

Functors, std::functions

SIMPLY EXPLAINED



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Functors

- A functor is pretty much just a class or a struct which defines the `operator()`. That lets you create objects which "look like" a function.
- One is that unlike regular functions, they can contain state.

```
class Multiplier { //functor classs
```

```
double y;
```

```
public:
```

```
– Multiplier(double y): y{y}{};
```

```
double operator()(double x) { return x * y;}
```

```
}
```

```
Multiplier doubler{2}; // Initialize
```

```
double x = doubler(5);
```