[Project title]

Domain Name System
OR
Data Distribution Service
OR
Java Remote Method Invocation

Handed in [April 20], [2013], by team no. [1]

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Abstract

About your reports and this template

- Use this template for your project work reports
- Substitute the template's place-holder dates and titles with appropriate ones
- Place-holders are marked with square brackets, i.e. [place-holder]
- For each report, you hand in both a tex and a pdf file
- The report should be 10-15 pages in total and it must be written in English

About the abstract, i.e. the current section

- An abstract is a brief summary of the report that helps the reader quickly ascertain the report's purpose. The abstract should be approximately half a page.

Contents

Chapter 1

Introduction

Approximately 1 page introduction that addresses the following

1. What the report is about
2. Why the report is relevant
3. How the rest of the report is structured

These are test citations to example bibliography entries number one [1] and two [2]. You should have at least 3 references to books and/or papers, i.e. web pages excluded.

Chapter 2

Domain Name System

Domain Name System, DNS, is used for

2.1 DNS fundamentals

To find the computer's host name the command `hostname` will show the human readable name for the computer. This is what will be shown on a search on the network where the computer is connected.
The `nm-tool` will access the NetworkManager Tool and show the IP-address, MAC-address, connection state and DNS-server for the computer. This is shown on figure **??**.

```
limro@ubuntu:~$ nm-tool

NetworkManager Tool

State: connected (global)

- Device: eth0  [Wired connection 1] ----
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  Type:              Wired
  Driver:            vmxnet
  State:             connected
  Default:           yes
  HW Address:        00:0C:29:D5:8E:55

  Capabilities:
    Carrier Detect:  yes
    Speed:           1000 Mb/s

  Wired Properties
    Carrier:         on

  IPv4 Settings:
    Address:         192.168.92.128
    Prefix:          24 (255.255.255.0)
    Gateway:         192.168.92.2

    DNS:             192.168.92.2
```

Figure 2.1: Use of the command `nm-tool`

Chapter 3

Prototype: Title of your prototype

Approximately 2-5 pages in-depth description of prototyping with the technology under consideration. That is, you analyze, design, implement, and test

- a very limited, but functional prototype that utilizes the technology under consideration.

You define your own prototype and the context in which it should function; the list below is for your inspiration.

- Domain Name System: A public school or a medium sized company would like to host their own DNS and/or forward requests to OpenDNS.
- Data Distribution Service: A hospital or a production factory would like to employ Connext DDS to distribute mission critical data.
- Java Remote Method Invocation: A company is setting up facilities, e.g. parcel or luggage sorters, abroad and would like to be able to access back-end methods and data at home.

In your analysis you should at least address and/or include:

- Overall diagram and description of the prototype
- Relevance of the technology under consideration to your prototype
- How the technology is included in your prototype
- Definition of a small set of realistic use-cases and related functional requirements

The design, implementation, and test should at least address and/or include:

- Diagrams, e.g. UML, supplemented with code snippets of most important parts
- Test and evaluation of your system: Does it work as intended?
- Evaluation of the prototype and the technology employment as a whole

Chapter 4

Conclusion

Approximately 1-2 pages covering conclusion, discussion, and perspectives.

4.1 Conclusion

Conlude on your investigations.

4.2 Discussion

Discuss your project work.

4.3 Perspectives

What are the perspectives on the technology and your prototype?

Bibliography

[1] R.L. Graham, D.E. Knuth, and O. Patashnik, *Concrete mathematics*, Addison-Wesley, Reading, MA, 1989.

[2] H. Simpson, *Proof of the Riemann Hypothesis*, preprint (2003), available at `http://www.math.drofnats.edu/riemann.ps`.