

Exercise 10 ⁽¹⁾

Scope: Lecture material

10.1 What core functionalities and desirable functionalities of Online Shops can you find included in OpenShop (see chapter 4.1)?

10.2 Name the components of search engines and explain their functions.

10.3 Name criteria that are used in search engines to rank information. How can you make your web site show up at the top of the search results? How can you make search engines only index your site's homepage, but no further pages? Also give some code examples.

10.4 Would you consider email newsletter a good way to promote your products, services, solutions and business ideas? Give detailed explanation. Take into consideration unregistered users, anonymous users, registered users and closed communities.

Exercise 10 ⁽²⁾

10.5 The ECommerce tutors (Sebastian & Patrick) are content customers of your online shop / service. Please send them an email newsletter (to: pa.hupe@tuhh.de and riedel@tuhh.de) providing information on (new) products, bargains, etc. (one email per group).

10.6 A pharmaceutical company A wants to order online some chemicals for its raw material from a chemical company C. How can company A find required items in the huge catalogs of company C, although both companies have different ontologies for their product classification?

10.7 Which product / service categorization option is best suited for your online shop / service, what product categorization option should be opted for by a big online shop (like Amazon)? Give reasons.

10.8 What are the similarities and differences between asymmetric encryption and symmetric key encryption? Explain.

10.9 Asymmetric encryption used to transfer a *secret key* for symmetrically encrypted data transmission is preferred over asymmetric encryption for data transmission, although the process is more complex. Give reasons.

Exercise 10 ⁽³⁾

Scope: Lab class: OpenShop

[Note: The following scenario only makes sense for product / service vendors (e.g., virtual merchant model) and does not suit all business models. If your business model is not suitable, feel free to choose a “merchant model” scenario for this OpenShop exercise]

10.10 After having evaluated OpenShop technology this last week, your company has decided to use OpenShop technology to host their online store:

- ☐ Port (move) your existing online shop to OpenShop.
- ☐ Keep the „look and feel“ of your existing shop as much as possible.
- ☐ Include shopping cart and order functionality.
- ☐ Customers should be able to order quantities of items.
- ☐ Optional: Remove the 5% VAT and 9% VAT and add a 16 % VAT (Europe) to it. The gross prices should include the VAT.
- ☐ Optional: Put some of your products on discount. The discount should be displayed on in the shopping cart.

Hint: To ease development, change the product descriptions in the Database and merge the existing template code from the Demo pizza shop and the HTML pages from your existing online shop.