My Project

Generated by Doxygen 1.9.4

Chapter 1

Class Index

1.1 Class List

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

Chapter 2

File Index

2.1 File List

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

Chapter 3

Class Documentation

3.1 Part Struct Reference

This structure is designated to hold all necessary parameters for production of different parts.

`#include <Part.h>`

Public Attributes

- std::string **id**
- std::string **name**
- unsigned int **count** {}

3.1.1 Detailed Description

This structure is designated to hold all necessary parameters for production of different parts.

The documentation for this struct was generated from the following file:

- Part.h

Chapter 4

File Documentation

4.1 input.h File Reference

File where input functions are defined.

```
#include <iostream>
#include "Part.h"
```

Include dependency graph for input.h:

Functions

- unsigned int input::getUnsgnInt ()

  Function is designated to get an unsigned integer.
- unsigned int input::getCount ()

  Function is designated to get an unsigned integer for count field of structure Part.
- std::string input::getString ()

  Function is designated to get a string.
- std::string input::getId ()

  Function is designated to get a string for id field of structure Part.
- std::string input::getName ()

  Function is designated to get a string for name field of structure Part.
- Part input::inputStruct ()

  Function is designated to get a string for id field of structure Part.
- std::string input::inputString ()

  Function is designated to get a .json string.

4.1.1 Detailed Description

File where input functions are defined.

4.1.2 Function Documentation

4.1.2.1 getCount()

```
unsigned int input::getCount ( )
```

Function is designated to get an unsigned integer for count field of structure Part.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	in case of bad input

Returns

unsigned int

4.1.2.2 getId()

```
std::string input::getId ( )
```

Function is designated to get a string for id field of structure Part.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	in case of bad input

Returns

std::string

4.1.2.3 getName()

```
std::string input::getName ( )
```

Function is designated to get a string for name field of structure Part.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	in case of bad input

Returns

std::string

4.1.2.4 getString()

```
std::string input::getString ( )
```

Function is designated to get a string.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	in case of bad input

Returns

std::string

4.1.2.5 getUnsgnInt()

```
unsigned int input::getUnsgnInt ( )
```

Function is designated to get an unsigned integer.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	is case of bad input

Returns

unsinged int

4.1.2.6 inputString()

```
std::string input::inputString ( )
```

Function is designated to get a .json string.

Exceptions

std::runtime_error	in case of EOF
std::runtime_error	in case of bad input

Returns

std::string

4.1.2.7 inputStruct()

```
Part input::inputStruct ( )
```

Function is designated to get a string for id field of structure Part.

Exceptions

std::runtime_error	in case of EOF in one of the fields of the structure
std::runtime_error	in case of bad input in one of the fields of the structure

Returns

Part

4.2 input.h

Go to the documentation of this file.

```
1 //
2 // Created by ionik on 07.09.2024.
3 //
4
10 #ifndef LAB1_INPUT_H
11 #define LAB1_INPUT_H
12
13 #include <iostream>
14 #include "Part.h"
15
16 namespace input {
23     unsigned int getUnsgnInt();
24
31     unsigned int getCount();
32
39     std::string getString();
40
47     std::string getId();
48
55     std::string getName();
56
63     Part inputStruct();
64
71     std::string inputString();
72 }
73
74 #endif //LAB1_INPUT_H
```

4.3 Part.h File Reference

This file contains description of the structure Part and functions of this structure.

`#include <iostream>`
Include dependency graph for Part.h:

4.4 Part.h

Go to the documentation of this file.

```
1 //
2 // Created by ionik on 06.09.2024.
3 //
4
10 #ifndef LAB1_PART_H
11 #define LAB1_PART_H
12
13 #include <iostream>
14
18 struct Part {
19     std::string id;
20     std::string name;
21     unsigned int count{};
22 };
23
31 Part create(std::string _id, std::string _name, unsigned int _count);
32
40 bool compare(Part& p1, Part& p2);
41
42 #endif //LAB1_PART_H
```

4.5 process.h File Reference

In this file are described functions that process given structures or strings.

```
#include <iostream>
#include "Part.h"
```

Include dependency graph for process.h:

Functions

- std::string process::structToString (const Part &part)

  This function transforms structure Part to .json string.
- Part process::stringToStruct (const std::string &json)

  This function transforms .json string to structure Part.

4.5.1 Detailed Description

In this file are described functions that process given structures or strings.

4.5.2 Function Documentation

4.5.2.1 stringToStruct()

```
Part process::stringToStruct (
            const std::string & json )
```

This function transforms .json string to structure Part.

Parameters

part	Example of .json string that will be transformed

Returns

std::string A tructure Part based on given .json string

4.5.2.2 structToString()

```
std::string process::structToString (
            const Part & part )
```

This function transforms structure Part to .json string.

Parameters

part	Example of structure Part that will be transformed

Returns

std::string A .json string based on given structure Part

4.6 process.h

Go to the documentation of this file.

```
1 //
2 // Created by ionik on 09.09.2024.
3 //
4
10 #ifndef LAB1_PROCESS_H
11 #define LAB1_PROCESS_H
12
13 #include <iostream>
14 #include "Part.h"
15
16 namespace process {
22     std::string structToString(const Part& part);
23
29     Part stringToStruct(const std::string& json);
30 }
31
32 #endif //LAB1_PROCESS_H
```

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