$$
\begin{aligned}
contract &::= decl^+ \\
decl &::= event\_decl \mid protocol\_decl \mid variable\_decl \mid property\_decl \mid rule\_decl \\
event\_decl &::= \textbf{event } event\_name \ (\textbf{, } event\_name)^* \ \textbf{;} \\
protocol\_decl &::= \textbf{protocol } protocol \ \textbf{; ;} \\
protocol &::= \textbf{any} \mid event\_name \mid protocol \ \textbf{;} \ protocol \\
&\quad \mid protocol \ \textbf{+} \ protocol \mid protocol \ \textbf{*} \\
variable\_decl &::= \textbf{variable } \Big( \ var\_name \ (\textbf{, } var\_name)^* \ (\textbf{ : } type\ )^? \ \textbf{;} \ \Big)^+ \\
type &::= \textbf{bool} \mid \textbf{max } (\ number\ ) \\
property\_decl &::= \textbf{property } (ldl\_formula \ \textbf{;})^+ \\
rule\_decl &::= \textbf{rule } (rule \ \textbf{;})^+ \\
rule &::= \Big( \ \textbf{except}^? \ \textbf{on } event\_name \ (\textbf{, } event\_name)^* \ (\textbf{\{ } code \ \textbf{\}})^? \ \Big)^? \\
&\quad \Big( \ \textbf{when } condition \ (\textbf{\{ } code \ \textbf{\}})^? \ \Big)^? \\
&\quad action \ (\textbf{\{ } code \ \textbf{\}})^? \\
condition &::= proposition \mid \textbf{<} ldl\_path \textbf{>} condition \\
action &::= \textbf{ensure } proposition \\
&\quad \mid \textbf{raise } event\_name \ (\textbf{+ } event\_name\ )^* \\
&\quad \mid \textbf{preserve } (var\_name \ (\textbf{, } var\_name)^*) \\
&\quad \mid \textbf{do } (\ action \ (\textbf{, } action)^+ \ )
\end{aligned}
$$