

CS421 Krell - Hint on inserting semantic routines

Add the following in the right places in your left factored grammar rules.

Email the rules to me on/before Week15A.

- `#getEword#` -- looks up the dictionary using `saved_lexeme` and stores into `saved_E_word`
- `#gen("CONNECTOR")#`
- `#gen("ACTOR")#`
- `#gen("OBJECT")#`
- `#gen("TO")#`
- `#gen("ACTION")#`
- `#gen("DESCRIPTION")#`
- `#gen("TENSE")#`

For all lines except for **TENSE:**, `saved_E_word` is generated. Otherwise, `saved_token` is generated:

After **CONNECTOR** is seen,

`#gen#` generates the **CONNECTOR:** line

Right after **SUBJECT** is seen,

`#gen#` generates the **ACTOR:** line

Right after `<be>`,

`#gen#` generates the **DESCRIPTION:** line

`#gen#` generates the **TENSE:** line

Right after **OBJECT** is seen,

`#gen#` generates the **OBJECT:** line

Right after **DESTINATION** is seen,

`#gen#` generates the **TO:** line

After `<verb>` is seen,

`#gen#` generates the **ACTION:** line

Right after `<tense>` is seen,

`#gen#` generates the **TENSE:** line

Error messages  screen

IRs  **translated.txt**

LEFT FACTORING

<s> ::= [CONNECTOR] <noun> SUBJECT <after subject>

<after subject> ::= <verb> <tense> PERIOD | <noun> <after noun>

<after noun> ::= <be> PERIOD | DESTINATION <verb> <tense> PERIOD | OBJECT <after object>

<after object> ::= <verb> <tense> PERIOD | <noun> DESTINATION <verb> <tense> PERIOD

Updated left factored grammar rules inserted semantic routines

<s>:::[CONNECTOR #getEword# #gen("CONNECTOR")#] <noun> #getEword# SUBJECT #gen("ACTOR")# <after subject>

<after subject> ::= <verb> #getEword# #gen("ACTION")# <tense> #gen("TENSE")# PERIOD | <noun> #getEword# <after noun>

<after noun> ::= <be> #gen("DESCRIPTION")# #gen("TENSE")# PERIOD | DESTINATION #gen("TO")# <verb> #getEword# #gen("ACTION")# <tense> #gen("TENSE")# PERIOD | OBJECT #gen("OBJECT")# <after object>

<after object> ::= <verb> #getEword# #gen("ACTION")# <tense> #gen("TENSE")# PERIOD | <noun> #getEword# DESTINATION #gen("TO")# <verb> #getEword# #gen("ACTION")# <tense> #gen("TENSE")# PERIOD