

On Inheritance and Templates

Monday, October 14, 2019 4:58 PM

```
template <typename T>  
class A  
{...};
```

```
A<int> andrew;  
A<string> john;
```

```
class B : public A<double>  
{...};
```

← derive specific instance of A

```
template <typename T>  
class C : public A<T>  
{...};
```

← templated derived class

```
template <typename T, typename Q>  
class D : public A<T>  
{  
    Q x;  
}
```

← template for derived classes with its own parameter.

```
class A  
{  
public:  
    x;  
protected:  
    y;  
private:  
    z;  
}
```

```
class B : protected A  
{  
protected:  
    x, y  
private:  
    z;  
}
```

```
class C : private A  
{  
private:  
    x, y, z;  
}
```