path
bool path_created
Animations
iPoint colliderSize
-----------------------------------
void OnCollision()
void Update()
void Draw()
void LoadSkeletonProperties()
void Move(p2DynArray<iPoint>& path, float dt)
```