uint32_t m_descriptorHeapIncrementSize Microsoft::WRL::ComPtr< ID3D12Resource > m textureBuffer Microsoft::WRL::ComPtr< ID3D12Resource > m constantBuffer Microsoft::WRL::ComPtr< ID3D12Resource > m_uploadBuffer std::vector< Microsoft::WRL ::ComPtr< ID3D12Resource > > m_vertexBuffer std::vector< D3D12 VERTEX _BUFFER_VIEW > m_vertexBufferView UINT m numVertexBuffer std::vector< Microsoft::WRL ::ComPtr< ID3D12Resource > > mugen_engine::MEGraphicCommandList m_additionalVertexBuffer Microsoft::WRL::ComPtr< ID3D12Command UINT m_numAdditionalVertexBuffer Allocator > m_cmdAllocator UINT m_currerntAdditionalVertexBuffer mugen_engine::MEGraphicDevice Microsoft::WRL::ComPtr< ID3D12Graphics ViewIndex Microsoft::WRL::ComPtr< ID3D12Device CommandList > m_cmdList MEGraphicGpuResourceManager() > m_device Microsoft::WRL::ComPtr< ID3D12Command void Initialize(const MEGraphicDevice Microsoft::WRL::ComPtr< IDXGIFactory6 Queue > m_cmdQueue &device, UINT numVertexBuffer) mugen_engine::VERTEX DATA > m_dxgiFactory Microsoft::WRL::ComPtr< ID3D12Fence · void SetGpuResource(MEGraphicCommand MEGraphicDevice() + DirectX:XMFLOAT3 pos > m_fence List &cmdList) MEGraphicDevice(const MEGraphicDevice UINT64 m fenceVal + DirectX::XMFLOAT2 uv void UploadVertexData(uint32 &)=delete MEGraphicCommandList() _t index, VERTEX_DATA *vertices, void Initialize() void Initialize(const MEGraphicDevice size_t vertexNum) · ID3D12Device *const GetDevice() const &device) void UploadConstantData(CONSTANT · IDXGIFactory4 *const GetFactory() const · void Execute() _DATA &constData) void _EnableDebugLayer() ID3D12CommandQueue *const + void SetRenderCommand(MEGraphicCommand GetCommandQueue() const List &cmdList) ID3D12GraphicsCommandList · void CreateSrv(const DXGI FORMAT format, const MEGraphicDevice *const GetCommandList() const &device) void CreateTextureBuffer(const DirectX:TexMetadata &metadata, const MEGraphicDevice &device) void ResetUploadBuffer(const size t rowPitch, const size _t height, const MEGraphicDevice &device) · void UploadDataToUploadBuffer (uint8_t *srcData, const size _t rowPitch, const size_t height) 8 88 88 ... void _InitalizeConstantBuffer (const MEGraphicDevice &device) size t GetAlignmentedSize (size_t size, size_t alignment) void CreateCbv(const MEGraphicDevice &device) void _SetBarrierBeforeUploadTexture (const MEGraphicCommandList &cmdList) -m vertices -m_pDevice -m_pCmdList -m_resourceManager mugen_engine::MEImage size_t m_height size t m xDivideNum - size_t m_yDivideNum DirectX::XMFLOAT4 m_brightness BLEND TYPE m blendType magica_rogue::MRTransform - MElmage() · float m_x MEImage(const std::wstring float m_y &filepath, MEGraphicDevice float m vx &device, size t xDivideNum, size_t yDivideNum, MEGraphicCommandList float m_vy &cmdList, MEGraphicPipeline &pipeline, + MRTransform(const float x, MEGraphicRenderTarget &renderTarget) const float y, const float void DrawGraph(int x, int wx, const float wy) y, float priority, int index=0) void SetPosition(const float · void DrawRotaGraph(int x, x, const float y) magica_rogue::MRStaticObjectInterface int y, float scale, float + void SetVelocity(const float angle, float priority, int w, const float w) index=0) + virtual MRTransform & GetTransform()=0 + woid SetVelocityWithAngle void DrawGraph2X(int x, int + virtual void Render(const (const float angle, const float speed) y, float priority, int index=0) MRCamera &camera) const =0 + float GetX() const void DrawRotaGraph2X(int x, + float GetY() const int y, float scale, float angle, float priority, int + float GetNextX() const index=0) + float GetNextY() const void DrawModiGraph(int x0, + void SetX(float x) int y0, int x1, int y1, int + void SetY(float y) x2, int y2, int x3, int y3, float priority, int index=0) + void SetVelocityX(float vx) void DrawModiGraph2X(int x0, + void SetVelocityY(float w) int y0, int x1, int y1, int + void Update() x2, int y2, int x3, int y3, float priority, int index=0) void SetBrightness(const float R, const float G, const float B, const float A) void SetBlendType(BLEND_TYPE blendType) void ResetAdditionalVertexBuffer() -m_transform -m_image magica_rogue::MRTresureBox MRRarity m rarity MRTresureBox(const float x, const float y, const MRRarity rarity) MRTransform & GetTransform() · void Render(const MRCamera &camera) const

mugen_engine::MEGraphicRenderTarget

- const int m_numBackBuffer
- Microsoft::WRL::ComPtr< IDXGISwapChain4m_swapchain
- Microsoft::WRL::ComPtr< ID3D12Descriptor Heap > m_rtvHeaps
- std::vector< Microsoft::WRL
- ::ComPtr< ID3D12Resource > > m_backBuffers
- D3D12_CPU_DESCRIPTOR_HANDLE m_renderTargetHandle
- D3D12_VIEWPORT m_viewport
- D3D12_RECT m_scissorRect
- + MEGraphicRenderTarget()
- void Initialize(const MEGraphicDevice &device, const MEGraphicCommandList &cmdList, HWND hwnd, const int window
- + void Present()
- + void SetBarrierBeforeRender
 (MEGraphicDevice &device, MEGraphicCommand
 List &cmdList)
- + void SetBarrierBeforePresent (MEGraphicCommandList &cmdList)

width, const int window height)

- + void Clear(float clearColor
- [4], MEGraphicCommandList &cmdList)
- void SetRenderArea(MEGraphicCommand List &cmdList, const int topX, const int topY, const int bottomX, const int bottomY)
- void SetRenderBaseCommand (MEGraphicCommandList &cmdList)

·m_pPipeline

mugen engine::MEGraphicPipeline

Microsoft::WRL::ComPtr< ID3D12Pipeline

Microsoft::WRL::ComPtr< ID3D12Root

void Initialize(const MEGraphicDevice

int type, MEGraphicCommandList

&device, const D3D12_INPUT_ELEMENT

DESC inputLayout[], const int layoutSize)

void ProcessBlobError(HRESULT result)

std::vector< char > m_vsBlob

std::vector< char > m_psBlob

State > m_pipelineState

· MEGraphicPipeline()

&cmdList)

Signature > m_rootSignature

void SetPipelineState(const

void _CreateRootSignarure (const MEGraphicDevice &device)

void CreatePipelineState

(const MEGraphicDevice &device, const D3D12_INPUT_ELEMENT_DESC

inputLayout[], const int layoutSize)

void LoadShader()

> m_errorBlob

Microsoft::WRL::ComPtr< ID3DBlob

Heap > m_basicDescHeap

-m_pRenderTarget