

Entity

+name : string

+transform

+light

+mesh

-m_component

-m_ID : int

+GetID() : int

+HasComponent() : bool

+GetComponentByType()

+GetAllComponents()

+RemoveComponent()

+AddComponent() : bool

Transform

+ Enabled : bool

+ Position : glm::vec3

+ Rotation : glm::quat

+ Scale : glm::vec3

Light

+ Enabled : bool

+ LightType

+ Diffuse : glm::vec4

+ Specular : glm::vec4

+ Attenuation: glm::vec4

+ OuterAngle : float

+ InnerAngle : float

LightType

Point

Spot

Directional

MeshRenderer

+ Enabled : bool

+ Mesh : string

+ Path : string

+ MaterialPath : string

+ Material

Material

RGBA : glm::vec4

SPEC : glm::vec4

bWireframe : bool

bUseRGBA : bool

bUseLight : bool

bVisible : bool

Textures : string

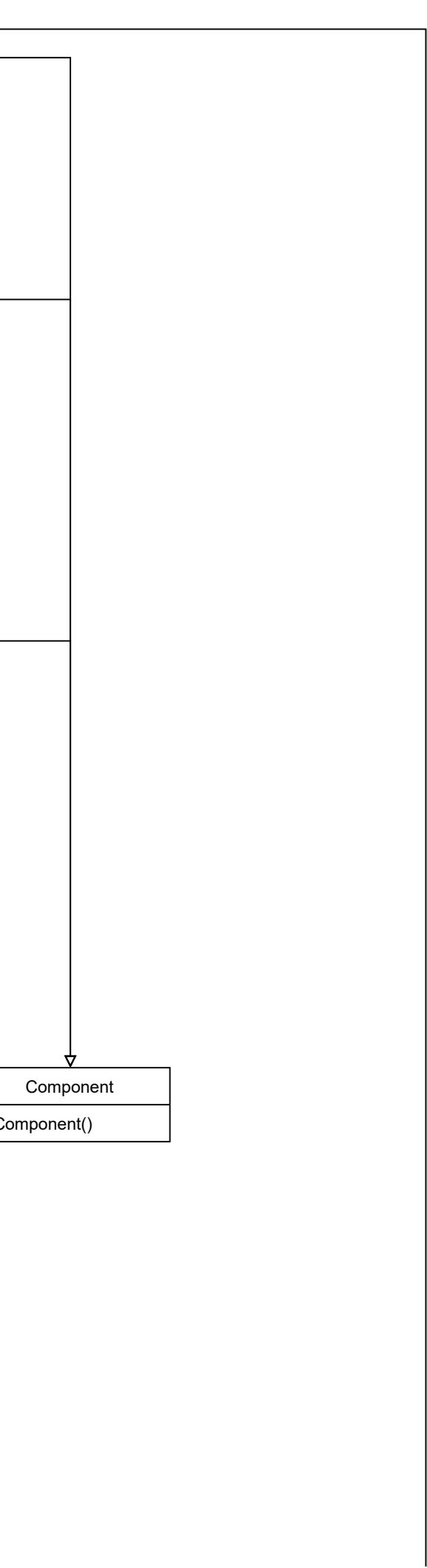
TextureRatio: float

EntityManager

- m_Entities : vector<Entity*>

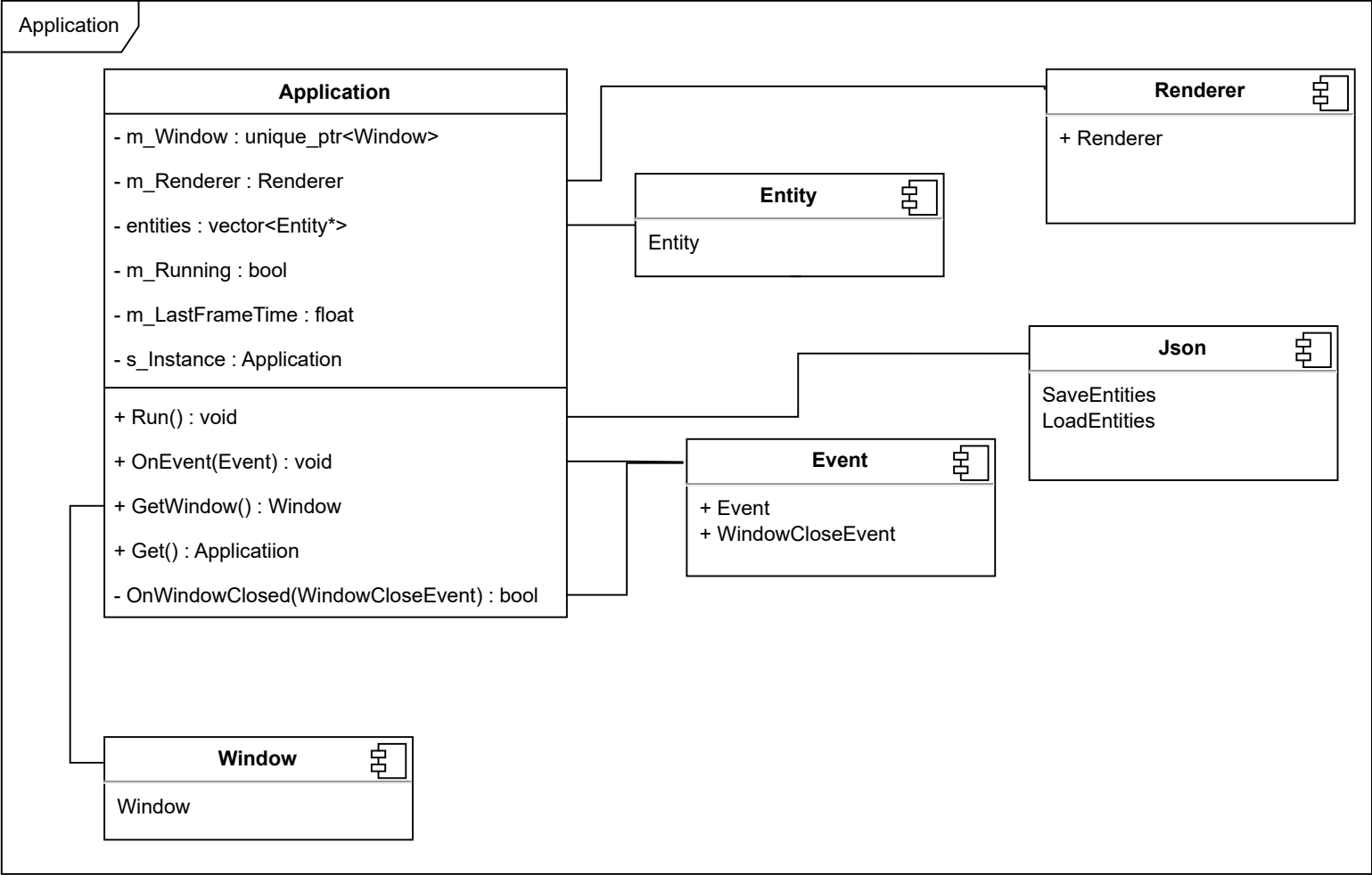
