MegaL Traceabiltiy Recovery

https://github.com/maxmeffert/megal-tr

Softlang Sync Meeting 2016-03-07

University of Koblenz-Landau

Maximilian Meffert

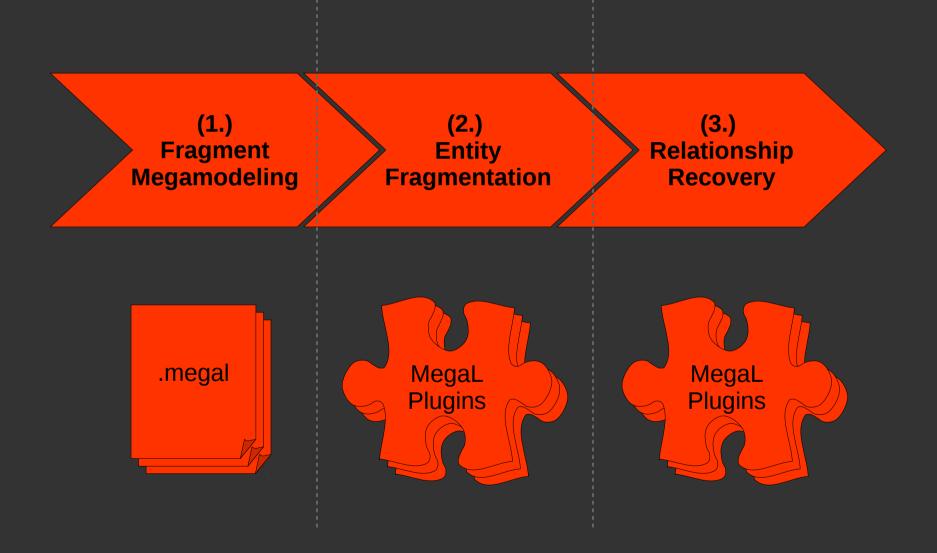
We Know & Declare



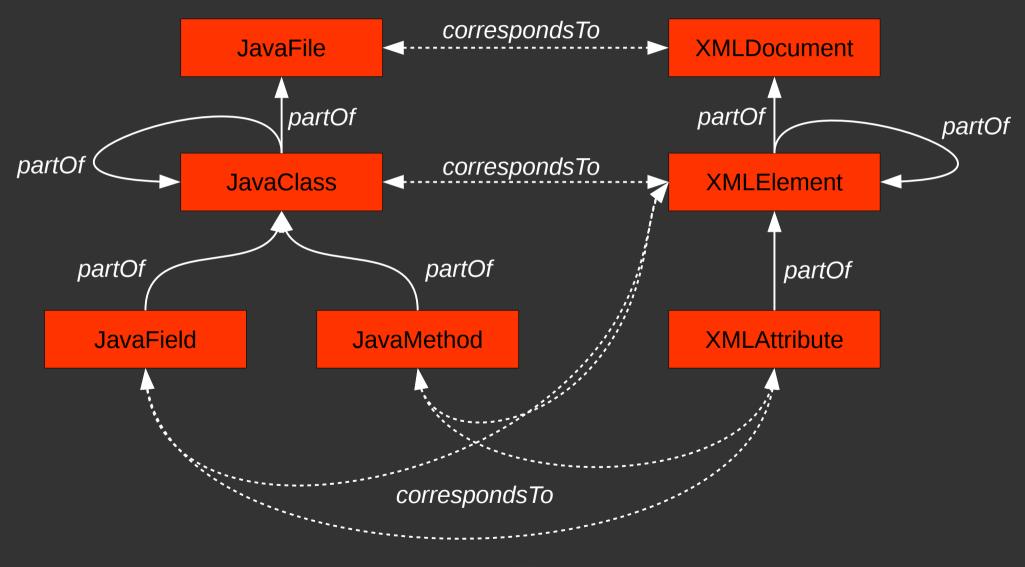
We Assume & Infer

```
correspondsTo
                            correspondsTo
public class Company {
                                             <company>
                            correspondsTo
                                               <name> ... </name
 private String name;
                                               <employees> ... </employees>
 private Employee[] employees;
                                correspondsTo
 public getName() {...}
                                             </company>
 public setName(...) {...}
 public getEmployees(){}
 public setEmployees(...) {...}
                                correspondsTo
```

