floggit.se extra development

This exercise is for the groups that have already completed the first section of the floggit lab. It is an extra piece of work to ensure all groups have a project to keep them busy for 4 weeks and thereby can continue training scrum. Before starting this extra lab the group should make sure all functionality from the first lab is implemented, their code is well structured, tidy (whitespace should be perfect, and no commented out code), the main methods should all have unit tests and their should be a suitable logging strategy applied to detect errors when the code is moved into production. Once you feel your group has satisfied all those requirements you may attempt this task.

All code in this extra section should be unit tested.

Books and films

Floggit has decided that different products require different properties. A book for example should have the extra properties isbn, year of publishing, and author. A book can have multiple authors and they also want to enable books to be searchable by author.

 A film or dvd should have actors, and rating (i.e. parental guidance, 18) etc. It should also be possible to search for film based on the actor.

In the future they may wish to add more special properties to specific groups of products and want you to ensure that your system architecture, both at a sql database level and a Java object level can cater for it.

They want to be able to add books and dvd via the console application too.

Better search and autocomplete

They also want extra search functionality exposed in the java api.

Floggit want to have an autocomplete form element on the web page to help people find what they need. As soon as the user has written 3 or more characters they will instantly see 10 suggestions based on their input, the most relevant will be at the top of the list. For each new character they type in the box the suggestion will be updated. You need to write a method to be called by the autocomplete text box on the web page. It should take a string of 3 or more characters and return a maximum of 10 products. The user may be typing a product name, author or actor. This method must go seriously fast and it is expected that you will spend a lot of time, testing the speed and optimising this method. It is OK to use third party software to make this function fly if you need to. To fully test the speed of this function you should fill your tables with lots of dummy data. Milliseconds count :-).

Not essential but extra points if the search method also searches the words in the product description, but maintains the speed.