

README.md

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<https://zenodo.org/badge/latest/doi/373793704>

### What smartExpander does?

smartExpander is a tool for suggesting whether abbreviations are used properly, i.e., whether they should be replaced with corresponding full terms.

### How to get started?

/MCPParser: The Java implementing of smartExpander.

testDataAndCommand.csv: Testing data to replicate the evaluation in the paper

### How to use smartExpander? (as a reusable tool)

1. Download the implementation and testing data:

```
git clone git@github.com:jiangyanjie/smartExpander.git
```

2. Switch to the folder where \*.class files are:

For example, "cd smartExpander\MCPParser\out\production\MCPParser"

3. Test smartExpander with a single abbreviation:

```
java FindCasualNames.main.smartExpander abbr identifier contexts typeOfIdentifier expansion  
projectName
```

where abbr is the abbreviation to be tested; identifier is the identifier containing the abbreviation; contexts is the contexts of the abbreviations (i.e., identifiers surrounding the abbreviations; typeOfIdentifier is the type of the enclosing identifier (e.g., variable name or method name); expansion is the full terms of the abbreviation; projectName is the name of the enclosing Java project.

**An illustrating example:** `java FindCasualNames.main.smartExpander nf nf  
file#jsmooth#model#persistency#make#path#relative#if#possible#root variableName new file  
davmail`

4. Expected Output for the execution:

"True": if the abbreviation should be expanded

"False": if the abbreviation should not be expanded

**How to replicate the evaluation?**

1. Open testDataAndCommand.csv

Each row of the table (except for the first row) represents a testing item (abbreviations).

2. To test the abbreviation on the  $i$ th row, copy the testing command on the last row Java Command 2 Test This Item, execute the command, and check the results against the value on row Necessity4Expansion(Prediction).