

# Explorations in Ruby: Practicals

## Week 4: Practical 3

I want you to write a fairly large program that implements a simple library system involving three classes defined over three files, with a fourth top-level file that uses them:

**FILE1 (book.rb)**: Should define a book class, indicating its title, author, unique-id and 2-3 other attributes that you think are important. Create five instances of this class to use in testing the program (do this instance creation in top.rb).

**FILE2 (user.rb)**: Should define a user class (someone who is borrowing books from the library), indicating their name, address, unique-id and any other attributes that you think are important. Create three instances of this class to use in testing the program (do this instance creation in top.rb).

**FILE3 (library.rb)**: Should define a library class that has attributes that record the books in the library, those books that have been borrowed, and those books available for borrowing. I will leave it up to you to decide the attributes and values for this class. Create one instance of this class to use in testing the program (do this instance creation in top.rb).

**FILE4 (top.rb)**: Should be the top-level file that calls these other three files. It should create the instances of all the three classes, show the current state of the library, have a method that carries out a borrowing event (i.e., a user borrowing a book) and show again the updated state of the library after a borrowing event has occurred, as well as the state of the user and the book in question. I will leave it to you to decide how many methods you want to do this and how you will do it.

Finally, create a method that I have not specified that is useful in this world.