Practice Project 1

Generated by Doxygen 1.8.13

Contents

Chapter 1

practice-project-1

Practive Project – Demonstrates usage of CMake, Doxygen, git and Travis CI. Also, serves as a guide for C++ projects with emphasis on modern C++.

Sublime Useful Packages

Download sublime text from their website, it will be a .deb. Then run in terminal using `subl`.

Preparing the Documentation

```
mkdir docs
cd docs
doxygen -g
doxygen Doxyfile
# Making pdf documentation from LaTeX files
cd latex
make
```

I have also included the pdf documentation in the root directory for reference and also I am not cleaning the build files as I assume Doxygen might not be installed on the evaluaters systems. If you feel comfortable in the html documentation, open this webpage `$PROJECT_ROOT/docs/html/index.html`.

Also, I kept the flag ON to build documentation with static members and all the member functions and variable for the sake of clarity.

Packages to install

- `DoxyDoxygen` – Documentation
- `Anaconda` – Python Autocomplete etc.
- `EasyClangComplete` – C++ Autocomplete.
- `GitHub Flavored Markdown Preview` – Markdown Preview

Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 4

Namespace Documentation

4.1 pp Namespace Reference

Classes

- class Calculator

  Class for calculator.

4.1.1 Detailed Description

pp is `practice-project-1` workspace.

Chapter 5

Class Documentation

5.1 pp::Calculator$<$ T $>$ Class Template Reference

Class for calculator.

```
#include <calculator.h>
```

Public Member Functions

- Calculator ()

  Constructor.
- T add (T a, T b)

  Perform additions.
- T subtract (T a, T b)

  Performs substraction.
- T mul (T a, T b)

  Performs multiplication.
- T divide (T a, T b)

  Performs division.

5.1.1 Detailed Description

template$<$typename T$>$
class pp::Calculator$<$ T $>$

Class for calculator.

Template Parameters

T	Template Class.

5.1.2 Constructor & Destructor Documentation

5.1.2.1 Calculator()

```
template<typename T >
pp::Calculator< T >::Calculator ( )
```

Constructor.

Template Parameters

T	template class.

5.1.3 Member Function Documentation

5.1.3.1 add()

```
template<typename T >
T pp::Calculator< T >::add (
             T a,
             T b )
```

Perform additions.

Parameters

in	*a*	parameter↩ _1
in	*b*	parameter↩ _2

Template Parameters

T	template class.

Returns

sum of `a` and `b`.

5.1.3.2 divide()

```
template<typename T >
T pp::Calculator< T >::divide (
             T a,
             T b )
```

Performs division.

Parameters

in	*a*	parameter↩ _1
in	*b*	parameter↩ _2

Template Parameters

T	template class.

Returns

division of `a` and `b`.

5.1.3.3 mul()

```
template<typename T >
T pp::Calculator< T >::mul (
             T a,
             T b )
```

Performs multiplication.

Parameters

in	*a*	parameter↩ _1
in	*b*	parameter↩ _2

Template Parameters

T	template class.

Returns

multiplication of `a` and `b`.

5.1.3.4 subtract()

```
template<typename T >
T pp::Calculator< T >::subtract (
             T a,
             T b )
```

Performs substraction.

Parameters

in	*a*	parameter↩ _1
in	*b*	parameter↩ _2

Template Parameters

T	template class.

Returns

multiplication of `a` and `b`.

The documentation for this class was generated from the following files:

- calculator.h
- calculator.cpp

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