Class Arg

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- Defined in File arg.hpp

Class Documentation

class Arg

Class for holding the argument information.

Public Functions

inline explicit Arg(const std::string &name)

Construct a new Arg object.

Parameters

name – The name of the argument.

~Arg() = default

template<typename ArgT>
inline Arg(const std::string &name, const ArgT &value)

Construct a new Arg object.

Parameters

- **name** – The name of the argument.

- **value** – The value of the argument.

template<typename ArgT>
inline Arg(const std::string &name, ArgT &&value)

Construct a new Arg object.

Parameters

- **name** – The name of the argument.

- **value** – The value of the argument.

template<typename ArgT, typename = std::enable_if_t<!std::is_same_v<Arg, std::decay_t<ArgT>>>>
inline Arg &operator=(const ArgT &value)

> Define the assignment operator.
>
> Template Parameters
>
> **ArgT** – The type of the argument.
>
> Parameters
>
> **value** – The value of the argument.
>
> Returns
>
> The reference to the argument.

template<typename ArgT, typename = std::enable_if_t<!std::is_same_v<Arg, std::decay_t<ArgT>>>>
inline Arg &&operator=(ArgT &&value)

> Define the assignment operator.
>
> Template Parameters
>
> **ArgT** – The type of the argument.
>
> Parameters
>
> **value** – The value of the argument.
>
> Returns
>
> The reference to the argument.

inline const std::string &name() const

> Get the name of the argument.
>
> Returns

The name of the argument.

inline const ArgType &arg_type() const

Get the type of the argument.

Returns

The type of the argument.

inline bool has_value() const

Check whether the argument contains a value.

Returns

true if the argument contains a value.

inline std::any &value()

Get the value of the argument.

Returns

The reference to the value of the argument.

YAML::Node to_yaml_node() const

Get a YAML representation of the argument.

Returns

YAML node including the name, type, and value of the argument.

YAML::Node value_to_yaml_node() const

Get a YAML representation of the argument value.

@ return YAML node including the value of the argument.

std::string description() const

Get a description of the argument.

[to_yaml_node()](#)

Returns

YAML string.