

GAME

Entity Manager

```
p2List<Entity*> entities  
  
bool Awake(pugi::xml_node&)  
bool Start()  
bool Update(float dt)  
bool PostUpdate(float dt)  
bool CleanUp()  
Entity* createEntity(entity_type type, int x, int y)  
void destroyEntity()
```

Player

```
SDL_Texture* graphics  
Collider* pit_collider  
fPoint collider_move  
bool touchingFloor  
bool jump  
int jumps  
bool GodMode  
p2DyanArray<iPoint> path  
SDL_Tetxure* path_marker  
uint jump_sound  
uint walking_sound  
uint dead_sound  
  
bool Awake(pugi::xml_node&)  
bool Start()  
bool PreUpdate()  
bool Update(float dt)  
bool PostUpdate(float dt)  
bool CleanUp()  
bool Load(pugi::xml_node&)  
bool Save(pugi::xml_node&) const  
void OnCollision(Collider* c1, Collider* c2)
```

Walking Enemy

```
bool Awake(pugi::xml_node&)  
bool Start()  
bool PreUpdate()  
bool Update(float dt)  
bool PostUpdate(float dt)  
bool CleanUp()  
bool Load(pugi::xml_node&)  
bool Save(pugi::xml_node&) const  
bool OnCollision(Collider* c1, Collider* c2)
```

Flying Enemy

```
bool Awake(pugi::xml_node&)  
bool Start()  
bool PreUpdate()  
bool Update(float dt)  
bool PostUpdate(float dt)  
bool CleanUp()  
bool Load(pugi::xml_node&)  
bool Save(pugi::xml_node&) const  
bool OnCollision(Collider* c1, Collider* c2)
```

Entity

```
enum entity_state  
enum entity_type  
iPoint position  
fPoint virtual_position  
fPoint v  
fPoint collider_offset  
bool colliding_bottom  
bool colliding_top  
bool colliding_right  
bool colliding_left  
bool going_right  
bool going_left  
bool jumping  
bool going_down  
entity_state state  
entity_type type  
SDL_texture* graphics  
Animation* animation  
int pos_relCam  
Collider* collider  
Collider* collidingFloor  
p2DynArray<iPoint> path_to_player  
float speed  
float jump_force  
bool flying  
bool IsDead  
float scale  
iPoint sprite_pos  
iPoint collider_pos  
iPoint collider_size  
float gravity  
  
Entity(const char* name)  
bool Entity_Update(float dt)  
void Calculate_Path()  
void Entity_OnCollision(Collider* c1, Collider* c2)  
void setAnimation()
```