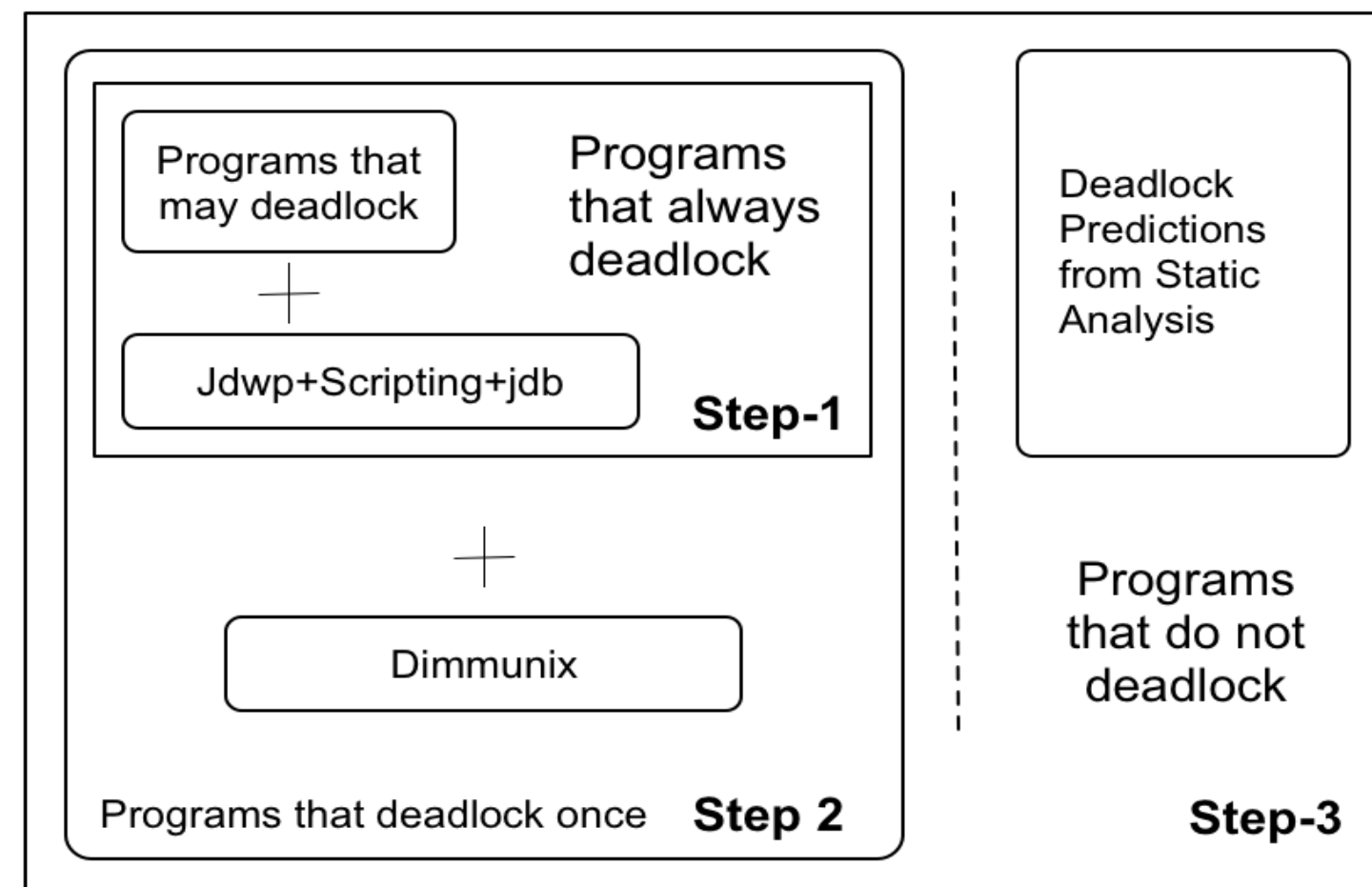
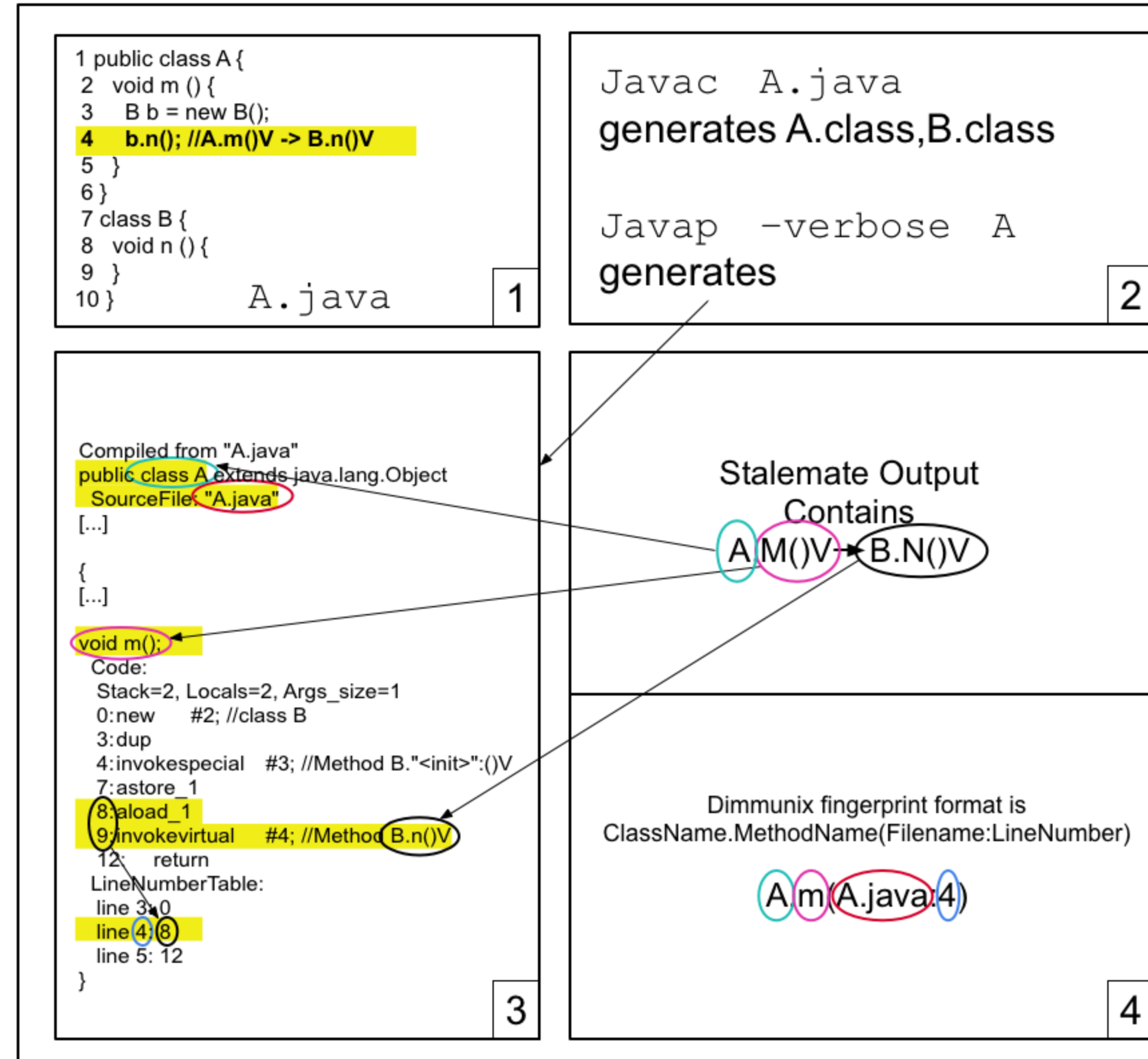
