Access Rights

In this lesson, we'll learn about access rights of inheritance.

WE'LL COVER THE FOLLOWING

Scope of access rights

The access rights of the inheritance determine which functionalities of the base class can be used in the derived class.

- A class can be derived `public`, `protected`, or `private` from its base class.
- For classes, the default access right is `private`; for structs, it's `public`.

`class BankAcc: Acc{...}` is the same as `class BankAcc: private Acc{...}`

Is-a relations

The derived class and the base class have an is-a relationship. Public inheritance is called an is-a relationship because the derived class has the same interface as the base class. The derived class is a specialization of the base class.

public

```
class BankAccount: public Account{ ...
```

`public` and `protected` members in the Account class are `public` and

`protected` in the BankAccount class.

protected

```
class BankAccount: protected Account{ ...
```

`public` and `protected` members in the Account class are `protected` in the BankAccount class.

private

```
class BankAccount: private Account{ ...
```

`public` and `protected` members in the Account class are `private` in the BankAccount.

In the next lesson, we'll look at the examples of inheritance.