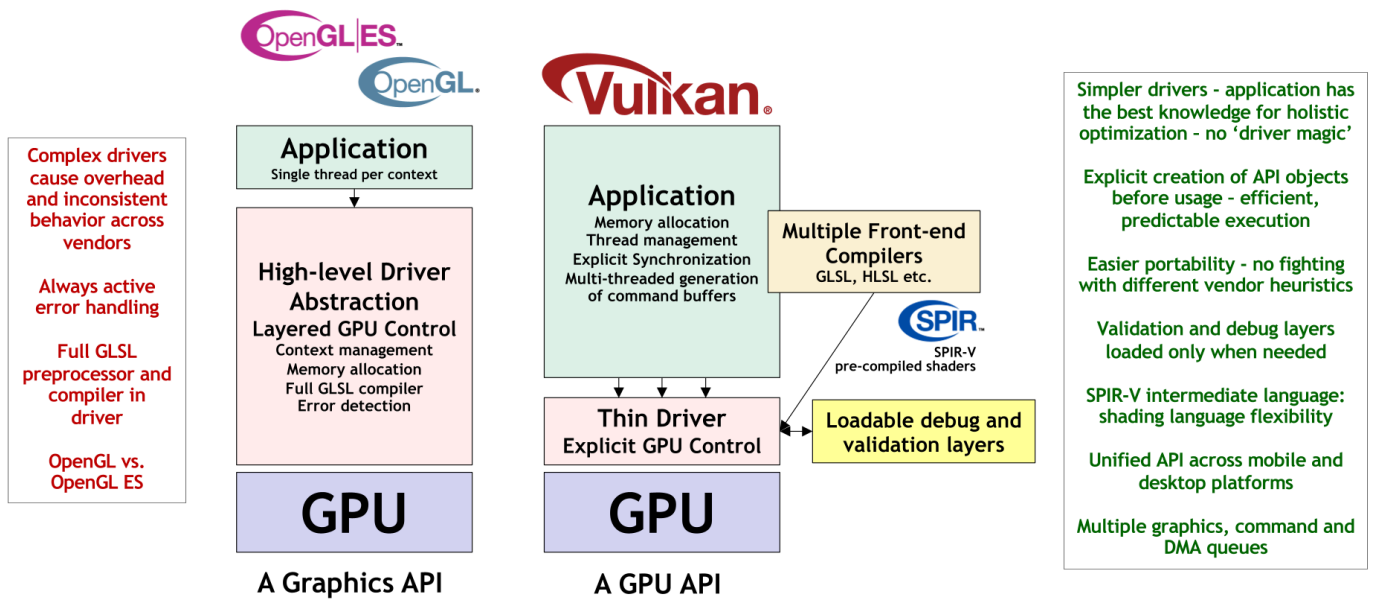


The Real "Adventure" begins here!

[well, not really. I believe the real adventure is it SHADERS and Algorithms!]

Vulkan Explicit GPU Control



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Chapter 1: VkInstance

1. VkApplicationInfo

- <https://vkdok.net/man/VkApplicationInfo>
 - do remember to check the **Valid Usage** section 😊
- yes, what are you waiting for, go go, shooo....
 - `#include <vulkan/vulkan.h>`
 - take an instance of that **Struct** -> Fill it up [😊][have the vkdok.net as assist]
- REY_DOCs**
 - `VkApplicationInfo` -> holds **name** and **version**, also the **lowest Vulkan API version** Your APP "can run" on. [*clarification needed:- lowest or highest]
 - Also, we can set the **name** and **version** of the **engine** (if any) used to create Your APP. This can help **vulkan driver implementations** to perform ad-hoc optimizations.
 - e.g. like if a Triple-A [AAA] game used, for say, **Unreal Engine Version 4.1.smth** idk 🤖
 - REFs:- [1. minerva](#)

2. VkInstanceCreateInfo

- <https://vkdoc.net/man/VkInstanceCreateInfo>
 - yeah, do remember to check the `Valid Usage` section 😊
 - `.ppEnabledLayerNames` -> "ChapterZZZ"
 - `.ppEnabledExtensionNames` -> Chapter4.2
 - Don't hesitate about `EnabledLayer` & `EnabledExtensions` right now
 - come back and add them when you need to 😊
- **REY_DOCS**
 - Nothing that I need to add
 - Tho if this section gets big, I will create a separate `.md` file for that thingy

3. VkInstance m_instance = nullptr;

- <https://vkdoc.net/man/VkInstance>
 - again.... yeah, do remember to check the `Valid Usage` section 😊

4. vkCreateInstance(CI, &m_instance)

- <https://vkdoc.net/man/vkCreateInstance>
 - `Valid Usage` section.... (yeah, everytime)

5. Error Handling / Checking / Logging

- check out my `amVK_log.hh`
 - uses [REY_LoggerUtils](#) inside `amGHOST`
 - has a simple `stackTracer()` that i basically stripped from blender3D codebase 😊

6. The Result

- Check out:- [4.guide.chapter1.hh](#)

7. The Unused ones

1. `vkEnumerateInstanceExtensionProperties()` -> Chapter4.2
 - <https://vkdoc.net/man/vkEnumerateInstanceExtensionProperties>
2. `Add_InstanceEXT_ToEnable(const char* extName)` -> Chapter4.2
 - this is a `amVK/REY Custom Function`