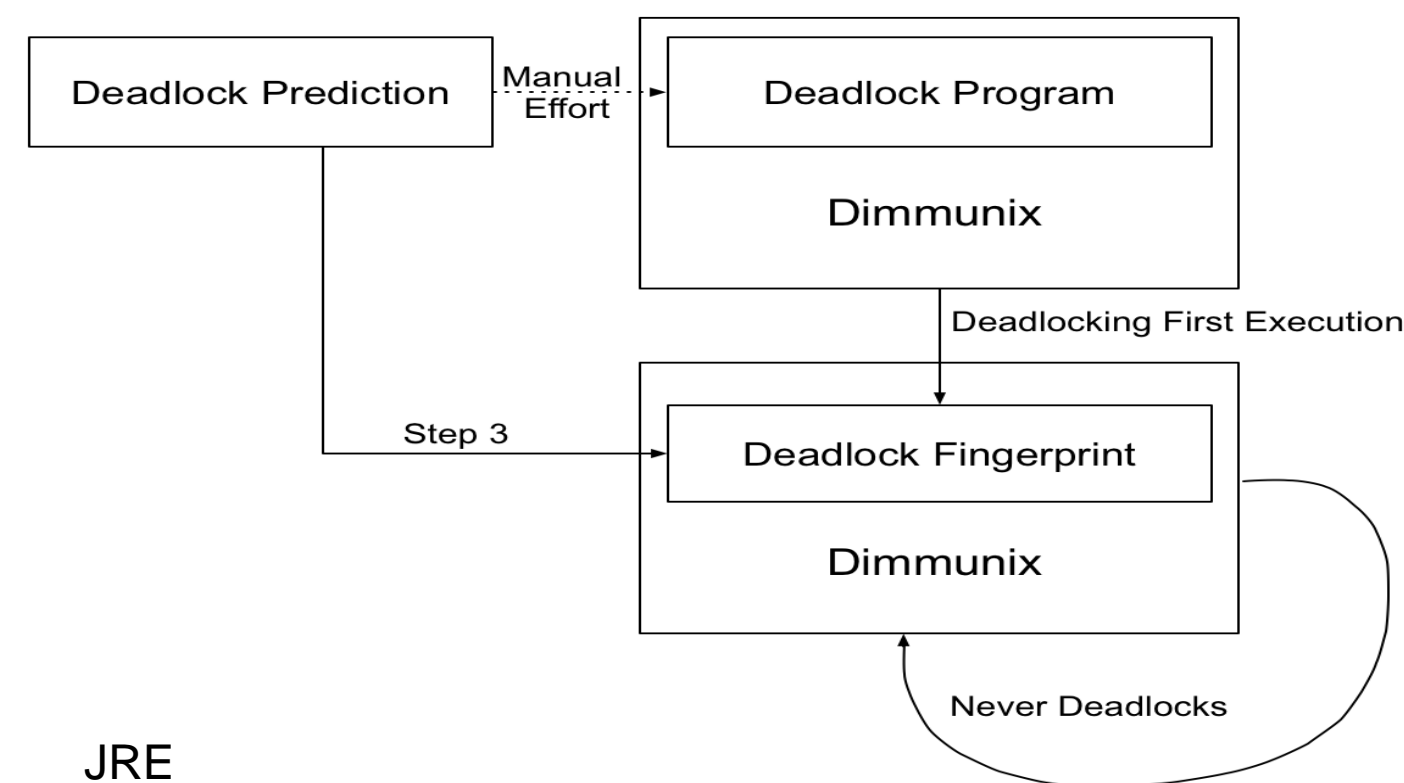


