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# **My Great Book Documentation**

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**Jul 18, 2019**



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# CHAPTER 1

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OGLP

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## 2.1 Grapher

### 2.1.1

```
${ROOT}\phplib\generalLibs\code01.php  
phplib/userManage/swtUserManager.php  
isManager() true  
logStore logStore """"
```

```
select *  
from mis_table_batch_list b left join mis_table_path_info p on b.path_id = p.path_id  
where b.batch_id = 1071;
```

## 2.2 Microbench

## 2.3 Shaderbench

## 2.4 Framebench





## 3.1 target TYPE

target TYPE ""

### 3.1.1

- TYPE

## 3.2 CMAKE\_TOOLCHAIN\_FILE was not used by the project

CMake

```
CMake Warning:
  Manually-specified variables were not used by the project:

    CMAKE_TOOLCHAIN_FILE
```

This is the standard warning gives you when you're giving it a command line option it's not using. That is giving `-DFOO=bar` to `cmake` when the `CMakeLists.txt` doesn't use `FOO` variable.

Now, that's a bit of a special case here: `CMAKE_TOOLCHAIN_FILE` is used by CMake the first time you're configuring your build, but as you can't change the toolchain for an already configured build, it's ignored every other time, thus the warning.

### 3.2.1

- `CMAKE_TOOLCHAIN_FILE` was not used by the project

## 3.3 add\_custom\_target

target target

target TYPE UTILITY target\_link\_libraries(target <user\_defined\_target>)

### 3.3.1

- `add_custom_target`

### 4.1 LINK

`/ignore:4221 LINK 4221`

“Properties -> Linker -> Command Line”

#### 4.1.1

- Visual C++: How to disable specific linker warnings?
- (Stackoverflow) Visual C++: How to disable specific linker warnings?

### 4.2 Linker Tools Warning LNK4221

C++

a.cpp

```
// a.cpp
#include <atlbase.h>
```

b.cpp

```
// b.cpp
#include <atlbase.h>
int func1()
{
    return 0;
}
```

```
cl /c a.cpp b.cpp
```

```
link /lib /out:test.lib a.obj b.obj
```

a.cpp b.cpp public symbol 4

1. a.cpp public symbol b.cpp b.obj

```
a
a b
a b
```

```
link /lib /out:test.lib a.obj b.obj
a.obj : warning LNK4006: "int __cdecl func1(void)" (?func1@@YAHXZ) already_
↳defined in b.obj; second definition ignored
```

a.cpp b.cpp b.cpp

```
link main.obj test.lib
```

a.cpp b.cpp

```
test.lib(a.obj) : error LNK2005: "int __cdecl func1(void)" (?func1@@YAHXZ) _
↳already defined in test.lib(b.obj)
main.exe : fatal error LNK1169: one or more multiply defined symbols found
```

2. a.cpp public symbol b.cpp a.obj

```
a
b a
b a
```

```
b.obj : warning LNK4006: "int __cdecl func1(void)" (?func1@@YAHXZ) already_
↳defined in a.obj; second definition ignored
b.obj : warning LNK4221: This object file does not define any previously_
↳undefined public symbols, so it will not be used by any link operation that_
↳consumes this library
```

a.cpp

### 4.2.1

- [Linker Tools Warning LNK4221](#)
- [What does LNK4221 mean?](#)
- [How to eliminate Warning LNK4221?](#)

## 4.3

```
lib /OUT:filename.lib input1.lib input2.lib ...
```

### 4.3.1

- How do you combine static library files?
- [CMake] Merge two static libraries
- Overview of LIB



## CHAPTER 5

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### Example reST

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The function `spam()` does a similar thing.





- [jellky](#)
- [Hugo](#)
- [Hexo](#)
- [pelican](#)
- [Hyde](#)

**jellky** Ruby github pages

**Hugo** Go

**Hexo** Markdown Octopress

**pelican** Python reStructuredText Markdown

**Hyde** Python



## 7.1 C++

```
#include <fstream>
#include <iterator>
#include <algorithm>

int main()
{
    std::ifstream input( "C:\\Final.gif", std::ios::binary );
    std::ofstream output( "C:\\myfile.gif", std::ios::binary );

    std::copy(
        std::istreambuf_iterator<char>(input),
        std::istreambuf_iterator<char>( ),
        std::ostreambuf_iterator<char>(output));
}
```

```
#include <fstream>
#include <iterator>
#include <vector>

int main()
{
    std::ifstream input( "C:\\Final.gif", std::ios::binary );
    // copies all data into buffer
    std::vector<char> buffer((
        std::istreambuf_iterator<char>(input)),
        (std::istreambuf_iterator<char>( )));
}
```

### 7.1.1

- Reading and writing binary file
- C++ Binary File I/O
- C++ Programming Examples

## 7.2 typedef

3

```
typedef char[3] type24;
```

```
typedef char type24[3];
```

However, this is probably a very bad idea, because the resulting type is an array type, but users of it won't see that it's an array type. If used as a function argument, it will be passed by reference, not by value, and the `sizeof` for it will then be wrong.

