
Subject: Re: Make THISFN simpler and more powerful

Posted by [Lance](#) on Fri, 11 Nov 2022 01:50:42 GMT

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Problem solved with a hackish modification to the definition of the Moveable template in <Core/Topt.h>

```
template <class T, class B = EmptyClass>
struct Moveable : public B {
    typedef B MoveableBase; // Add this line
    friend void AssertMoveable0(T *) {}
};
```

Now it works like a charm :)

```
#include <Core/Core.h>
#include <concepts>
#include <type_traits>
```

```
template <class T>
concept UppMoveable = std::is_trivial_v<T> || requires{
    typename T::MoveableBase;
    requires std::derived_from<T,
        Upp::Moveable<T, typename T::MoveableBase>
    >;
};
```

```
CONSOLE_APP_MAIN
{
    using namespace Upp;
```

```
    struct D{
        D(){}
    };
```

```
    struct F{
        F() = default;
    };
```

```
    struct E : Moveable<E, D>{
        E(){}
    };
```

```
DUMP(UppMoveable<String>);//true
DUMP(UppMoveable<D>);//false
DUMP(UppMoveable<F>);//true, note the difference between D and F
```

```
DUMP(UppMoveable<E>);//true  
DUMP(UppMoveable<int64>);//true  
}
```

This is a hack. I am still interested to know if there is a way to do it without resorting to touch <Core/Topt.h>.
