

Introduction to Software Engineering Assignment 1

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SS21

Titlepage

- Create a title page with "Introduction to Software Engineering", "Assignment 1", your name, and date of completion.

Problem 1. Prepare a requirements document for the following application

- *Your company wants to market its new image processing product iMage as profitably as possible. The plug-in architecture you have developed makes it possible to deliver functionality individually. This way, customers can decide which functionality they need and buy additional plug-ins later.*
- *An online store is to be developed for the sale of iMage and the associated plug-ins. The store shall offer the basic package iMage-Basics, as well as individual plug-ins and plug-in packages. The product iMage-Basics is to be available at the opening of the online store.*
- *Employees of your company's sales department shall be able to enter new plug-ins and plug-in packages into the online system. They shall also be able to define prices and time-limited special offers. Employees of the marketing departments shall also be able to enter a product description, which will be displayed to customers after approval. This description shall contain the functionality of the package offered and a listing of the plug-ins included. In addition, for plug-in packages, the price savings compared to purchasing the included plug-ins individually shall be displayed.*
- *Before customers can order software products via the online platform, they must register by providing their names, addresses, telephone numbers and e-mail addresses. After registration, the user receives a confirmation message to his or her e-mail address, with a delay of at most 5s. Once he/she has confirmed the registration, he/she can purchase software products in the online store. Customers can choose to pay their invoices by direct debit or credit card. Customers should be able to define their preferred payment method in the account information. They will also be able to see the products they have already purchased.*
- *The online platform shall support at least 1000 simultaneous users and be able scale to 10.000 simultaneous users.*

Problem 1

- Create a requirements document according to the template discussed in class and specify at least 5 functional requirements, 3 product data requirements, and 2 non-functional requirements. The requirements specification should include at least one use-case diagram. (Write something for each chapter of the requirements document template).
- The application description above is not complete and therefore partly imprecise. It is to be completed plausibly by you. Imagine your task is to hand in the completed document to your project manager as a basis for decision-making. Therefore, in this task, points are not only awarded for the requirements, but also for the plausibility and the form of the document. The document should not exceed 5 pages of text (plus illustrations and glossary). You may use Powerpoint or similar to compose the document, to be ready for your potential presentation in class.
- Important watermark: Call the online store in your use-case-diagram *Store_your_full_name*. For example: *Store_Saba_Maiervili*.

Problem 2

- Prepare a short feasibility study for the above product. Identify the most difficult aspects of the product and state whether your fictional company has the required personnel and knowledge. Also briefly discuss the remaining points in a feasibility study.