mugen_engine::MEGraphicDevice

- Microsoft::WRL::ComPtr< ID3D12Device > m_device
- Microsoft::WRL::ComPtr< IDXGIFactory6 > m_dxgiFactory

+ MEGraphicDevice()
+ MEGraphicDevice(const MEGraphicDevice &)=delete
+ void Initialize()
+ ID3D12Device *const GetDevice() const
+ IDXGIFactory4 *const GetFactory() const
- void _EnableDebugLayer()

mugen_engine::MEGraphicCommandList

- Microsoft::WRL::ComPtr< ID3D12Command Allocator > m_cmdAllocator
- Microsoft::WRL::ComPtr< ID3D12Graphics CommandList > m_cmdList
- Microsoft::WRL::ComPtr< ID3D12Command Queue > m_cmdQueue
- Microsoft::WRL::ComPtr< ID3D12Fence > m_fence
- UINT64 m_fenceVal

+ MEGraphicCommandList()
+ void Initialize(const MEGraphicDevice &device)
+ void Execute()
+ ID3D12CommandQueue *const GetCommandQueue() const
+ ID3D12GraphicsCommandList *const GetCommandList() const

mugen_engine::MEGraphicPipeline

- std::vector< char > m_vsBlob
- std::vector< char > m_psBlob
- Microsoft::WRL::ComPtr< ID3DBlob > m_errorBlob
- Microsoft::WRL::ComPtr< ID3D12Pipeline State > m_pipelineState
- Microsoft::WRL::ComPtr< ID3D12Root Signature > m_rootSignature

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+ MEGraphicPipeline()
+ void Initialize(const MEGraphicDevice &device, const D3D12_INPUT_ELEMENT _DESC inputLayout[], const int layoutSize)
+ void SetPipelineState(const int type, MEGraphicCommandList &cmdList)
- void _ProcessBlobError(HRESULT result)
- void _CreateRootSignarure (const MEGraphicDevice &device)
- void _LoadShader()
- void _CreatePipelineState (const MEGraphicDevice &device, const D3D12_INPUT_ELEMENT_DESC inputLayout[], const int layoutSize)

mugen_engine::MEGraphicRenderTarget

- const int m_numBackBuffer
- Microsoft::WRL::ComPtr< IDXGISwapChain4 > m_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 _width, const int window_height)
+ void Present()
+ void SetBarrierBeforeRender (MEGraphicDevice &device, MEGraphicCommand List &cmdList)
+ void SetBarrierBeforePresent (MEGraphicCommandList &cmdList)
+ 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_pDevice   -m_pCmdList   -m_pPipeline   -m_pRenderTarget

mugen_engine::MEFontData

- HDC m_hdc
- HFONT m_oldFont
- std::unordered_map< wchar _t, MEGraphicCharacterUnit > m_loadedCharacters

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+ MEFontData()
+ MEFontData(std::wstring fontName, int fontSize, MEGraphicDevice &device, MEGraphicCommandList &cmdList, MEGraphicPipeline &pipeline, MEGraphicRenderTarget &renderTarget)
+ MEFontData & operator=(const MEFontData &rhs)
+ void DrawString(const int x, const int y, const float color[4], float priority, const std::wstring text)
+ void DrawFormatString(const int x, const int y, const float color[4], float priority, const std::wstring text,…)

-defFont

mugen_engine::Fps

- std::chrono::system_clock ::time_point start_time_
- int count_
- float fps_
- static const int cnt_to_sample
- static const int ideal_fps_

+ Fps()
+ bool Update()
+ void Draw()
+ void Wait()