LESSON 1:

Inheritance

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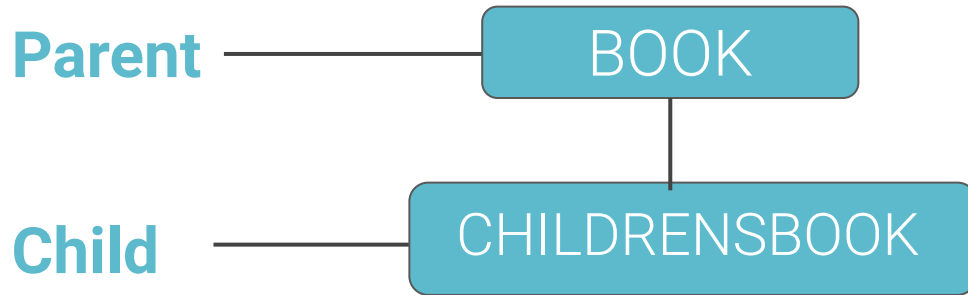
Learning Objectives

- Learn how to create a subclass of an existing class
- Understand that public methods are inherited by the subclass of a class and can be accessed from within the class by using the keyword *super*

Parent — BOOK

Child — CHILDRENSBOOK

These classes are linked together, so the child will **inherit** all the properties of the parent class

Example:

```
public class ChildrensBook extends Book
{
    public ChildrensBook (String t, String a,
                              String i, int y){
        super (t, a, y);
        illustrator = i;
    }
}
```

ChildrensBook is a **child** of Book

extends:

links child class to its parent

class can only extend one class *but* can have several classes extending each other in a chain

Book ——————→ ChildrensBook ——————→ BoardBook

super

calls methods/constructors from parent class

if the parent class does not have the method, Java looks at the next parent class up the ladder

at the top ALL classes inherit from **Object**