+ Init() : void

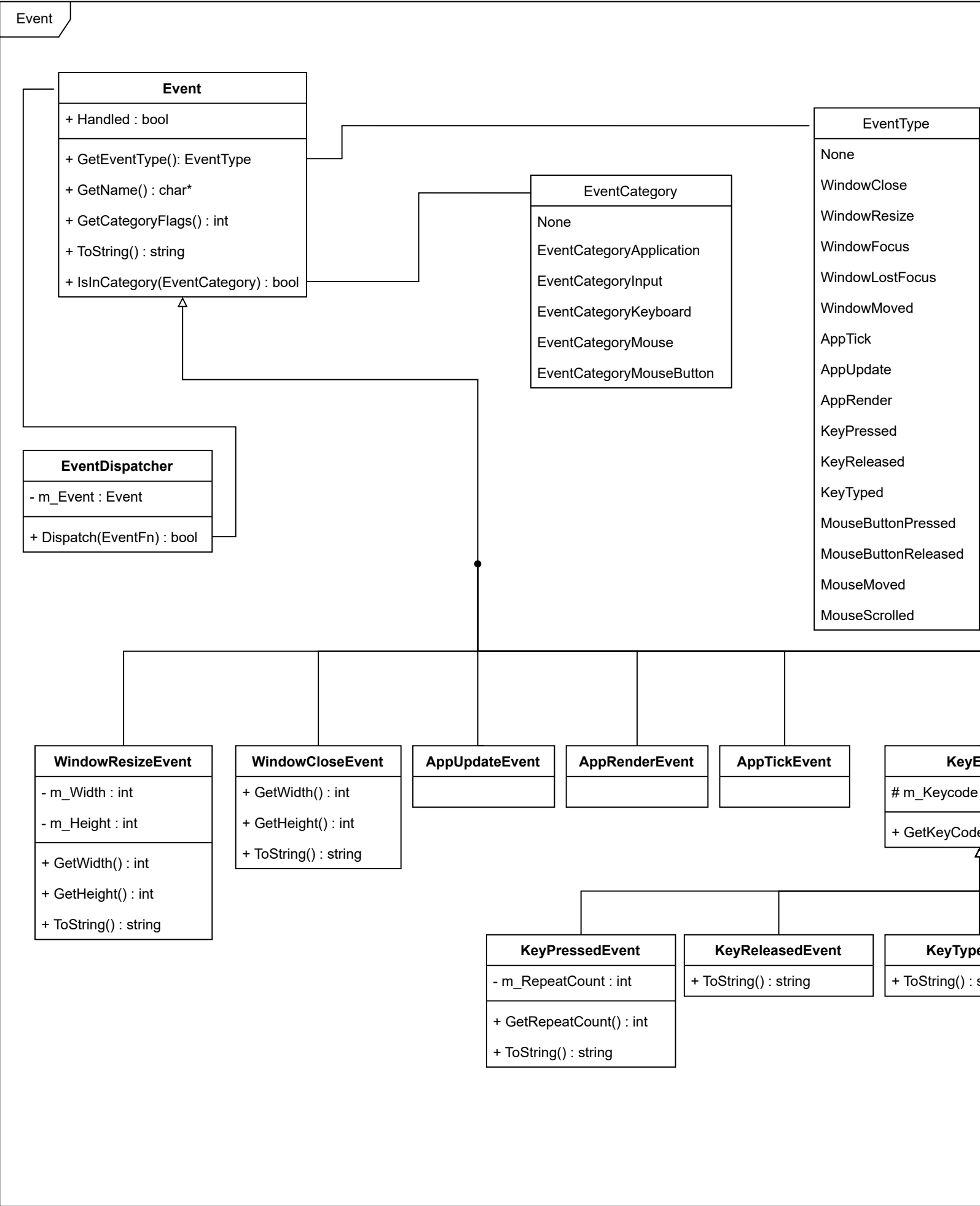
+ GetEntities() : vector<Entity*>

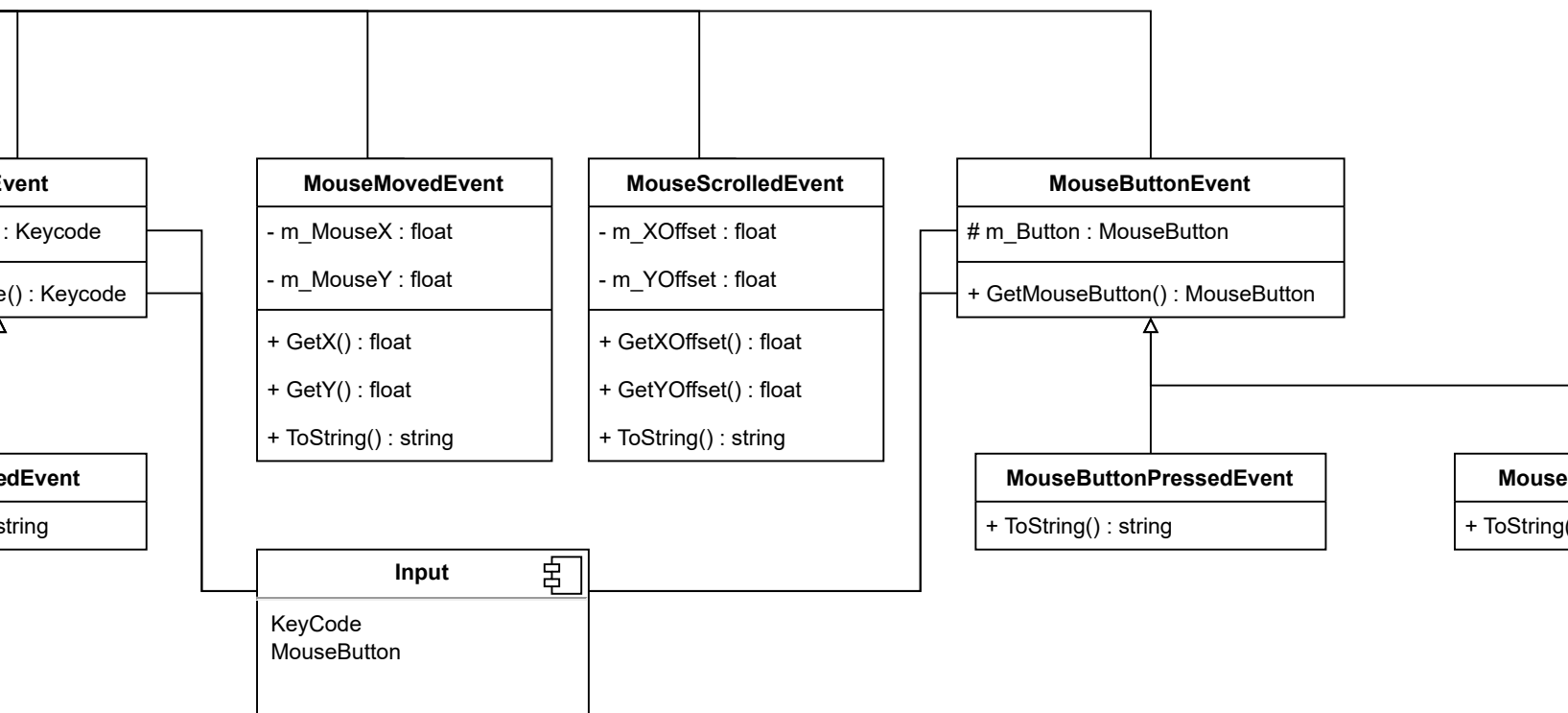




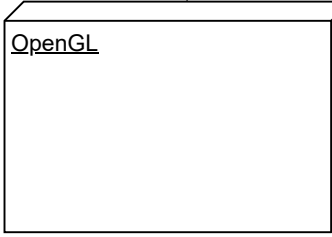
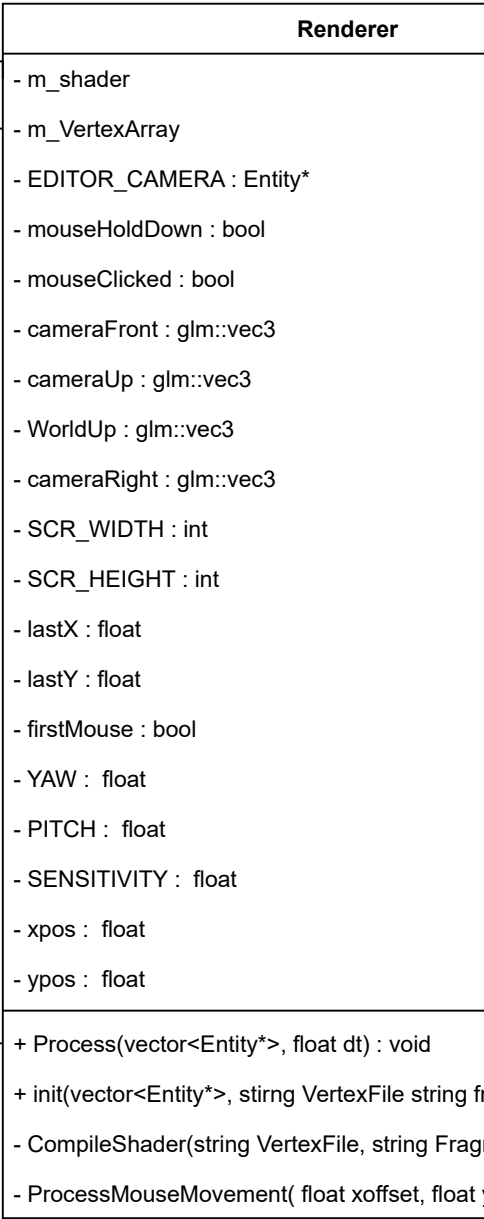
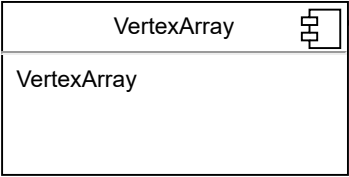
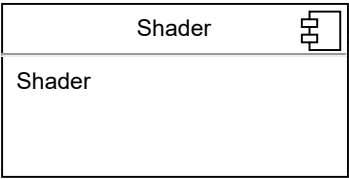