A better solution would be

```
typedef struct type24 { char x[3]; } type24;
```

You probably also want to be using `unsigned char` instead of `char`, since the latter has implementation-defined signedness.

### 7.2.1

- typedef fixed length array

## 8.1 Vulkan Cube

### 8.1.1 demo\_build\_image\_ownership\_cmd

#### VkCommandBufferUsageFlags

- **VK\_COMMAND\_BUFFER\_USAGE\_ONE\_TIME\_SUBMIT\_BIT** specifies that each recording of the command buffer will only be submitted once, and the command buffer will be reset and recorded again between each submission.

command buffer   recording   command buffer

- **VK\_COMMAND\_BUFFER\_USAGE\_RENDER\_PASS\_CONTINUE\_BIT** specifies that a secondary command buffer is considered to be entirely inside a render pass. If this is a primary command buffer, then this bit is ignored.

secondary command buffer   render pass   primary command buffer

- **VK\_COMMAND\_BUFFER\_USAGE\_SIMULTANEOUS\_USE\_BIT** specifies that a command buffer can be resubmitted to a queue while it is in the pending state, and recorded into multiple primary command buffers.

### 8.1.2 Vulkan Cube

### 8.1.3 Vulkan Cube

Vulkan cube   Vulkan SDK   Vulkan SDK

## 8.2 Host Access to Device Memory Objects

Memory objects created with `vkAllocateMemory` are not directly host accessible.

vkAllocateMemory Memory object host accessible

Memory objects created with the memory property `VK_MEMORY_PROPERTY_HOST_VISIBLE_BIT` are considered mappable. Memory objects must be mappable in order to be successfully mapped on the host.

Memory objects memory `VK_MEMORY_PROPERTY_HOST_VISIBLE_BIT` mappable host Memory object

To retrieve a host virtual address pointer to a region of a mappable memory object, call

memory object host

```
VkResult vkMapMemory(
    VkDevice      device,
    VkDeviceMemory memory,
    VkDeviceSize  offset,
    VkDeviceSize  size,
    VkMemoryMapFlags flags,
    void**        ppData);
```

`vkMapMemory` does not check whether the device memory is currently in use before returning the host-accessible pointer. The application must guarantee that any previously submitted command that writes to this range has completed before the host reads from or writes to that range, and that any previously submitted command that reads from that range has completed before the host writes to that region (see here for details on fulfilling such a guarantee). If the device memory was allocated without the `VK_MEMORY_PROPERTY_HOST_COHERENT_BIT` set, these guarantees must be made for an extended range: the application must round down the start of the range to the nearest multiple of `VkPhysicalDeviceLimits::nonCoherentAtomSize`, and round the end of the range up to the nearest multiple of `VkPhysicalDeviceLimits::nonCoherentAtomSize`.

While a range of device memory is mapped for host access, the application is responsible for synchronizing both device and host access to that memory range.

```
void vkGetImageSubresourceLayout (
    VkDevice      device,
    VkImage       image,
    const VkImageSubresource* pSubresource,
    VkSubresourceLayout*      pLayout);

typedef struct VkImageSubresource {
    VkImageAspectFlags aspectMask;
    uint32_t           mipLevel;
    uint32_t           arrayLayer;
} VkImageSubresource;

typedef struct VkSubresourceLayout {
    VkDeviceSize offset;
    VkDeviceSize size;
    VkDeviceSize rowPitch;
    VkDeviceSize arrayPitch;
    VkDeviceSize depthPitch;
} VkSubresourceLayout;
```

## 9.1 LOG

- .logopen

```
.logopen [\t] [\u] [FileName]  
  
\t ID  
  
\u Unicode ASCII(ANSI)
```





