

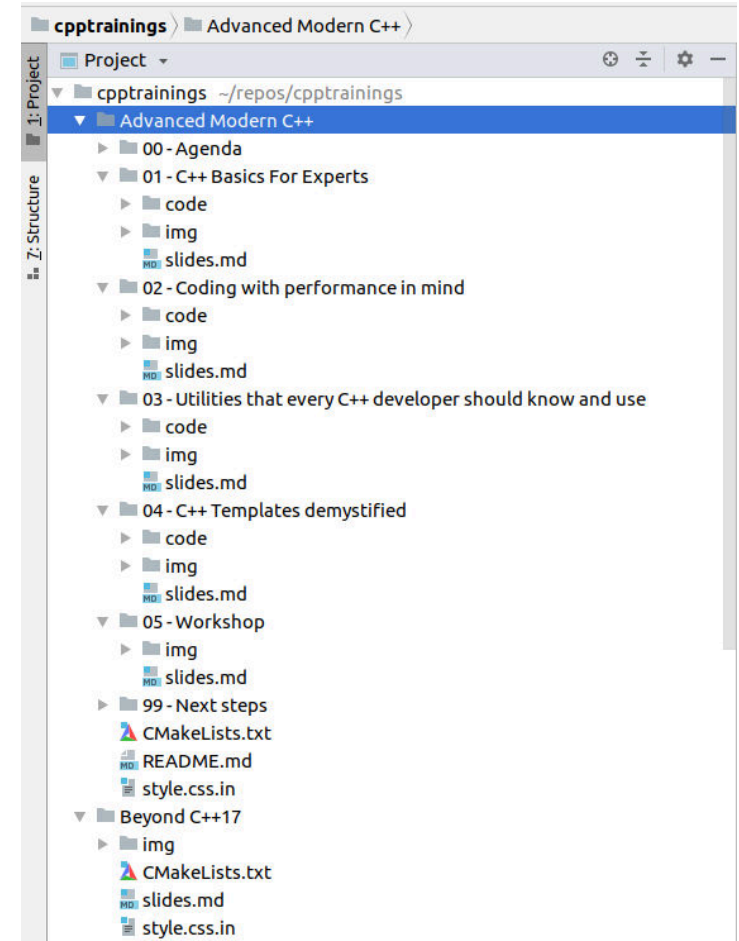
# How to create slides about CMake with CMake?

