CS 4098 Project
Report

An Experimental Compiler Design Platform

Submitted in partial fulfillment of
the requirements for the award of the degree of

Bachelor of Technology
in
Computer Science and Engineering

Submitted by

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Certificate

This is to certify that this is a bonafide record of the project presented by the students whose names are given below during Monsoon 2013 in partial fulfilment of the requirements of the degree of Bachelor of Technology in Computer Science and Engineering.

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Abstract

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Chapter 1

Problem Definition

In spite of the availability of plenty of educational resources worldwide to tutor students in the process of building a compiler, most of them lack a systematic approach.

Though many attempts have been made to simplify this process down, these merely serve as a manual to compiler-generation tools such as LEX and YACC. Very few link the usage of the tools to the compiler design process. Also, most of these abstain from exploring the back-end working of these tools. The availability of such resources are limited because they are often localized within the institution or organization of origin.

Chapter 2

Introduction

Building a compiler from scratch can be an intricate and time consuming task. Compiler generator tools such as LEX and YACC have been used for building compilers for over more than three decades now. These utilities have greatly simplified the process since their introduction in 1975 by Lesk and Johnson.

This project aims to develop an online self-sufficient educational platform which can be used to tutor students in writing a compiler. Being instructional in nature, this project gives the learner an insight into the working of LEX, YACC and the usage of these tools to develop a compiler for SIL (Simple Integer language).

some text[1], some more text

2.1 Background and Recent Research

2.1.1 ¡any sub section here¿

2.1.2 Literature Survey

¡Sub-subsection title¿

¡Sub-subsection title¿

even more text[1], and even more.

2.2 Motivation

[1] ¡footnote here¿

Chapter 3

Work Done

3.1 Literature review

3.1.1 Lexical Analysis using LEX

3.1.2 Pattern matching by LEX

3.1.3 Syntax analysis using YACC

3.1.4 Parsing algorithm generated by YACC

Chapter 4

Design

4.1 Documentation

4.2 Testing

4.3 Developing the prototype

4.4 Roadmap

4.5 Version Control

4.6 Online platform

4.7 Compiling the framework

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Refer figure 4.1.

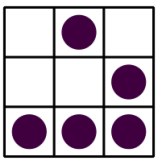

Figure 4.1: ¡Caption here¿

4.7.1 ¡Sub-section title¿

4.8 ¡Section title¿

Chapter 5

Future Work

¡Future work here¿

Chapter 6

Conclusion

¡Conclusion here¿

Acknowledgments

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References

[1] ¡Name of the reference here¿, `<urlhere>`

[2] ¡Name of the reference here¿, `<urlhere>`