

$$\begin{array}{lcl}
 \text{(Regexs) } r ::= & u \in \Delta & \\
 & | \ s \in \Sigma^* & \\
 & | \ r^* & \\
 & | \ r_1 r_2 & \\
 & | \ r_1 | r_2 &
 \end{array}$$

Figure 1: Regex Syntax

let  $\Delta$  be the set of user defined data types. let  $\Sigma^*$  be the set of words over the alphabet  $\Sigma$