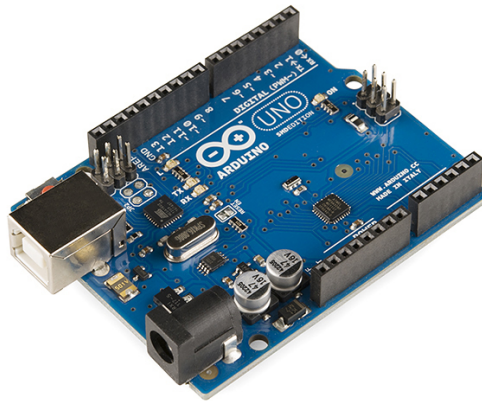

To be determined!

GROUP SW513E15



Christian Lundtofte
Henrik Djernes Thomsen
Jonathan Hastrup

Bjørn Opstad
Morten Mandrup
Mathias Corlin



AALBORG UNIVERSITY
STUDENT REPORT

Department of computer science
Selma Lagerlöfs Vej 300
9220 Aalborg Ø

Title:

The .Beer language for Arduino

Synopsis:

Theme:

Design, definition and implementation of programming languages

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Project group:

SW406F15

Members:

Christian Lundtofte Sørensen

Henrik Djernes Thomsen

Jonathan Hastrup

Martin Viktor

Morten Mandrup Hansen

Supervisor:

Giovanni Bacci

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The goal for this project is to design and implement a language for the Arduino, which is targeted for students and programming beginners. The project group had varying experience with Arduino, hence having different ideas about what features the new language should provide. These were analysed and evaluated by means of some language criteria. This analysis laid the foundation of the .Beer language.

This report describes the process from ideas and theory into the final language, over design, implementation and finally testing of the language.

The compiler has been developed using ANTLR to generate scanner and parser. The compiler is made by implementing multiple listeners and a walker to traverse the abstract syntax tree multiple times.

The .Beer language simplifies some complicated operations when working with data and pins on the Arduino. The details, that complicates these operations, are handled by the compiler.

The contents of this report is freely accessible, however publication (with source references) is only allowed upon agreement with the authors.

Christian Lundtofte

Martin Viktor

Henrik Thomsen

Morten Mandrup

Jonathan Hastrup

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1. Project introduction

This is an introduction.

Here is the initializing problem statement:

1.1 Initializing problem statement

How can a sensor network and a protocol be designed, so that data can be relayed throughout the network, enabling an endpoint device to receive the information without being within range of all sensors in the network?

It is a good question and we will analyze it.

Part I

Analysis

The analysis will discuss and look into the different aspects of the initializing problem formulation and the topics therein. The sections in this chapter blah-blah..

2. Context

3. Technologies

We shall look at some existing technologies now.

3.1 Mesh networks

3.2 Wireless communication

3.3 Communication protocols

4. Problem Statement

Very good problem statement for you, my friend. Special prize.

Make a good sending data network for arduino.

Part II

Implementation

7. Implementation

Part III

Conclusion

oh..

9.1 What have we done!?

10. Summary

ok..

10.1 It ended like this

11. Future Work

Here's what's missing..

11.1 To be done

Part IV

Appendix