

02220 - Distributed Systems

Requirements for Project Reports

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1. Introduction

Many students have difficulty in deciding what sort of information to include in their reports. The aim of this document is to help you to include the essential material and avoid unnecessary things. The requirements given below fall into three categories:

- **Legal Requirements:** requirements which are dictated by **DTU's rules** and which have the status of **legal requirements**.
- **Mandatory Requirements for Technical/Scientific Reports:** requirements which are **mandatory** for any good technical/scientific report, such as the ones you produce in 02220.
- **Recommended Requirements:** requirements which we **advise** you to follow in order to present the results of the lab project in a good way.

2. Legal Requirements (DTU Rules)

1. If you are working in a group of two (or more) people, then **you must clearly indicate who is responsible for which parts of the report**, so that an individual evaluation of the group members can be made.
2. Although you are welcome to search for advice and ideas in the printed literature and on the Internet, you must remember that **any material which you include in your report, and which is not your own personal work, must be clearly marked, and you must give a reference to its source**.

3. Requirements for Technical/Scientific Reports

1. The first page of the report must contain the **title** of the project, the **date of submission** and the **names and student numbers of all the authors**.
2. *In case of hard (printed) copies of the report*, **all the authors must sign the report**. This indicates that they take the responsibility for the contents of the report and are its sole authors.
3. Your report must contain a **table of contents**, listing the main sections and which pages they start on.
4. **Pages and sections must be numbered**. If your report contains appendices, these should be identified by letters: Appendix A, Appendix B, ...
5. Your report must contain a **list of references** to any sources of information which you have referred to. The items in the list should be numbered. References to the list from the main text should use this number in square brackets, e.g. [13] to refer to reference number 13.

6. Your report should follow the accepted structure for technical reports, starting with a **brief description of the problem** being dealt with, followed by a **description of the solution designed to solve the problem, a technical solution** (implementation of the system, if any) and **how it was tested** (if any testing took place). The report should finish with a **short conclusion** and the **list of references**. Some more details of what to include in the description of the technical solution can be found in Section 4 below.
7. Your report must have a **clear layout**, so the reader can easily see its structure.
8. Source text for programs, detailed program documentation and detailed test results should be placed in appendices.

4. Recommended Requirements

1. It is important to relate your description of the technical solution to **both the approach/paradigm being used** (for example RMI, UDP, TCP, p2p, ...) **and the concrete technology being used** (Java RMI, JXTA, ...). A good idea is to divide the description of the technical solution into:
 - 1.1. A **high level description of the key idea/approach** behind the solution proposed in the report.
 - 1.2. A **Design** section, describing the design of the system in terms of the **architecture** and the adopted **design paradigm**.
 - 1.3. An **Implementation** section, describing how the design has been implemented in terms of the actual technology.
2. In the description of the implementation, you should avoid “line-by-line” description of what the individual methods do. Focus instead on giving a **high-level description of what the parts of the program do, focusing only on key parts of the implementation**.
3. The section on Test (if any) in the main report should explain the **test strategy**, i.e. what sorts of things were to be tested. A complete list of test cases, test data and/or test results should be in an appendix.

5. Golden Rules

Independently from the structure of the report (see above requirements), a good **scientific** report should always adhere to the following two **golden rules**:

1. Creating a new system requires a number of steps to be taken, both at design and implementation level. For each step you take in the design and implementation of the proposed system:
 - 1.1. Consider and evaluate **all possible alternatives**.
 - 1.2. **Motivate WHY** you have decided for that step (in terms of the alternatives and based on their evaluation).
2. Provide **examples** to illustrate both the problem and the proposed solution.

Good luck with your reports!