

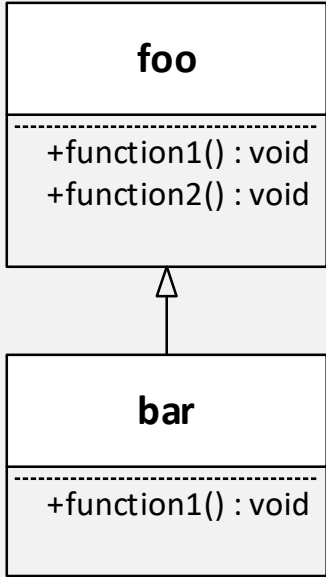


# CASTING & MEMBER FUNCTIONS

Locating and calling functions within inheritance hierarchies



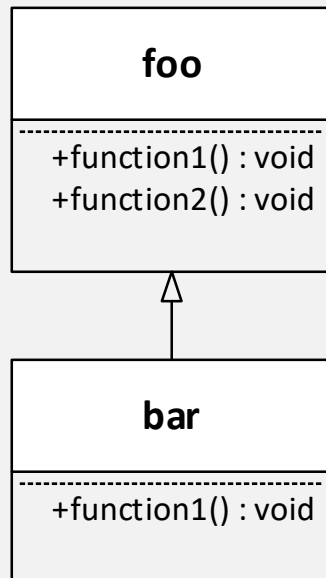
# MEMBER FUNCTIONS & INHERITANCE



```
class foo
{
    public:
        void function1 ();
        void function2 ();
};

class bar : public foo
{
    public:
        void function1 ();
};
```

# MEMBER FUNCTIONS & INHERITANCE



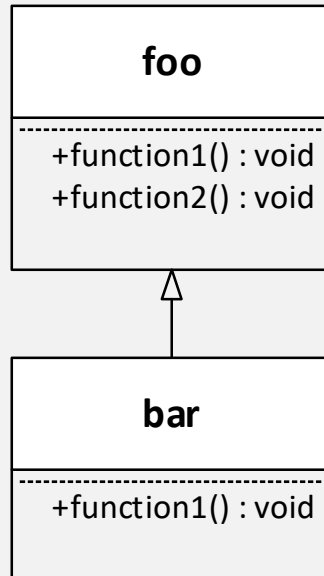
```
class foo
{
    public:
        void function1 ();
        void function2 ();
};
```

```
class bar : public foo
{
    public:
        void function1 ();
};
```

```
foo* p1 = new foo;
```

```
p1->function1 ();
p1->function2 ();
```

# MEMBER FUNCTIONS & INHERITANCE



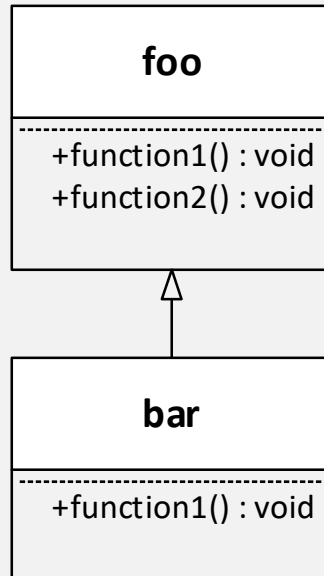
```
class foo
{
    public:
        void function1 ();
        void function2 ();
};
```

```
class bar : public foo
{
    public:
        void function1 ();
};
```

```
bar* p2 = new bar;
```

```
p2->function1 ();
p2->function2 ();
```

# MEMBER FUNCTIONS & INHERITANCE



```
class foo
{
    public:
        void function1 ();
        void function2 ();
};
```

```
class bar : public foo
{
    public:
        void function1 ();
};
```

```
foo* p3 = new bar;
```

```
p3->function1 ();
p3->function2 ();
```



# FUNCTION BINDING

- Programs may have multiple functions with the same name (overloaded and overridden)
- Function binding is when a function call is bound or connected to the correct function
- All of the examples illustrated here demonstrate the same kind of binding
  - Compile time binding
  - Early binding
  - Static binding