<https://github.com/train-it-eu/remark-cmake>

Mateusz Pusz  
November 16, 2018

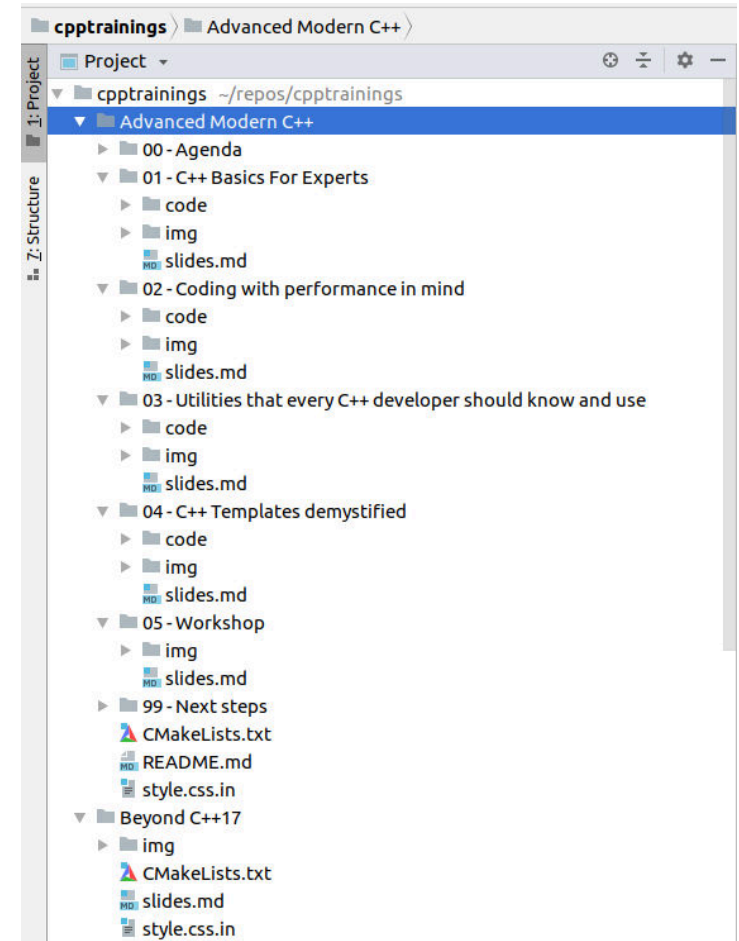
**CMake? Are you crazy? Why?**

# CMake? Are you crazy? Why?



# CMake? Are you crazy? Why?

- Brings *benefits for large slide decks*
- Slides generation and C++ sample code compilation in *one CMake project*
- Slides *content is orthogonal to presentation layout and style*
  - easy to switch different styles for the same content
- *Easy reuse* of slides and whole chapters
- *Handouts* generation engine
- Easier to write Markdown in `*.md` file (instead of `*.html`)



# Well, I lied a bit ;-) Slides are generated by Remark.js

```
class: title-slide
```

```
# How to create slides about CMake with CMake?
```

```
## https://github.com/mpusz/remark-cmake
```

```
Mateusz Pusz
```

```
November 16, 2018
```

```
---
```

```
# CMake? Are you crazy? Why?
```

```
.left-column[
```

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```
]
```

```
.right-column[
```

```
.right[![Train IT trainings](img/train-it.png)]
```

```
]
```

# How do I start?

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# How do I start?

1. *Download remark.cmake* script from <https://github.com/train-it-eu/remark-cmake>
2. Define your favorite *presentation style and layout*
3. If needed, fix or add custom language highlighting
4. Prepare presentation content as a *Markdown file*

# How do I start?

1. *Download remark.cmake* script from <https://github.com/train-it-eu/remark-cmake>
2. Define your favorite *presentation style and layout*
3. If needed, fix or add custom language highlighting
4. Prepare presentation content as a *Markdown file*
5. Aggregate all above in one *CMake project*

# CMake project with presentations

```
cmake_minimum_required(VERSION 3.3)
project(remark-cmake)

# path to custom cmake modules
list(APPEND CMAKE_MODULE_PATH "${CMAKE_CURRENT_SOURCE_DIR}/cmake")
include(remark)

# engine definition
add_subdirectory(remark.js)

# presentation definitions
add_subdirectory("API Reference")
add_subdirectory("Example")
```

- Just copy `remark.cmake` to your `./cmake` subdirectory and include it in a project
- More than one presentation possible in one CMake project

# Example presentation definition

```
add_remark_slides(example_presentation ALL
  NAME "Slides_about_CMake_with_CMake"
  TITLE "How to create slides about CMake with CMake?"
  STYLE remark-style-default
  STYLE_TEMPLATE style.css.in
  MARKDOWN_SLIDES slides.md
  LANGUAGES
    remark-language-cmake
  RESOURCES
    img/questions.jpg
    img/train-it.png
    img/warning.png
)
```

# Example presentation definition

```
add_remark_slides(example_presentation ALL
  NAME "Slides_about_CMake_with_CMake"
  TITLE "How to create slides about CMake with CMake?"
  STYLE remark-style-default
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  MARKDOWN_SLIDES slides.md
  LANGUAGES
    remark-language-cmake
  RESOURCES
    img/questions.jpg
    img/train-it.png
    img/warning.png
)
```

Styles are defined by CSS files and thanks to that can be easily replaced.

# EXAMPLE PRESENTATION DEFINITION

```
add_remark_slides(example_presentation ALL
  NAME "Slides_about_CMake_with_CMake"
  TITLE "How to create slides about CMake with CMake?"
  STYLE remark-style-trainIT
  STYLE_TEMPLATE style.css.in
  MARKDOWN_SLIDES slides.md
  LANGUAGES
    remark-language-cmake
  RESOURCES
    img/questions.jpg
    img/train-it.png
    img/warning.png
)
```

Styles are defined by CSS files and thanks to that can be easily replaced.

# Engine definition

