Each element has an Info Struct where the user can initialize the variables of element. All variables have an initialization by default.

GUI-UML

Inherits from j1Module

UIElement

UIElement() virutal ~UIElement() virtual Update(float):void virutal Draw():void virutal HandleInput():void virutal HasToBeRemoved():bool virutal GetType(): UIElement_TYPE virtual DebugDraw():void MouseHove():bool UpdateDragging(float):void SetOrientation():void GetScreenRect():SDL_Rect GetLocalRect():SDL_Rect GetScreenPos():iPoint GetLocalPos():iPoint

parent: UIElement* tex_area:SDL_Rect tex:const SDL_Texture* mouse_click_pos:iPoint listener:j1Module* vertical:UI_Element_VERTICAL_POS horizontal: UIElement_HORIZONTA_POS type: UIElement_TYPE to_remove:bool

SetLocalPos(iPoint):void

IncreasePos(iPoint):void

SetInteratction(bool):void

j1GUI

virtual ~j1Gui(); Awake(xml_node):**bool** Start():bool PreUpdate():bool Update(float dt):bool PostUpdate():bool CleanUp():bool

Blit(float dt):bool

j1GUI();

CreateUIImage(UIImage_Info):**UIImage***CerateUILabel(UILabel_Info):**UILabel*** CreateUlButton(UlButton_Info):**UlButton*** CreateUlCursor(UlCursor_Info):UlCursor* CreateUIWindow(UIWindow_Info):**UIWindow*** CreateUILifeBar(UILifeBar_Info):UILifeBar CreateUISlider(UISlider_Info): UISlider* DestroyElement(UIElement*):bool ClearALLUI():bool

ClearMapTextures():bool SetUpDragginChildren(UIElemen*):void SetUpDraggingNode(bool):void

atlas_file_name:p2SString UI_elements_list:p2List<UIElement*> to spawn UI elements:p2List<UIElement*> to_spawn_UI_parents:p2List<UIElement*> map_textures:map<Tex_Names, const SDL Texture*> map_fonts:map<Font_Names, TTF_Font*> UI_elements_tree:nTree<UIElement*> debug_draw:bool

UIButton()

drag_to_true:bool drag_to_false:bool update_drag:bool

Ullmage

draggable:bool

interactive:bool

Ullmage() Draw():void DebugDraw(iPoint):void SetColor(SDL_Color):void StartAnimation(Animation):void Update(float):void GetColor():SDL_Color SetNewRect(SDL_Rect):void GetRect():SDL_Rect ResetFade():void FromAlphaToAlphaFade(float, float):bool

image:Ullmage_Info total_time:float start_time:float reset:bool anim_to_play: Animation anim: Animation* speed:float start_animation:bool

UIButton

Draw():void DebugDraw(iPoint):void HandleInput():void ChangeSprite(SDL_Rect):void Update(float):void GetHoverSprite():SDL_Rect GetPressedSprite():SDL_Rect GetNormalSprite():SDL_Rect GetActualEvents():UlEvents SlideTransition(float,int,float,bool,float):bool Bounce(float,float):bool InitializeBounce(float):void

button: UIButton_Info Ulevent: UlEvents tab:bool next_event:bool $bounce_value: f \textbf{loat}$ start_pos:iPoint

UILabel

UILabel() Draw():void Update(float):void $HandleInput(): \pmb{void}$ DebugDraw(iPoint):void SetColor(SDL_Color):void StartAnimation(Animation):void Update(float):void GetColor():**SDL_Color** SetNewRect(SDL_Rect):**void** GetRect():SDL_Rect ResetFade():**void** FromAlphaToAlphaFade(float, float):bool RandomAlphaPainting(float,SDL Color):void SlideTransition(float,int,bool,float):bool label:UlLabel_Info

total time:float start_time:float reset:bool bounce_value:float start_pos:iPoint

font: TTF Font*

UIWindow

UIWindow() Draw():void DebugDraw(iPoint):void HandleInput():void Update(float):void SlideTransition(float,int,float,bool,float):bool Bounce(float,float):bool InitializeBounce(float):void

tab:bool next event:bool bounce_value:float start pos:iPoint first_bounce:bool reset:bool start_bouncing:bool

UILifeBarl()

window: UIWindow_Info

UICursor

UICursor() Update(float):void SetMousePosition():void HandleInput:void

curosr: UICursor_Info Ulevent: UlEvents

UILifebar

Draw():void Update(float):void HandleInput():void DebugDraw(iPoint):void SetLifeProgress(int):void IncreaseLifeProgress():void DecreaseLifeProgress():void GetProgress():void

life_bar:UILIfeBar_Info Ulevent: UlEvents next_event:bool

UISlider

Draw():void Update(float):void HandleInput():void DebugDraw(iPoint):void GetPercent():uint SlideTransition(float, int, float, bool):bool Bounce(float, float)bool InitializeBounce(float):void

slider:UISlider_Info Ulevent: UlEvents next_event:bool lets_move:bool bounce_value:float start_pos:iPoint reset:bool start_bouncing:bool

UISlider()