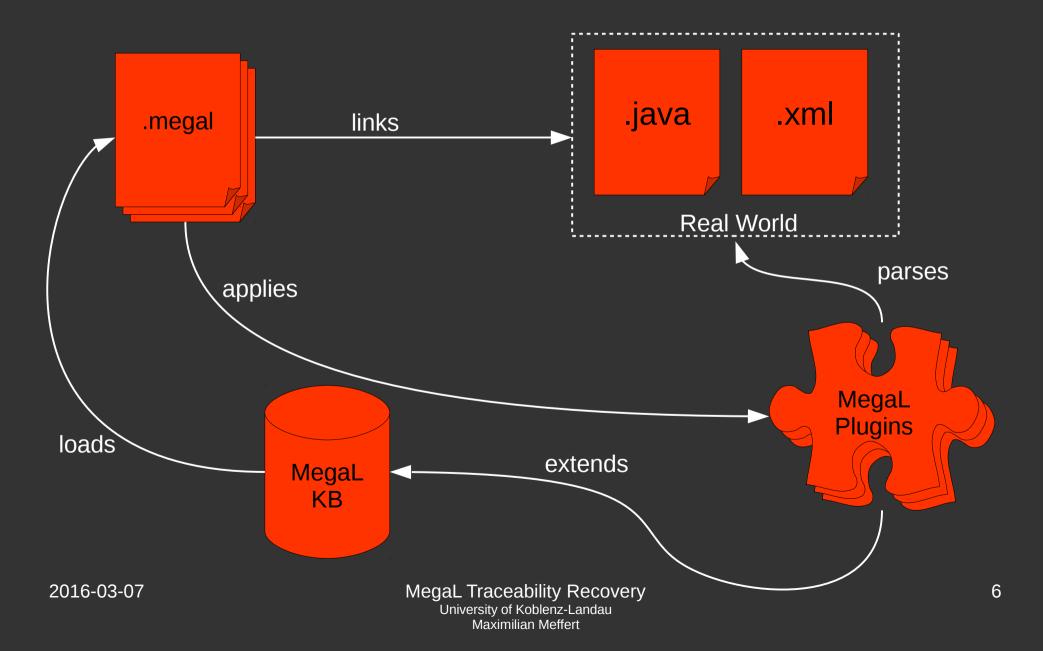
Recovery Phases



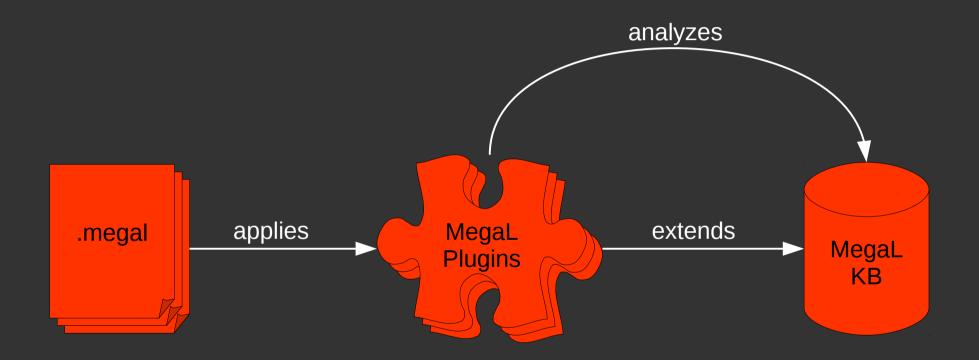
(1.) Fragment Megamodeling



(2.) Entity Fragmentation



(3.) Relationship Recovery



Current Challenges



Java Method Overloading

Java Method Parameters

Current State



Create sufficient Fragment Megamodels

Create an <u>ANTLR</u> based fragmentation infrastructure to utilize its grammar zoo (https://github.com/antlr/grammars-v4)