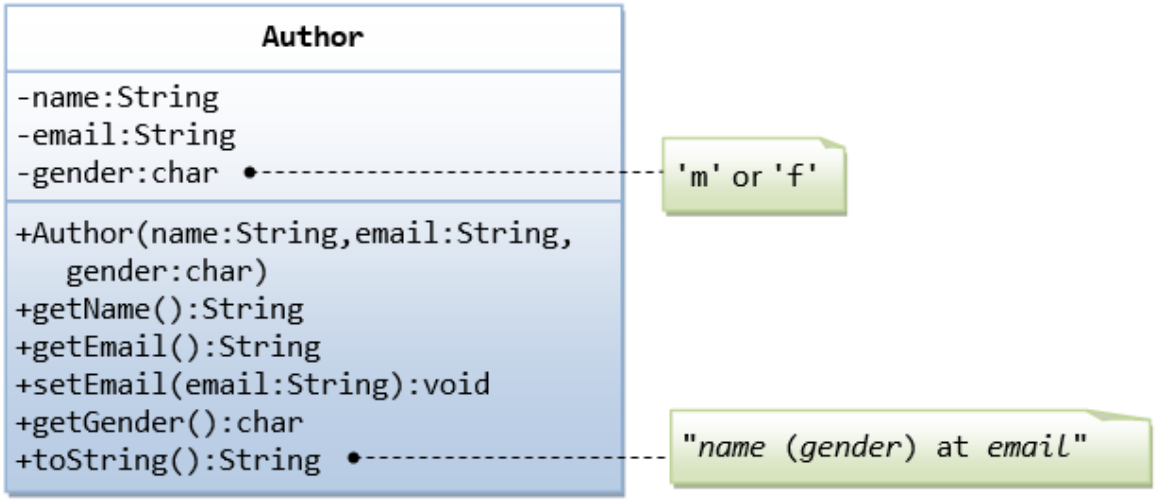
1. The Author and Book Classes

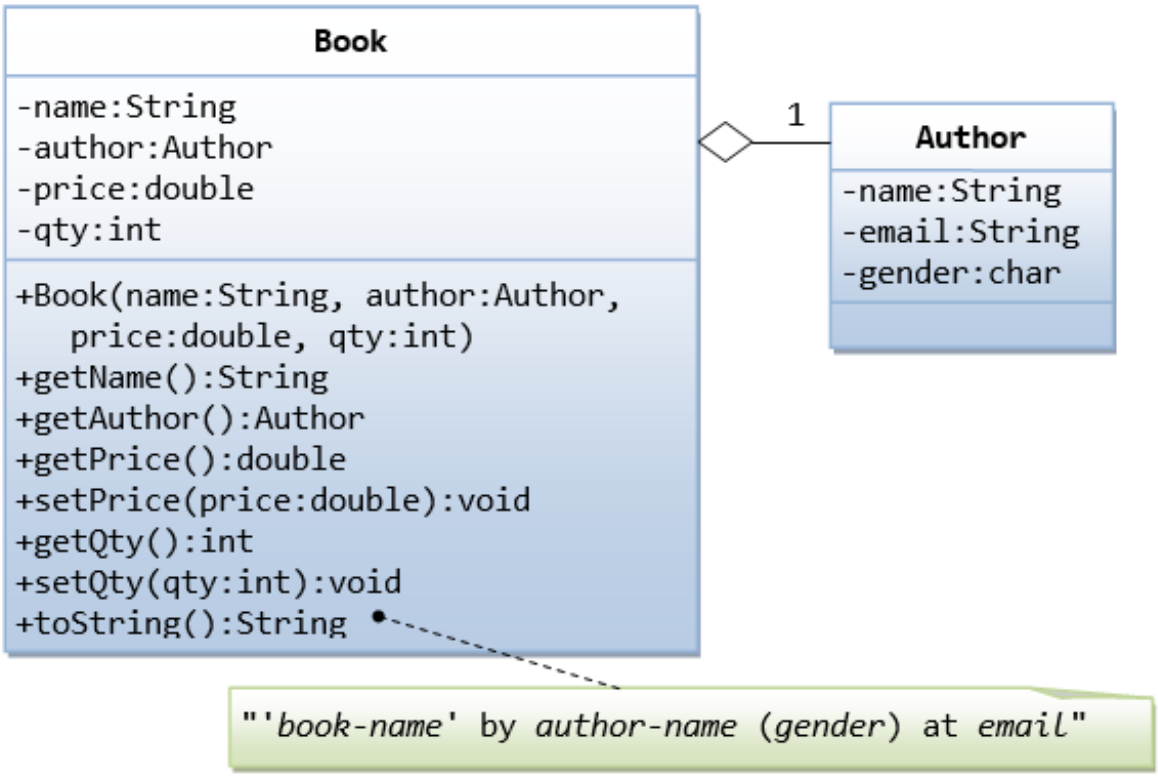
Let's start with the **Author** class



A class called **Author** is designed as shown in the class diagram. It contains:

- Three *private* member variables: *name (String)*, *email (String)*, and *gender* (char of either '*m*' or '*f*' - you might also use a *boolean* variable called *isMale* having value of `true` or `false`).
- A constructor to initialize *the name*, *email* and *gender* with the given values. (There is no *default constructor*, as there is no default value for `name`, `email` and `gender`.)
- Public getters/setters: *getName()*, *getEmail()*, *setEmail()*, and *getGender()*. (There are no setters for `name` and `gender`, as these properties are not designed to be changed.)
- A *toString()* method that returns "*name (gender) at email*", e.g., "*Abdullah Abdullaev (m) at abdullah@softclub.tj*".

2. A Book is written by one Author



Let's design a *Book* class. Assume that a book is written by one (and exactly one) *author*. The Book class (as shown in the class diagram) contains the following members:

- Four `private` member variables: *name (`String`), author (an instance of the `Author` class we have just created, assuming that each book has exactly one author), price (`double`), and qty (`int`).*
- The `public` getters and setters: *`getName()`, `getAuthor()`, `getPrice()`, `setPrice()`, `getQty()`, `setQty()`.*
- A *`toString()`* that returns "*`'book-name' by author-name (gender) at email`*". You could reuse the `Author`'s `toString()` method, which returns "*`author-name (gender) at email`*".