

Current Status

The following are the currently explored areas of the proposed stages of the project (not yet completed):

- Introduction - Completed
- Motivation - Completed
- Objectives - Completed
- Design - Completed
- Documentation - Completed
- Proposed Framework - Completed
- Online Platform - Not started

All the completed documents are available in the following link:



Experimental Compiler Design Platform

CS 4098 - Project
Report

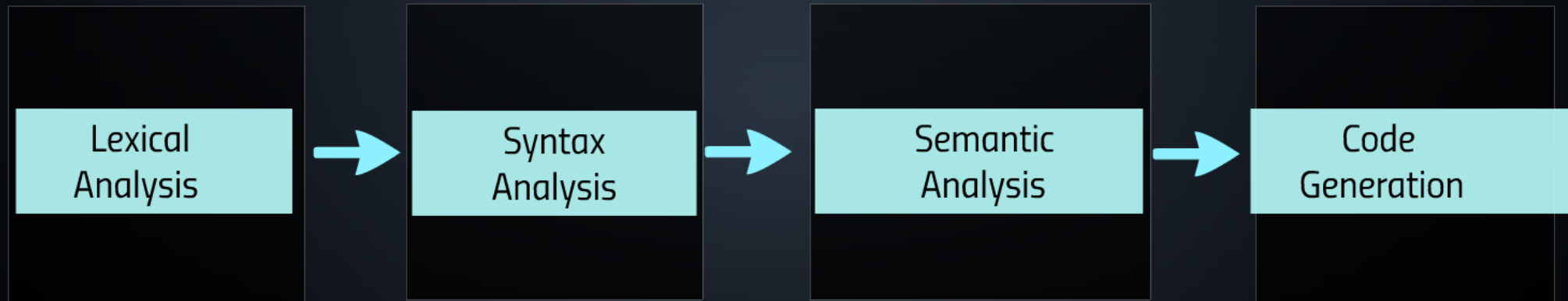


Introduction

- Complex Nature of Compiler Design
- Educational Platform
- Accessible to all - Online
- Self-sufficient
- Minimal Expert Supervision Required



Existing Framework





Problem Statement

In this currently used approach, we found that many students who enrolled for the compiler laboratory course (including ourselves) faced problems with correlating the compiler design theory with the implementation process.

Problems We Faced as Students

- Correlation between different stages
- Correlation with theory
- Understanding back-end working of tools (Lex & Yacc)
- Developing for custom specifications

Proposed Solution

To develop an online self-sufficient educational platform for compiler design which can be used to tutor students under minimal expert supervision

Objectives

- To Provide Tutorial Documentation
- To Build an Online platform
- To Provide Scope for future Development

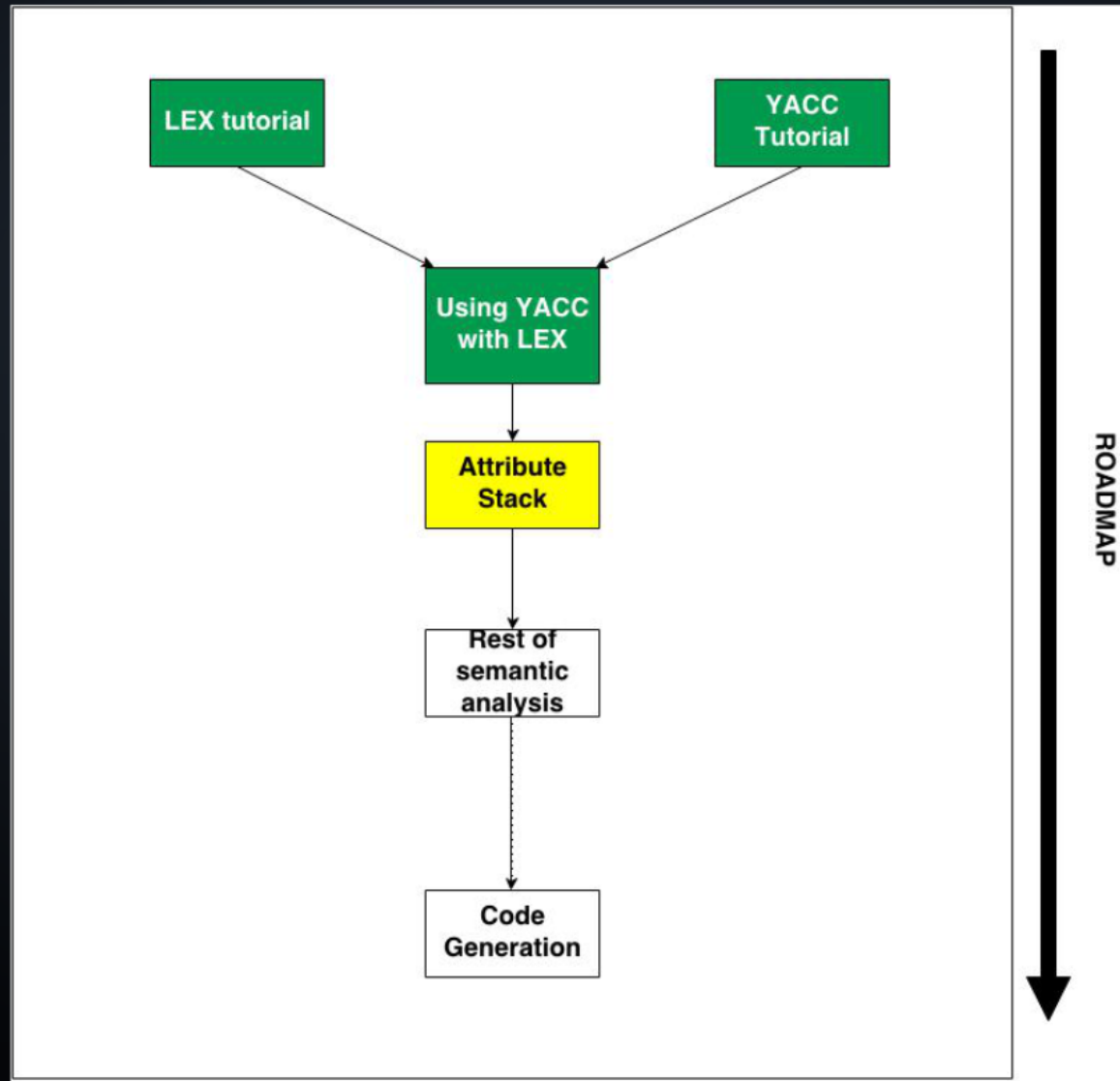
Design

- Compiling the Documentation
- Testing Code for Each Stage of Compiler Design as well as those provided in the Documentation
- Using Version Control
- Setting Up the Online Platform
- Assembling the Framework

Documentation

- In-depth Explanation of LEX
- In-depth Explanation of YACC
- LEX & YACC Communication
- Plenty of Examples & Sample I/O

Proposed Framework



Online platform

- silcnitc.github.io
- Github
- HTML, CSS3 & Java Script

Current Status

The Platform can be potentially deployed once the proposed stages of the project have been completed.

Details are as follows :

- LEX Documentation - Designed,Compiled and Reviewed
- YACC Documentation - Designed ,Compiled and Reviewed
- LEX-YACC Communication - Designed,Compiled and Reviewed
- Attributes Documentation - Under Progress
- Extensions to SIL - Designed but yet to be tested
- Online Platform - mainframe of the website has been completed. All the completed documentation are available online.

Thankyou