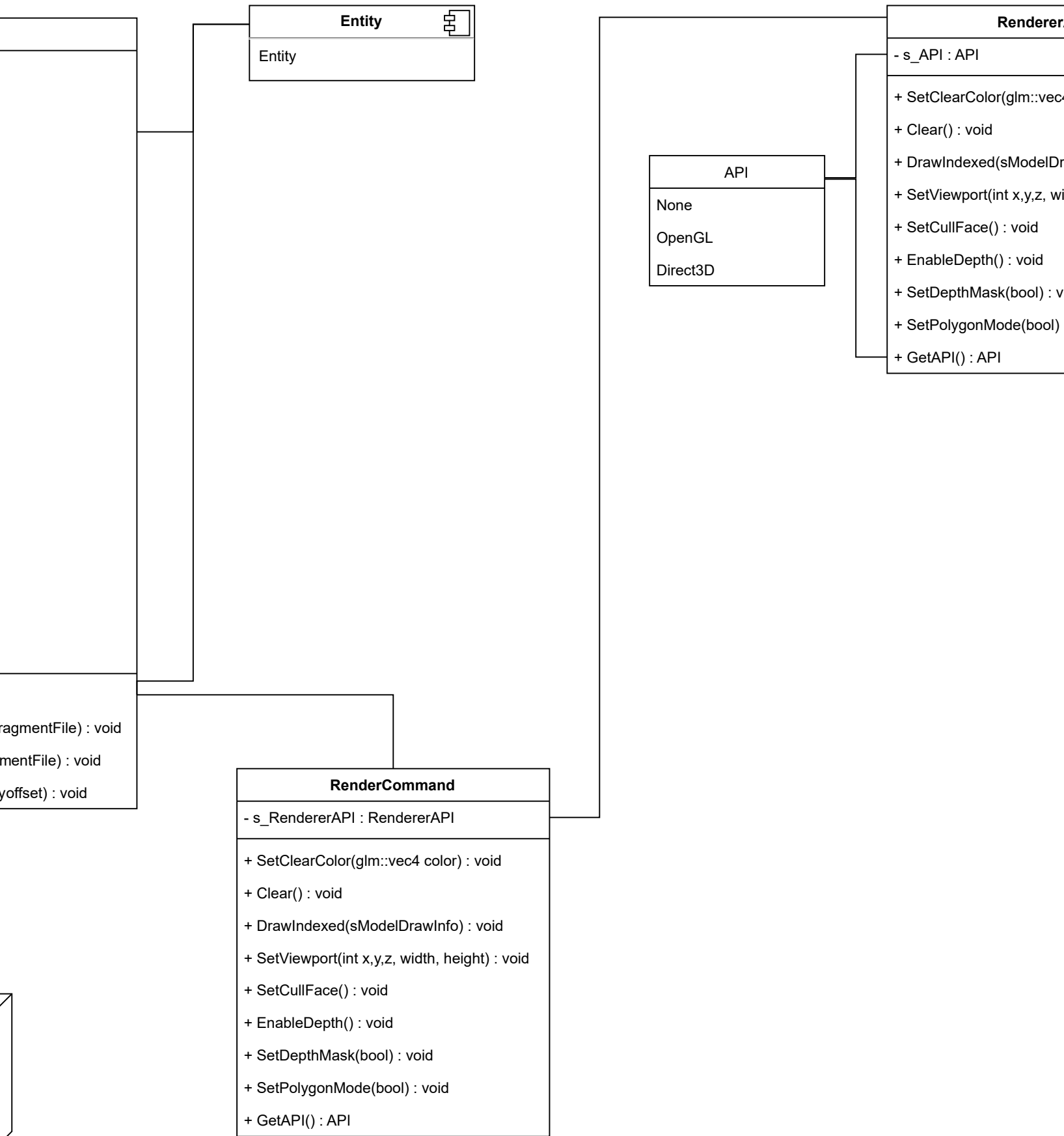




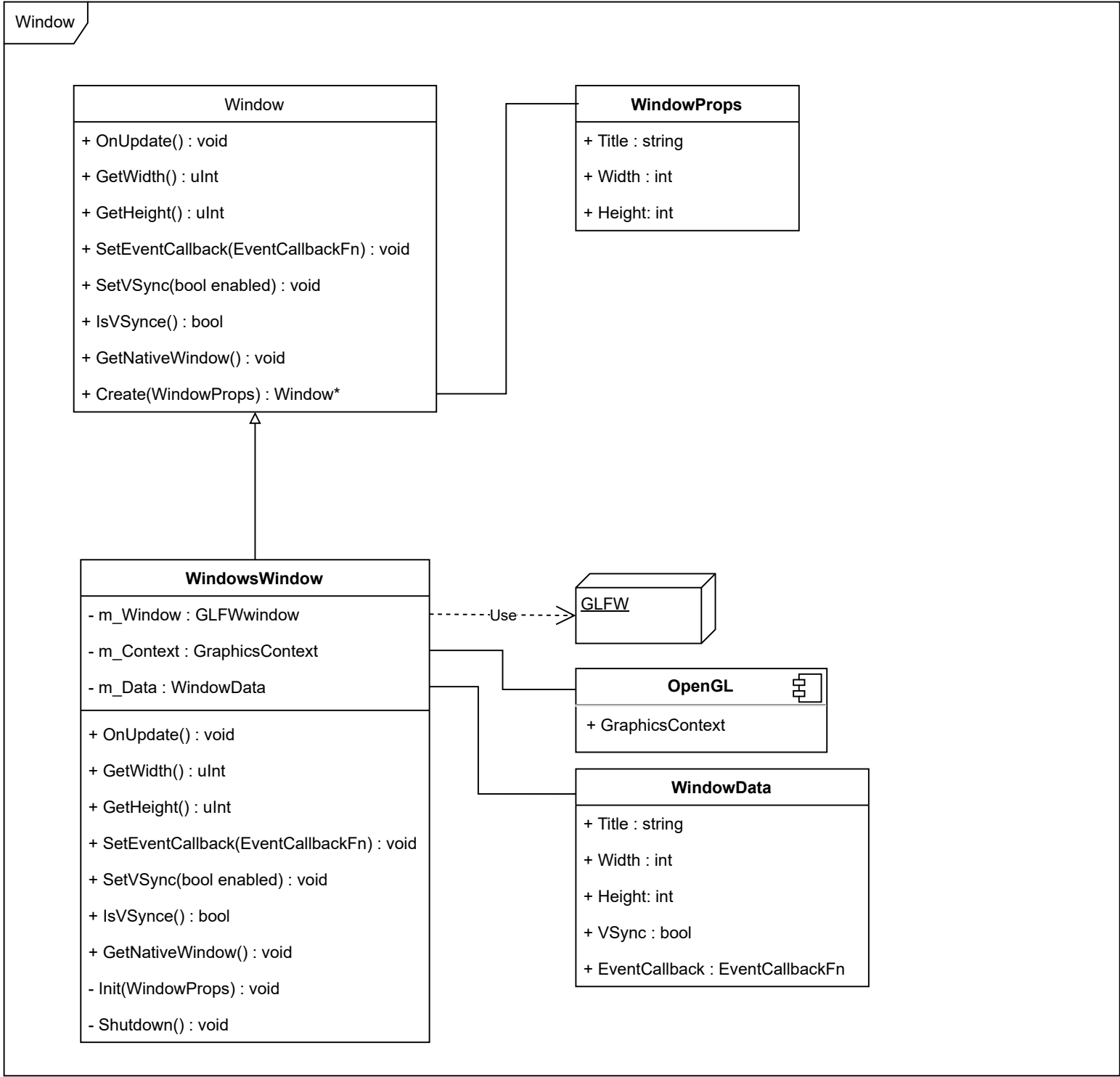
ButtonReleasedEvent
() : string



Use



API
4 color) : void
awInfo) : void
dth, height) : void
void
: void



Timestep
- m_Time : float
+ GetSeconds() : float
+ GetMilliseconds() : float

