EE461L Reading Assignment 1 – University of Texas at Austin

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UT EID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PAPER TITLE: On the criteria to be used in decomposing systems into modules, *David Parnas*

PAPER URL: <http://dl.acm.org/citation.cfm?id=361623>

Communications of the ACM [CACM Homepage](http://cacm.acm.org/%22%20%5Ct%20%22_self) [archive](http://dl.acm.org/citation.cfm?id=J79&picked=prox&cfid=107393287&cftoken=25987530" \t "_self) Volume 15 Issue 12, Dec. 1972
Pages 1053 - 1058 [ACM](http://www.acm.org/publications) New York, NY, USA

**Instructions.** Please download the above paper from the ACM Digital Library. Access to ACM digital library is free if you are using a computer on campus with a valid UT Austin IP address. If you plan to work off campus, please make sure to download the paper in advance or find the paper on line yourself. **It is your responsibility to read the same version of the assigned paper.** You are welcome to meet in small groups to discuss papers, but each student must submit his or her own review. You can follow this format if you like. You will write four short paragraphs addressing the following points. Long reviews are not necessarily good reviews. Please limit your review to 500 words at most. **The hard copy of your review is due in class on the day, as specified on the class website.** No electronic copy of the review will be accepted. No late policy.

    1.    Stated goals and solution. What problem are the authors trying to solve? What are the bounds on this problem, i.e., what are they not trying to solve? What techniques or tools do the authors offer to solve the problem at hand? How do the authors know they have solved the problem? Do the authors test or validate their approach experimentally? Does the solution meet the stated goals, or does it fall short in some way? Avoid simply quoting the authors’ own abstract. Restating in your own words demonstrates your understanding.

    2.    Cool or significant ideas. What is new here? What are the main contributions of the paper? What did you find most interesting? Is this whole paper just a one-off clever trick or are there fundamental ideas here which could be reused in other contexts?

    3.    Fallacies and blind spots. Did the authors make any assumptions or disregard any issues that make their approach less appealing? Are there any theoretical problems, practical difficulties, implementation complexities, overlooked influences of evolving technology, and so on? Do you expect the technique to be more or less useful in the future? What kind of code or situation would defeat this approach, and are those programs or scenarios important in practice? *Note: we are not interested in flaws in presentation, such as trivial examples, confusing notation, or spelling errors. However, if you have a great idea on how some concept could be presented or formalized better, mention it.*

    4.    New ideas and connections to other work. How could the paper be extended? How could some of the flaws of the paper be corrected or avoided? Also, how does this paper relate to others we have read, or even any other research you are familiar with? Are there similarities between this approach and other work, or differences that highlight important facets of both?

**Please take the time to edit your reviews.** Unclear or unnecessarily long prose will be graded accordingly.**Your Reviews Here: 500 Words Maximum.**