

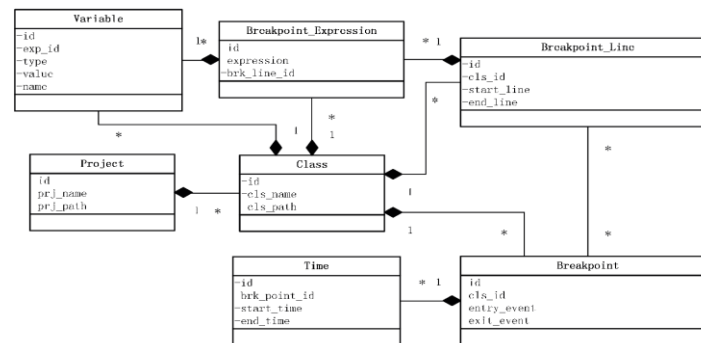
# Software debugging analysis based on developer behavior data

**Bo YANG, Qian YU, Huai LIU, Yuze HE, Chao LIU**

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# Problems & Ideas

- What information about developer's behavior is critical for improving automated software debugging?
- How to collect developer's debugging behavior data without any interruption and conduct a comparative analysis between different developers?
- Ideas: Define a hierarchical information structure and conduct experimental studies
  - We define a hierarchical information structure for the collection of developer behavior data, based on which a software debugging analysis method is developed and implemented in an Eclipse plug-in DebugInfo.
  - Experimental studies are conducted, with the purpose of explaining the reasons behind the unsatisfactory performance of spectrum-based fault localization in software debugging.
  - We carry out a qualitative comparative study of the proposed method and related research, and give a vision for improving the performance of software debugging.



# Main Contributions

- **SBFL does not reduce the debugging time**

- **SBFL does not reduce the number of iterations in debugging**

