Software Engineering (MsC in Engineering in Computer Science)
Sapienza Università di Roma

Lab #5 – A complex system

We consider an e-commerce (e-shop) simplified application that presents a catalog of products, accept customer orders, check inventory and perform other business functions.

The application consists of multiple subsystems, including several front-ends with a user interface for shops (a web application and an app for native mobile devices), as well as services for all the operations required on the server side:

- Identity service, for managing users/credentials/etc.
- Catalog service, for managing products and catalogs
- Ordering service, for managing the orders of users
- Basket service, for managing the shopping cart during a specific session

On the machine of the instructor, RabbitMQ is deployed, to be used as message bus for all services, in case it is needed. As well, during the lab you will see how to manage a simple database (sqlite) as data store for your service.

The objective of the lab is to build the system, by interacting with the instructors in order to get new knowledge, solve doubts, etc.