

# floggit webshop part 1

Floggit is branching out into selling its own range of products and would like your company to build the database and JAVA api for the shop. Floggit already owns a large mysql server park and would like all data to be stored on it's current infrastructure. The system must also be secure. Floggit sees this order as being the first step in a larger order for creating the web service infrastructure for their site. The initial order is for a database structure and JAVA api plus a test java console tool for populating and running the main api components. They need to start filling the database with products as soon as possible and need a tool their staff can use to begin that process.

## Database system requirements

Create a mysql relational database that can store information about the following items.

### Products

The products that floggit will sell are wide ranging. Its new business model is similar to Amazon. Each product should have a name, a description, cost and rrp. Each product will also be included in one or more category. Such as book, gardening or gardening, tools.

Some examples of products:

**Name:** Gardening month by month

**Description:** How to have a beautiful garden from January to December, now fully up-to-date and revised

Pick this pocket-sized favourite from the experts at the RHS, and find out what to do when, to ensure your plants are well cared for and your garden blooms all year round.

Easy-to-follow, this guide not only tells you what to do when, but shows you how to do it. Follow over 1,300 seasonal tasks for every part of the garden, expert plant advice, including star plants from January to December, and tips on organisation.

Whether you are a green-fingered guru or are just starting out, enjoy 12 months of successful gardening.

**Cost:** 65

**RRP:** 130

**Categories:** Book, Gardening

**Name:** Draper Expert 19655 Stainless Steel Border Spade

**Description:** The Spear & Jackson Select Stainless Steel Digging Spade has a mirror polished stainless steel head for rust resistance and minimal soil adhesion. The polypropylene shaft has an integral ergonomic forward tilting handle for ease of use.

**Cost:** 70

**RRP:** 180

**Categories:** Tools, Gardening

## Categories

Each category will have a member of staff that is responsible for it.

The following categories will be included at launch but floggit reserves the right to change the list under the project.

Category	Staff responsible
Books	Maxwell Farley
Computing	Kameko Stewart
Toys	Aaron Hodge
Gardening	Rachel Thompson
Electronics	Kameko Stewart
Clothes	Rachel Thompson
Mens	Rachel Thompson
Womens	Rachel Thompson
Children	Rachel Thompson
Sports & outdoors	Claudia Stuart
Films	Maxwell Farley

The staff table already exists and you will receive a database dump of it.

## Users

Customers will create a user account on the floggit website they will be able to login and add products to their shopping cart.

Floggit wants to use the persons email address as their username, but will also require, the persons name, address, telephone number and password.

## Shopping basket

When users buy products they place them in a shopping basket. The shopping basket needs to record the quantity of the product the user wants to buy too.

# JAVA database api

It is expected that the data stored in the mysql database should also be modelled as JAVA objects, i.e. there should be a JAVA User class, Product class etc.

## **Creating, updating and deleting.**

The JAVA database api should give access to the usual Create, Update, Delete operations for Users, Products, Categories and Shopping Basket. The inputs to these methods should be java objects.

## **Reading and querying the data**

The JAVA database api should also include methods that:

Can return a JAVA collection of all a) users ,b) products and c) categories.

d) Take a username and returns a shopping basket for that user if one exists.

e) Validates a user by accepting a username and password and returning true or false depending on whether the information is correct.

f) Takes a category name and returns a collection of all the products in that category.

# JAVA console tool

Develop a console application with a menu system. The console application should demonstrate that your JAVA database api works. From the console application you should be able to:

- a) create a category, product and user.
- b) edit a category, product and user.
- c) validate a user by seeing if they can log in.
- d) retrieve a list of products in a specific category.
- e) search for a specific product by name.

## Assignment information

This assignment should be completed in groups. If the database component and the JAVA api component is completed all members of the group will be awarded at least a G grade for the assignment as part of the database course. There is an additional individual assignment that should be completed for students aiming at a VG grade.

Hand-in date: The code for your assignment should be zipped and sent to [tom@arctictiger.se](mailto:tom@arctictiger.se) no later than the 19 February 2014. It should be clear from the email who participated in the group.