

Analysing of different antlr patterns in java based repositories

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Research Question

RQ1. How popular are listener and visitor patterns in java antlr repositories?

RQ2. How frequent are enterX and exitX methods used in listener patterns?

Assumption

- Only considering @Override methods
- Methods which have implementation
- Methods have to start with enter, exit or visit

- Download all Repositories
- Check all methods in java classes
- Store all valid methods in data table
- Visualize and analysis of the data

Implementation

```
methodDeclaration
  : OVERRIDEN? typeTypeOrVoid IDENTIFIER formalParameters ('[' ' ']*)*
  (THROWS qualifiedNameList)?
  methodBody
  ;
```

- RQ1. How popular are listener and visitor patterns in java antlr repositories?
- RQ2. How frequent are enterX and exitX methods used in listener patterns?

Threads to validity

- Methods similiar to the target methods can be count
- Method implementation in the files provided by antlr are not count

Further tasks

- Run again to count methods with enter and exit
- Check the datatable to find logic mistake and eliminate "similiar" methods
- Increase Performance

Questions?