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)
bool Update(float dt, bool do_logic)
void Draw(SDL_Rect r, bool flip, int x, int y)
bool CleanUp()
bool Start()

*

virtual

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

1

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

1

Harpy

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

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