```
add_remark_engine(default_engine
ENGINE scripts/remark-latest.min.js
HTML_TEMPLATE template.html.in
RESOURCES
    favicon.ico
    scripts/jquery.min.js
    scripts/laser_ptr.js
)
```



# Styles definition

```
add_remark_style(remark-style-base
  DEPENDS default_engine
  SOURCES
    css/base.css
)
```

- Hierarchical approach

```
add_remark_style(remark-style-default
  DEPENDS remark-style-base
  SOURCES
    css/default.css
    css/default_colors.css
)
```

# Custom highlighting

```
add_remark_language(remark-language-cmake
  SOURCES
    scripts/cmake.language.js
)
```

# Big presentations can be divided into chapters

```
set(TRAINING_NAME "api_reference")

add_remark_chapter(${TRAINING_NAME}_chapter_title
  BASE_DIR "1 - Title"
  MARKDOWN_SLIDES
    slides.md
)

add_remark_chapter(${TRAINING_NAME}_chapter_api
  BASE_DIR "2 - API Reference"
  MARKDOWN_SLIDES
    slides.md
)

add_remark_chapter(${TRAINING_NAME}_chapter_end
  BASE_DIR "3 - End"
  MARKDOWN_SLIDES
    slides.md
  RESOURCES
    img/warning.png
)
```

# Big presentations can be divided into chapters

```
set(TRAINING_NAME "api_reference")

add_remark_chapter(${TRAINING_NAME}_chapter_title
  BASE_DIR "1 - Title"
  MARKDOWN_SLIDES
    slides.md
)

add_remark_chapter(${TRAINING_NAME}_chapter_api
  BASE_DIR "2 - API Reference"
  MARKDOWN_SLIDES
    slides.md
)

add_remark_chapter(${TRAINING_NAME}_chapter_end
  BASE_DIR "3 - End"
  MARKDOWN_SLIDES
    slides.md
  RESOURCES
    img/warning.png
)
```

```
add_remark_slides(${TRAINING_NAME} ALL HANDOUTS
  NAME ${TRAINING_NAME}
  TITLE "cmake.remark API Reference"
  STYLE remark-style-default
  STYLE_TEMPLATE style.css.in
  LANGUAGES
    remark-language-cmake
  CHAPTERS
    ${TRAINING_NAME}_chapter_title
    ${TRAINING_NAME}_chapter_api
    ${TRAINING_NAME}_chapter_end
)
```

# Handouts generation

## Original

```
# Slide with animation
```

```
This part
```

```
--
```

```
and this part
```

```
--
```

```
will not generate separate slides in handouts
```

```
---
```

```
exclude: handouts
```

```
# Slide that should not be included in handouts
```

```
This slide wil not be included in handouts
```

```
---
```

```
# Next slide
```

# Handouts generation

## Original

```
# Slide with animation
This part
--
and this part
--
will not generate separate slides in handouts
---
exclude: handouts
# Slide that should not be included in handouts
This slide wil not be included in handouts
---
# Next slide
```

## Handouts

