

# Trace Link Recovery using Static Program Analysis

*B.Sc. Thesis Colloquium/Defense*

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# Motivation: Software as Cognitive Challenge



Modern Software Systems are:

- large  
(allover artifact count)
- heterogeneous  
(languages involved)

⇒ challenging for program  
comprehension tasks

View on the "Black Eye" galaxy  
provided by [2].

asdf

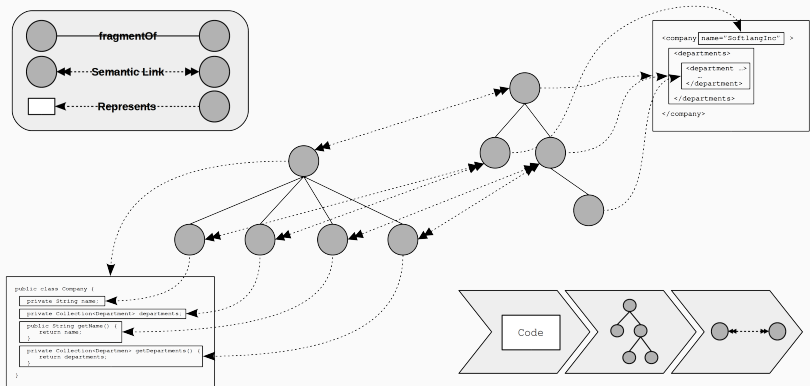
## Definition (Trace)

**(Noun)** A specified triplet of elements comprising: *source artifact*, *target artifact* and a *trace link* associating the two *trace artifacts*. [1]

**(Verb)** The act of following a trace link. [1]



# Trace Link Recovery Approach i



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# References

- [1] Gotel, O., Cleland-Huang, J., Hayes, J.H., Zisman, A., Egyed, A., Grünbacher, P., Dekhtyar, A., Antoniol, G., Maletic, J.I., Mäder, P.: Traceability Fundamentals. In: Software and Systems Traceability, pp. 3–22. Springer (2012)
- [2] NASA, STScI: Dust Band Around the Nucleus of "Black Eye Galaxy" M64 (2004), [http://hubblesite.org/image/1447/news\\_release/2004-04](http://hubblesite.org/image/1447/news_release/2004-04), retrieved 29<sup>th</sup> December, 2017