

Chimera: Agnostic Language Component Based Framework using NodeJS and CLI

Go Frendi Gunawan
STIKI Malang
Malang, Indonesia
Email: frendi@stiki.ac.id

Mukhlis Amien
STIKI Malang
Malang, Indonesia
Email: amien@stiki.ac.id

Jozua Ferjanus Palandi
STIKI Malang
Malang, Indonesia
Email: jozuafp@stiki.ac.id

Abstract—Component Based Software Engineering (CBSE) is a branch of software engineering that emphasizes the separation of concerns with respect to the wide-ranging functionality available throughout a given software system. The main advantage of CBSE is separation of components. A single component will only focus on a single task or related collection of tasks. Allowing software developer to reuse the component for other use-cases. By using this approach, software developer doesn't need to deal with spaghetti code. Several approaches has been developed in order to achieve ideal CBSE. The earliest implementation was unix pipe and redirect, while the newer approach including CORBA, XML-RPC, and REST. Our framework, Chimera, was built on top of Node JS. Chimera allows developer to build pipe flow in a chain (a YAML formatted file) as well as defining global variables. Compared to unix named and unnamed pipe, this format is easier and more flexible. On the other hand, unlike XML-RPC, REST, and CORBA, chimera doesn't enforce users to use http protocol.

Keywords—Chimera, Language Agnostic, Component-Based Software Engineering, Node JS, CLI.

I. INTRODUCTION

Component based software development approach is based on the idea to develop software systems by selecting appropriate off-the shelf components and then to assemble them with a well- defined software architecture. [?]

A. Subsection Heading Here

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

II. CONCLUSION

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue,

a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

APPENDIX A

PROOF OF THE FIRST ZONKLAR EQUATION

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

ACKNOWLEDGMENT

The authors would like to thank...

@Article feilhauer2016def, title = DEF-a programming language agnostic framework and execution environment for the parallel execution of library routines, author = Feilhauer, Thomas and Sobotka, Martin, journal = Journal of Cloud Computing, volume = 5, number = 1, pages = 20, year = 2016, publisher = Springer Berlin Heidelberg

@Article hadar2013intuition, title = When intuition and logic clash: The case of the object-oriented paradigm, author = Hadar, Irit, journal = Science of Computer Programming, volume = 78, number = 9, pages = 1407–1426, year = 2013, publisher = Elsevier

@Article kaur2010component, title = Component based software engineering, author = Kaur, Arvinder and Mann, Kulvinder Singh, journal = International Journal of Computer Applications, volume = 2, number = 1, pages = 105–108, year = 2010, publisher = International Journal of Computer

Applications, 244 5 th Avenue,# 1526, New York, NY 10001,
USA India

@InProceedings mcilroy1968mass, title = Mass-produced
software components, author = McIlroy, M Douglas and
Buxton, J and Naur, Peter and Randell, Brian, booktitle =
Proceedings of the 1st International Conference on Software
Engineering, Garmisch Pattenkirchen, Germany, pages = 88–
98, year = 1968

@Misc conway2003parallel, title = Parallel Processing on
the Cheap: Using Unix Pipes to Run SAS Programs in Parallel.
SAS Users Group International (SUGI 28) Proceedings. March
30–April 2, 2003. Seattle, Washington, author = Conway, Ted,
year = 2003

@Article prechelt2000empirical, title = An empirical com-
parison of seven programming languages, author = Prechelt,
Lutz, journal = Computer, volume = 33, number = 10, pages
= 23–29, year = 2000, publisher = IEEE

REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to L^AT_EX*, 3rd ed. Harlow, England:
Addison-Wesley, 1999.