```
# Slide with animation
This part
and this part
will not generate separate slides in handouts
---
# Next slide
```

- Handouts generator removes
  - all -- animation breaks
  - whole slides with **exclude: handouts**
- Useful for PDF files generation

# More info?

<https://github.com/train-it-eu/remark-cmake>

- `remark.cmake` script
- Source of *that presentation*
- Presentation with *API Reference*
- Example *style and layout*
- Simple JavaScript scripts (i.e. *laser*)
- Custom *highlighting for CMake* language

# More info?

<https://github.com/train-it-eu/remark-cmake>

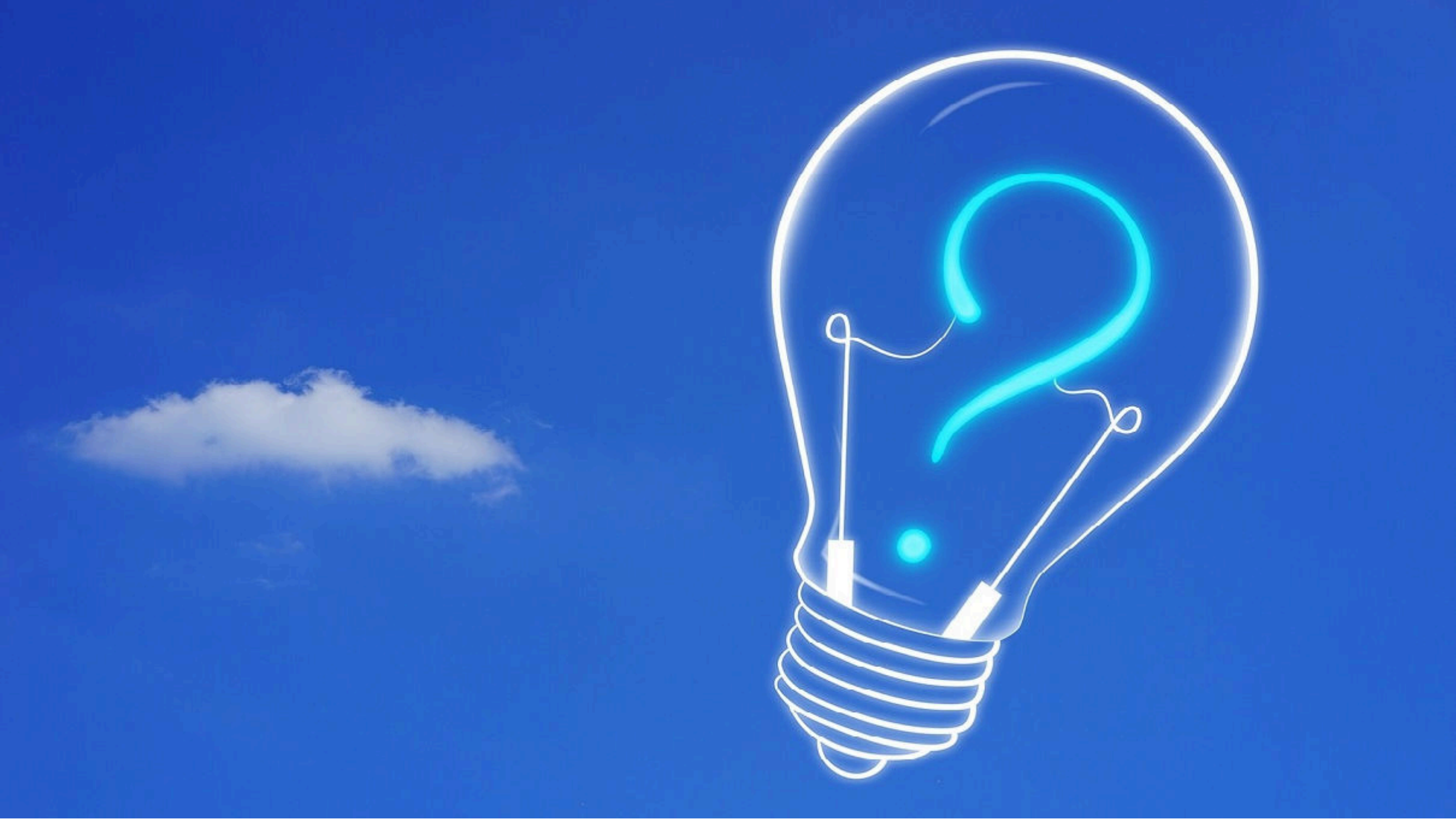
- `remark.cmake` script
- Source of *that presentation*
- Presentation with *API Reference*
- Example *style and layout*
- Simple JavaScript scripts (i.e. *laser*)
- Custom *highlighting for CMake* language


You are welcomed to contribute :-)



West Const = the best Const





The background is a bright yellow color. It is decorated with several black, three-dimensional-looking geometric shapes, possibly trapezoids or parallelograms, arranged in a pattern that suggests depth and perspective. These shapes are positioned at the corners and along the edges of the frame.

**CAUTION**  
**Programming**  
**is addictive**  
**(and too much fun)**