Theory of Computation

Coursework 1

C1527380

# Question 1

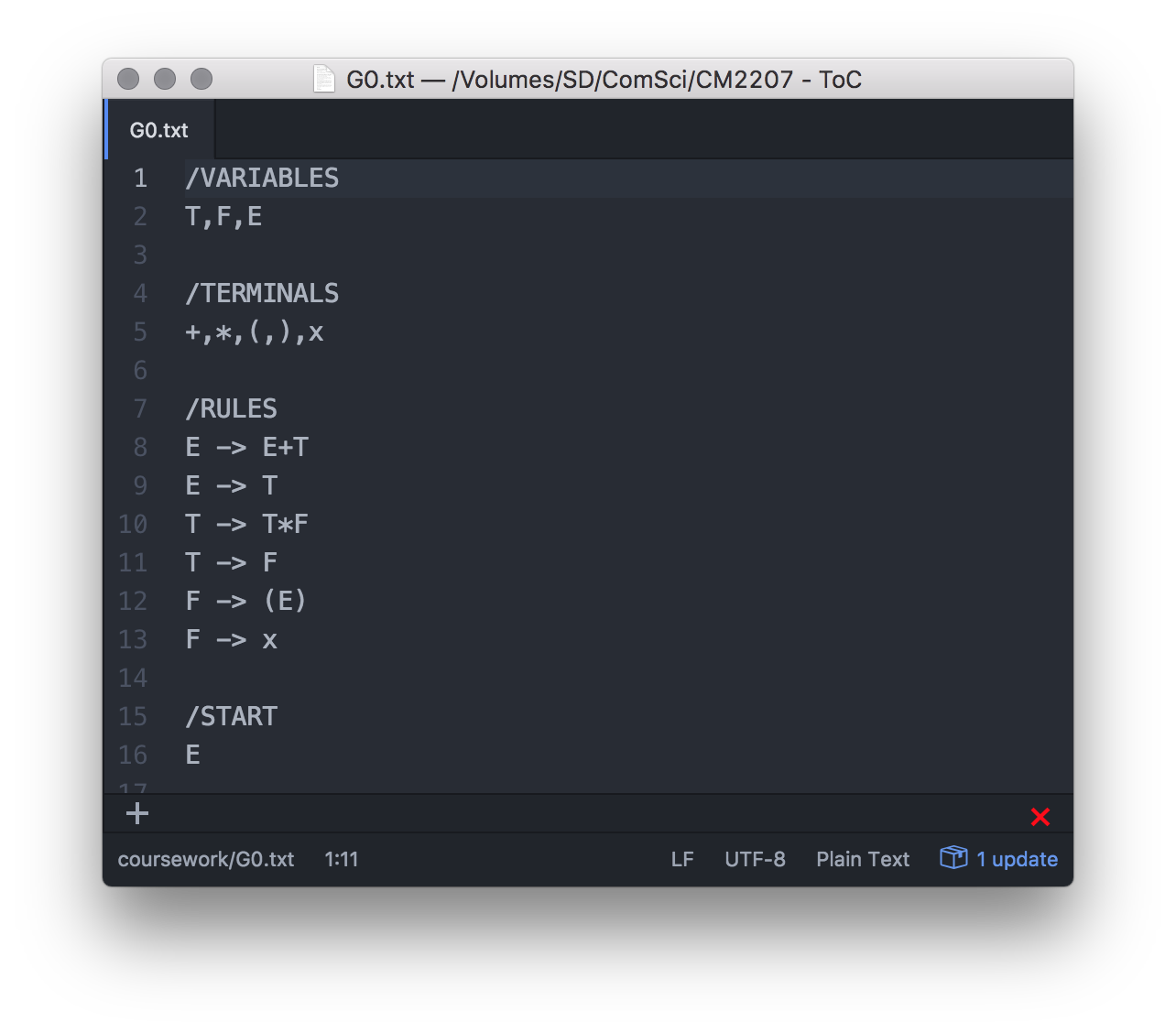


Figure 1: CFG G0 text file

Figure 1 describes my encoding of the CFG G0.

A key aim of my encoding was to maximise readability, therefore I will describe the key features which achieve this:

* **Tuple declaration**:
  + Each set of tuples is separated into their respective sections, each section is headed by a “/” followed by the type of tuples contained below
  + The “/” is there for clarity to the user to aid in differentiating the heading from the tuple content
  + The section name follows the “/” in capital letters, again to differentiate from the content below.
  + All the declarations must be written below the headings for each and follow the respective ruled for each type.
* **Variable declarations:**
  + Variables are declared on a single line, separated by commas
* **Terminal declarations:**
  + Terminals are also declared on a single line, separated by commas
* **Rule declarations:**
  + Each rule is declared on a separate line
  + Each rule
* **Start variable**
  + The start variable must be a single character