

# EECS 510 Final Project

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## 1. General Description

blah blah blah

testing doing this locally i guess if it compiles, it compiles

testing again

## 2. Grammar for the Language

Placeholder Grammar: S is the initial variable for the beginning of a combo

$$\begin{aligned}
 S &\rightarrow (Y_1) \mid (B_1) \mid (\bar{R}_1) \mid A \mid (\bar{L}_2) \mid (L + Y) \\
 Y_1 &\rightarrow (Y_2) \mid (B_1) \mid (\bar{R}_1) \mid (Y + B) \\
 Y_2 &\rightarrow (Y_3) \mid (B_1) \mid (\bar{R}_1) \mid (Y + B) \\
 Y_3 &\rightarrow (B_1) \mid (\bar{R}_1) \mid (Y + B) \mid (\bar{R}_1 + Y + B) \\
 B_1 &\rightarrow (B_2) \mid (\bar{R}_1) \\
 B_2 &\rightarrow (B_3) \mid (\bar{R}_1) \\
 B_3 &\rightarrow (B_4) \mid (\bar{R}_1) \\
 B_4 &\rightarrow (B_5) \mid (\bar{R}_1 + Y + B) \mid (\bar{R}_1) \\
 B_5 &\rightarrow (B_5) \mid (\bar{R}_1 + Y + B) \mid (\bar{R}_1)???? \\
 (\bar{R}_1 + Y + B) &\rightarrow (Y + B) \mid (Y_1) \mid (B_1) \mid (\bar{R}_1) \\
 (\bar{L}_2) &\rightarrow (Y_1) \mid (B_1) \mid (\bar{R}_1) \mid A \mid R_2 \\
 (\bar{R}_1) &\rightarrow (\bar{R}_1 + Y + B)
 \end{aligned}$$

## 3. Automaton

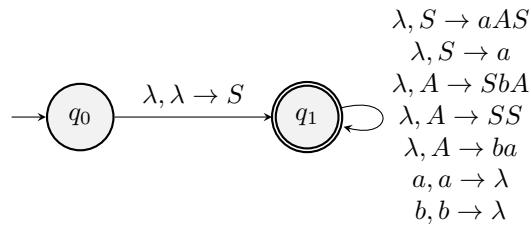


Figure 1: Automaton for language

4. Data Structure

5. Testing