## CHAPTER 10

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### Links

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- 3
  - 
  -
- OpenGL
  - OpenGL <https://learnopengl.com/>
  - OpenGL2 <https://learnopengl.com/>
  - <https://github.com/JoeyDeVries/LearnOpenGL> <https://learnopengl.com/>
  - OpenGL-AssImp
  - Order Independent Transparency In OpenGL 4.x
  - CSharpGL(22)(Order-Independent-Transparency)
- Vulkan
  - Vulkan Fast Paths - GDC 2016
  - Performance Tweets series: Barriers, fences, synchronization
  - Vulkan barriers explained
  - BARRIERS IN VULKAN : THEY ARE NOT THAT DIFFICULT
  - Using pipeline barriers instead of semaphores
  - confused about render pass in Vulkan API
  - Render passes - Vulkan Tutorial
  - BREAKING DOWN BARRIERS - PART 1: WHAT'S A BARRIER?
- C/C++
  - <http://www.pythontutor.com>
  - <https://coliru.stacked-crooked.com/>

- <http://cpp.sh/>
- reStructuredText
  - reStructuredText tool support
- GitHub
  - [datenwolf/linmath.h](https://github.com/datenwolf/linmath.h) - A small library for linear math as required for computer graphics
- GitHub Repository Mirrors

GitHub	Gitee
<a href="https://github.com/KhronosGroup/Vulkan-Docs">https://github.com/KhronosGroup/Vulkan-Docs</a>	<a href="https://gitee.com/chenchang/Vulkan-Docs">https://gitee.com/chenchang/Vulkan-Docs</a>
<a href="https://github.com/LunarG/VulkanSamples">https://github.com/LunarG/VulkanSamples</a>	<a href="https://gitee.com/chenchang/VulkanSamples">https://gitee.com/chenchang/VulkanSamples</a>
<a href="https://github.com/Microsoft/DirectX-Graphics-Samples">https://github.com/Microsoft/DirectX-Graphics-Samples</a>	<a href="https://gitee.com/chenchang/DirectX-Graphics-Samples">https://gitee.com/chenchang/DirectX-Graphics-Samples</a>
<a href="https://github.com/Overv/VulkanTutorial">https://github.com/Overv/VulkanTutorial</a>	<a href="https://gitee.com/chenchang/VulkanTutorial">https://gitee.com/chenchang/VulkanTutorial</a>
<a href="https://github.com/SaschaWillems/Vulkan">https://github.com/SaschaWillems/Vulkan</a>	<a href="https://gitee.com/chenchang/Vulkan">https://gitee.com/chenchang/Vulkan</a>
<a href="https://github.com/walbourn/directx-sdk-samples">https://github.com/walbourn/directx-sdk-samples</a>	<a href="https://gitee.com/chenchang/directx-sdk-samples">https://gitee.com/chenchang/directx-sdk-samples</a>
<a href="https://github.com/google/googletest">https://github.com/google/googletest</a>	<a href="https://gitee.com/chenchang/googletest">https://gitee.com/chenchang/googletest</a>
<a href="https://github.com/opengl-tutorials/ogl">https://github.com/opengl-tutorials/ogl</a>	<a href="https://gitee.com/chenchang/ogl">https://gitee.com/chenchang/ogl</a>

## 11.1 Welcome to My Great Book's documentation!

### 11.2

Welcome to **My** Great Book's documentation!

A A b

this is a paragraph that contains [a link](#).

## 11.3 Welcome to My Great Book's documentation!

goto *Welcome to My Great Book's documentation!*.

*Microsoft VC++*

See This is an example

ENVAR DK\_ROOT

Since Pythagoras, we know that  $a^2 + b^2 = c^2$ .

Control-x Control-f

*Start → Programs*

Release

Version

Today is Jul 18, 2019

**Danger:** Beware killer rabbits!

**Danger:** Beware killer rabbits!

**Attention:** Beware killer rabbits!

**Caution:** Beware killer rabbits!

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**Note:** Beware killer rabbits!

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**Hint:** Beware killer rabbits!

---

---

**Important:** Beware killer rabbits!

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**Tip:** Beware killer rabbits!

---

**Warning:** Beware killer rabbits!

New in version 1.1.0: Beware killer rabbits!

Changed in version 1.2.0: Beware killer rabbits!

Deprecated since version 1.3.0: Beware killer rabbits!

**See also:**

**Module `zipfile`** Documentation of the `zipfile` standard module.

**GNU tar manual, Basic Tar Format** Documentation for tar archive files, including GNU tar extensions.

### LICENSE AGREEMENT

Running the program needs a license.

**spam** (*eggs*)

**ham** (*eggs*)

Spam or ham the foo.

**filterwarnings** (*action*, *message*=", category=Warning, module=", lineno=0, append=False)

## CHAPTER 12

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### Indices and tables

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- `genindex`
- `modindex`
- `search`



## D

`DK_ROOT`, [23](#)

## E

environment variable  
    `DK_ROOT`, [23](#)

## H

`ham()` (*built-in function*), [24](#)

## S

`spam()` (*built-in function*), [24](#)