VertexArray

+ LoadModelIntoVAO(string filename, sModelDrawInfo, int shaderProgramID) : bool

+ FindDrawInfoByModelName(string filename, sModelDrawInfo) : bool

+ LoadPlyFiles(string filename, sModelDrawInfo) : bool

+ Create() : shared_ptr<VertexArray>



sModelDrawInfo

meshName : string

VAO_ID : int

VertexBufferID : int

VertexBuffer_Start_Index : int

numberOfVertices : int

IndexBufferID : int

IndexBuffer_Start_Index : int

numberOfIndices : int

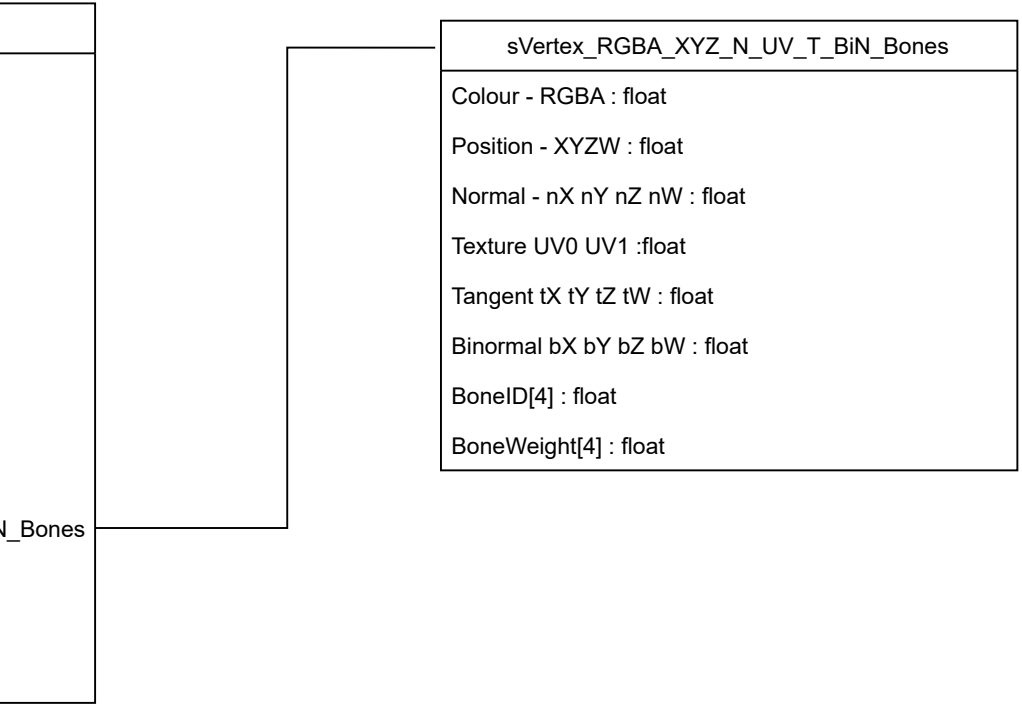
numberOfTriangles : int

