# DAT 250 Advanced Software Technologies

Wojciech Pasiak Jaroslaw Pasiak Christoffer Brandhaug Erlend Meling Torsvik

November 20, 2020

# Feed App Project



# **Contents**

1 Introduction							
	.1 Implementattion	3					
	.2 Techonology stack	3					
	.3 Results	3					
	Introduction  1.1 Implementattion	3					
2	Software Technology Stack						
3	Demonstrator Prototype						
4	Prototype Implementation						
5	Test-bed Environment and Experiments						
6	Conclusions	5					

#### **Abstract**

10-15 lines with the software technology and the highlights from the project that has been undertaken.

#### 1 Introduction

Approximately 1 page on:

#### 1.1 Implementattion

A brief introduction to the prototype implementation and topic of the project.

#### 1.2 Techonology stack

Discuss (briefly) the technology stack that has been selected, mention related technologies (if relevant), primary arguments for choice of technology stack.

#### 1.3 Results

A brief account of the results that have been obtained in the project.

#### 1.4 Organization of report

A one paragraph overview at the end, explaining how the rest of the report is / has been organised. This rest of this report is organised as follows: Section 2 gives an ....

## 2 Software Technology Stack

Introduce in (sufficient) depth the key concepts and architecture of the chosen software technologies. As part if this, you may consider using a running example to introduce the technology.

Emphasize the "new" software technologies that was selected by the group and which has not been covered in the course.

This part and other parts of the report probably needs to refer to figures. Figure 1 from [1] just illustrates how figure can be included in the report.

# 3 Demonstrator Prototype

About 4 pages on:

- 1. An architectural overview of the application that has been implemented
- 2. High-level design, domain model, ... (App assignment A)
- 3. May involve selected models from Chaps. 5 of the IoT and cloud books

The example below shows how you may include code. There are similar styles for many other langages - in case you do not use Java in your project. You can wrap the listing into a figure in case you need to refer to it. How to create a figure was shown in Section 2.

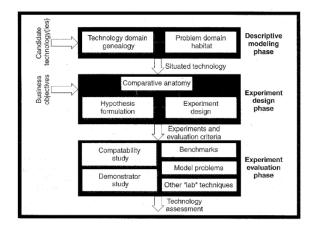


Figure 1: Software technology evaluation framework.

```
public class BoksVolum {

public static void main(String[] args) {

int b, h, d;
String btext, htext, dtext;

[ ... ]

int volum = b * h * d;

String respons =

"Volum [" + htext + "," + btext + "," + dtext + "] = " + volum;
}

}

}
```

# 4 Prototype Implementation

This section should provide details of how the prototype has been implemented which may involve presentation of suitable code snippets.

## 5 Test-bed Environment and Experiments

About 2 pages that:

**Explains** how the prototype has been tested the test-bed environment.

**Explains** what experiments have been done and the results.

For some reports you may have to include a table with experimental results are other kinds of tables that for instance compares technologies. Table 1 gives an example of how to create a table.

Config	Property	States	Edges	Peak	E-Time	C-Time	T-Time
22-2	A	7,944	22,419	6.6 %	7 ms	42.9%	485.7%
22-2	A	7,944	22,419	6.6 %	7 ms	42.9%	471.4%
30-2	В	14,672	41,611	4.9 %	14 ms	42.9%	464.3%
30-2	C	14,672	41,611	4.9 %	15 ms	40.0%	420.0%
10-3	D	24,052	98,671	19.8 %	35 ms	31.4%	285.7%
10-3	E	24,052	98,671	19.8 %	35 ms	34.3%	308.6%

Table 1: Selected experimental results on the communication protocol example.

### **6** Conclusions

Concludes on the project, including the technology, its maturity, learning curve, and quality of the documentation.

The references used throughput the report should constitute a well chosen set of references, suitable for someone interesting in learning about the technology.

### References

[1] A.W. Brown and K. C. Wallnau. A framework for evaluating software technology. *IEEE Software*, 13(5):39–49, September 1996.