Maximal Slides

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Columns

Java

- kompiliert zu Bytecode
- Multipass Compiler
- Optimierungen zur Runtime
- Linking zur Runtime

C/C++

- kompiliert zu Objectcode
- Onepass Compiler Design (In Realität aber Multipass)
- Optimierungen zur Compiletime
- Linking zur Compile- oder Runtime

Image drawio

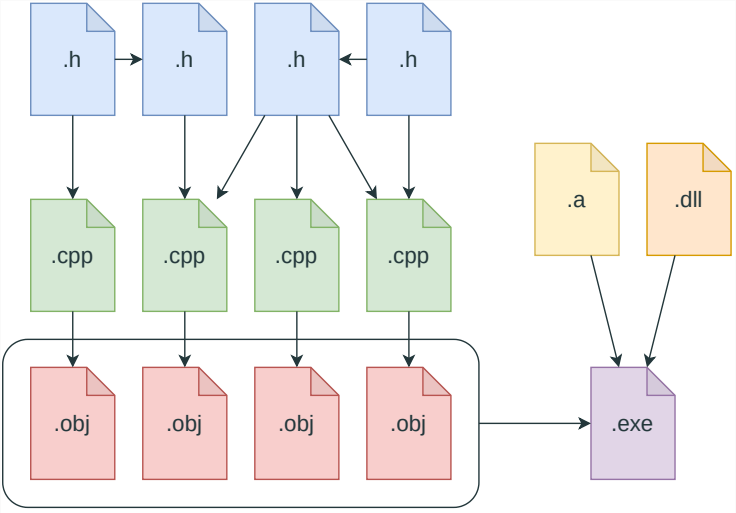


Image direct

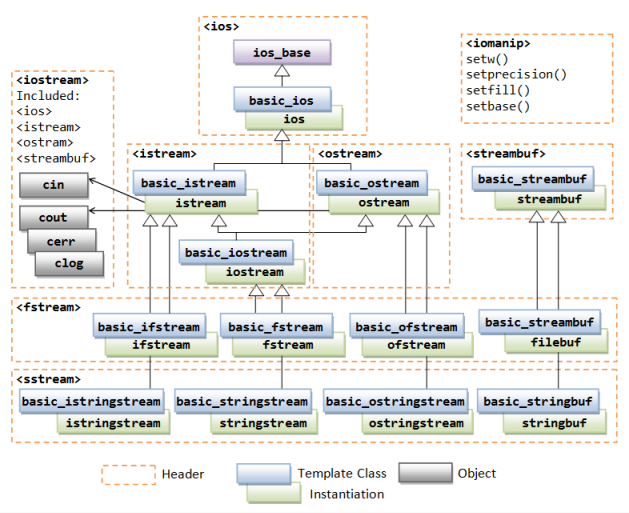
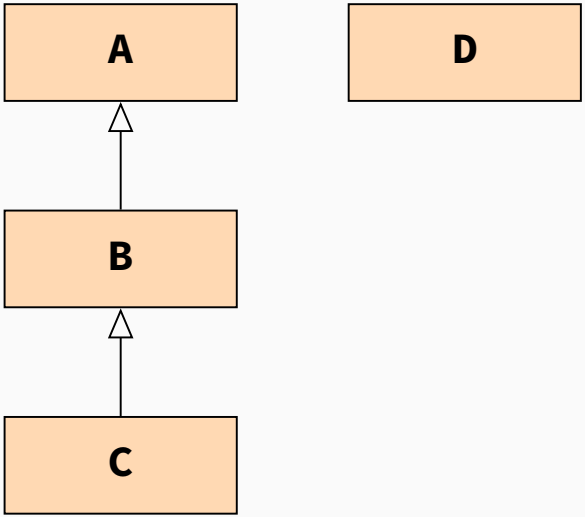


Image tikz



Links

- Lorem

Links

- An Introduction to Modern CMake
- Effective Modern CMake
- C++Now 2017: Daniel Pfeifer - Effective CMake

Inline code

```
cmake_minimum_required(VERSION 3.10)
project(example)

# collect sources
file(GLOB_RECURSE src src/*.cpp)

# main app target
add_executable(example_app ${src})
target_link_libraries(example_app
    PRIVATE pthread)

# define compile flags (warnings are fatal / add more checks)
set(cxxflags -Werror -Wall -Wextra -Wconversion -Wpedantic)

# set compiler flags
target_compile_options(example_app PRIVATE ${cxxflags})
```

Formulas

Die Multiplikation zweier Matrizen A und B, $R = A \times B$ ist wie folgt definiert: $r_{i,j} = \sum_{k=1}^{v} a_{i,k} b_{k,j}$, wobei A eine $u \times v$, B eine $v \times w$ und R eine $u \times w$ Matrix sind.

Zum Beispiel:

$$\begin{pmatrix} a_{0,0} & a_{0,1} & a_{0,2} \\ a_{1,0} & a_{1,1} & a_{1,2} \end{pmatrix} \times \begin{pmatrix} b_{0,0} \\ b_{1,0} \\ b_{2,0} \end{pmatrix} = \begin{pmatrix} a_{0,0} \times b_{0,0} + a_{0,1} \times b_{1,0} + a_{0,2} \times b_{2,0} \\ a_{1,0} \times b_{0,0} + a_{1,1} \times b_{1,0} + a_{1,2} \times b_{2,0} \end{pmatrix} = \begin{pmatrix} r_{0,0} \\ r_{1,0} \end{pmatrix}$$