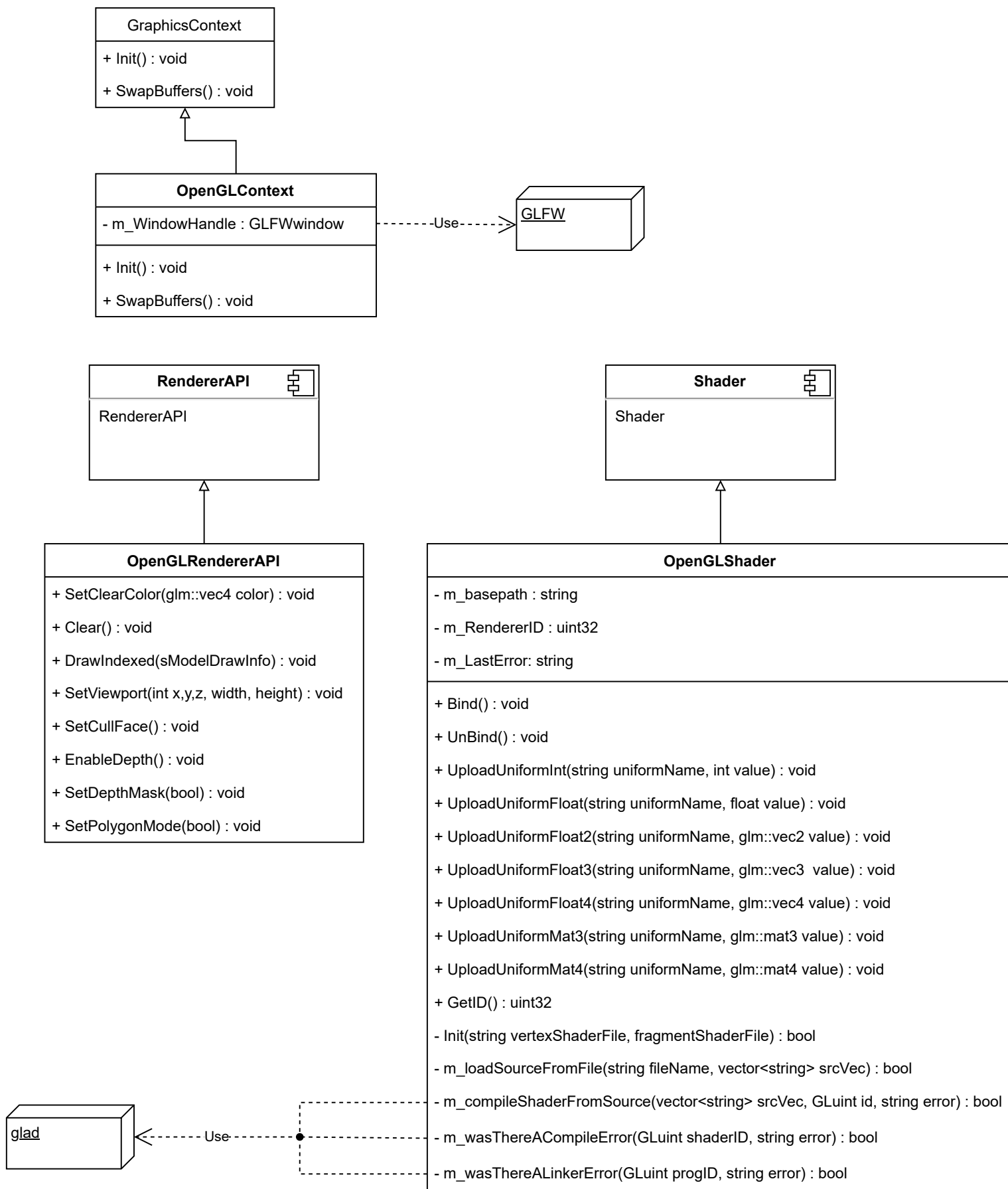
pVertices : sVertex_RGBA_XYZ_N_UV_T_BiN

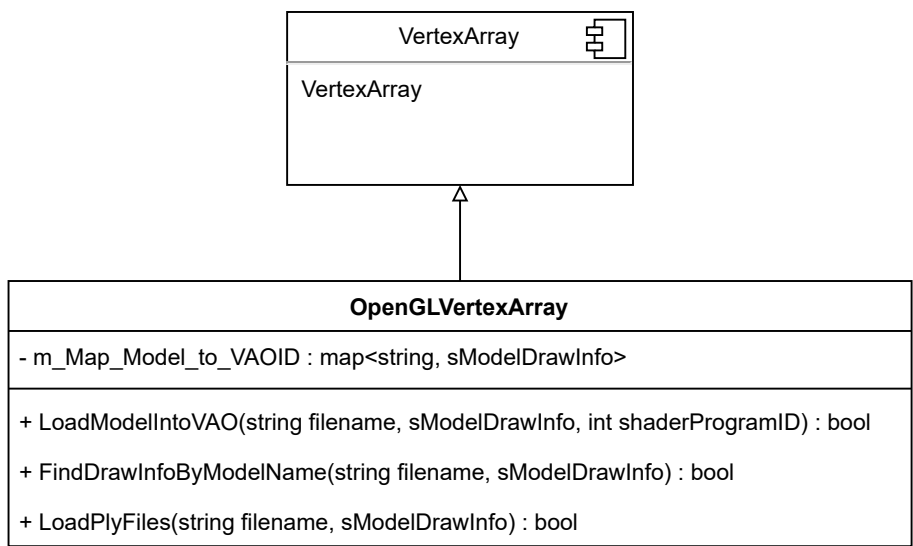
pIndices : int

maxValues : glm::vec3

minValues : glm::vec3







Shader

Shader

- + Bind()
- + UnBind()
- + Create(string vertexShaderFile, FragmentShaderFile)

JSON

