```
GUI 0..1
```

```
i1GUI():
~j1GUI();
```

bool Awake(pugi::xml\_node& config); bool Start();

bool PreUpdate(); bool Update(float dt); bool PostUpdate(); bool CleanUp();

bool Save(pugi::xml\_node&) const; bool Load(pugi::xml\_node&);

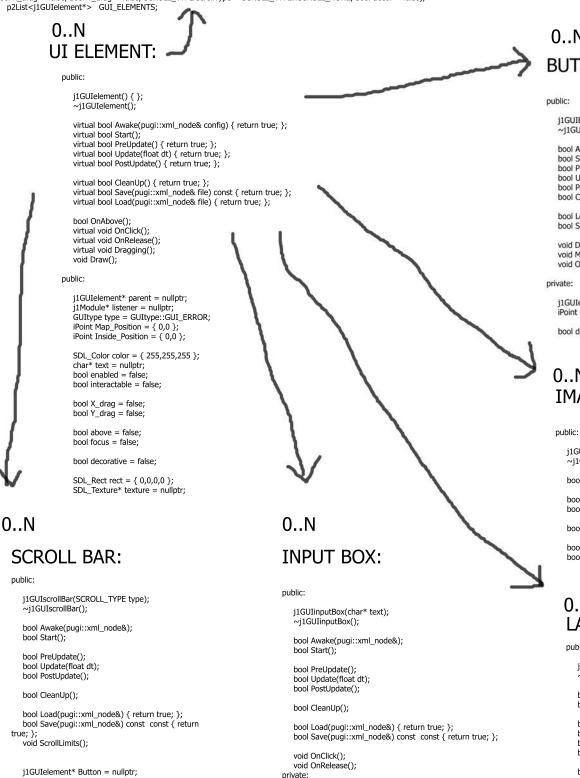
SCROLL\_TYPE Type =

float Value;

SCROLL\_TYPE::SCROLL\_NONE;

void Update\_Position(j1GUIelement\* element, iPoint position, iPoint localPosition);
j1GUIelement\* ADD\_ELEMENT(GUItype type, j1GUIelement\* parent, iPoint Map\_Position, iPoint Inside\_Position, bool interactable, bool enabled, SDL\_Rect section, char\* text = nullptr, j1Module\* listener = nullptr, bool X\_drag = false, bool Y\_drag = false, SCROLL\_TYPE scrollType = SCROLL\_TYPE::SCROLL\_NONE, bool decor = false);

SHEN UI UML:



j1GUIelement\* string = nullptr; i1GUIelement\* background = nullptr;

## 0..N**BUTTON:**

```
j1GUIButton();
   ~j1GUIButton();
  bool Awake(pugi::xml_node&);
  bool Start();
  bool PreUpdate();
  bool Update(float dt);
  bool PostUpdate();
  bool CleanUp();
  bool Load(pugi::xml_node&) { return true; };
  bool Save(pugi::xml_node&) const const { return true; };
  void Dragging();
  void MovingIt(float dt);
  void OnRelease();
private:
  j1GUIelement* label = nullptr;
  iPoint Drag = \{0,0\};
  bool dragging;
 0..N
  IMAGE:
```

## 0..NLABEL:

j1GUIimage();

~j1GUIimage();

bool PreUpdate(); bool PostUpdate();

bool CleanUp();

bool Awake(pugi::xml\_node&);

```
public:
   j1GUIlabel();
   ~j1GUIlabel();
   bool Awake(pugi::xml_node&);
   bool Start();
   bool PreUpdate();
   bool Update(float dt);
   bool PostUpdate();
   bool CleanUp();
   bool Load(pugi::xml_node&) { return true; };
   bool Save(pugi::xml_node&) const const { return true;
};
```

bool Load(pugi::xml\_node&) { return true; }; bool Save(pugi::xml\_node&) const const { return true; };