Avoiding Deadlocks using Stalemate and Dimmunix



Architecture of the Investigation



Verifying that Stalemate can report Deadlock predictions in the syntax of Dimmunix Fingerprints

Results

API	Program	BugId	Step1	Step2	Step3
MIDI:	RtsTc	8010771	Pass	Pass	Pass
Musical	TcDp1	8031702	Pass	Pass	Pass
Instrument	TcDp2	8031698	Pass	Pass	Pass
Digital I/f	RtsTcDp	8031699	Pass	Pass	Pass
Corba	TcPdh	8024334	Pass	Pass	Pass
	TcEdh	8036570	Pass	Pass	Pass
Annotation	JlcAt	6588239	Pass	Fail	Fail
Security	RcCt	7118809	Pass	Fail	Fail

References

- [1] K. Arnold, J. Gosling and D. Holmes, "The Java Programming Language, Third Edition", Pearson Education Pte Ltd, Delhi 110-092, India, 2000.
- [2] Vivek. K. Shanbhag, "Deadlock-Detection in Java-Library using Static-Analysis", 15th APSEC-2008.
- [3]. D. T. Horatiu Jula, C. Zamfir, and G. Candea. Deadlock immunity: enabling systems to defend against deadlocks. In USENIX OSDI, December 2008
- [4] <https://code.google.com/p/dimmunix/>
- [5] <https://github.com/vivekShanbhag/Stalemate>

Authors

1. Surabhi Pandey- surabhi.pandey@iitb.org
2. Sushanth Bhat- sushanth.bhat@iitb.org
3. Vivek Shanbhag- vivek.shanbhag@gmail.com

JRE

