

# Implementing named parameters in C++11



base[devs].find("daminetreg").talk()

# Unambiguous

```
using namespace xxhr;  
GET( Url{"https://basel-devs.github.io/"},  
on_response = [](auto&& resp) {  
    //... do something  
};
```

# Two kinds of named parameters

```
using namespace xxhr;  
GET(Url{"https://basel-devs.github.io/"},  
    on_response = [](auto&& resp) {  
        //... do something  
    }  
);
```

# How can the first be detected ?

```
struct Url { std::string url; };

namespace priv {

    template <typename T>
    void set_option(Session& session, T&& t) { session.SetOption(XXHR_FWD(t)); }

    template <typename T, typename... Ts>
    void set_option(Session& session, T&& t, Ts&&... ts) {
        set_option(session, XXHR_FWD(t));
        set_option(session, XXHR_FWD(ts)...);
    }

} // namespace priv

template <typename... Ts>
void GET(Ts&&... ts) { Session session; priv::set_option(session, XXHR_FWD(ts)...); session.GET(); }
```

# So now we know

- Passing parameter out-of-order to the function
- Selectively reacting based on their “name”.

# Could we get the {} away ?

```
template<template <class> class Template>

struct make_handler_t {

    template<typename Handler>

        constexpr Template<Handler> operator= (Handler handler) const {
            return Template<Handler>(handler);

        }

};
```

# Could we get the {} away ?

```
template <class Handler>

struct on_response_ {

    explicit on_response_(Handler handler) : handler_(handler) {}

    Handler handler_;

};

constexpr make_handler_t<on_response_> on_response;
```

# Unambiguous

```
using namespace xxhr;  
GET( on_response = [](auto&& resp) {  
    //... do something  
},  
Url{"https://basel-devs.github.io/"}  
);
```