

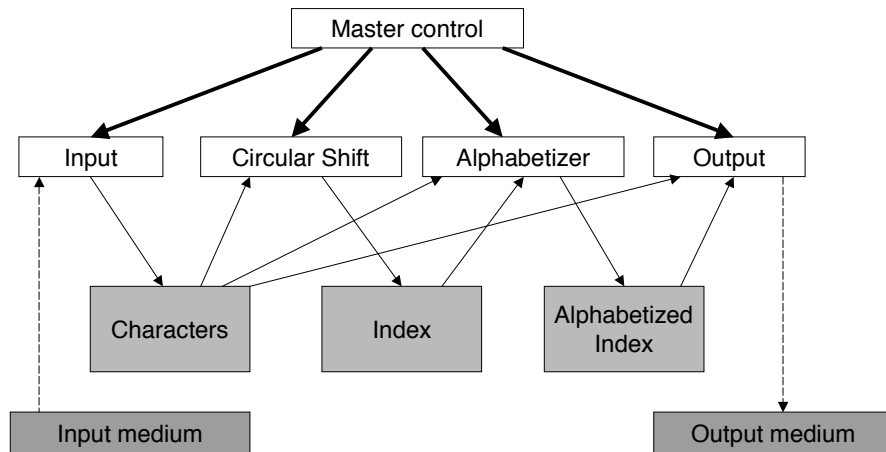
A Sketchy Evolution of Software Design

- 1960s
 - Structured Programming
 - (“Goto Considered Harmful”, E.W.Dijkstra)
 - Emerged from considerations of formally specifying the semantics of programming languages, and proving programs satisfy a predicate.
 - Adopted into programming languages because it’s a better way to think about programming
- 1970s
 - Structured Design
 - Methodology/guidelines for dividing programs into subroutines.
- 1980s
 - Modular (object-based) programming
 - Ada, Modula, Euclid, ...
 - Grouping of sub-routines into modules with data.
- 1990s
 - Object-Oriented Languages started being commonly used
 - Object-Oriented Analysis and Design for guidance.

Three Papers by David Parnas

- “On the Criteria To Be Used in Decomposing Systems into Modules”
 - *Comm. ACM* 15, 12 (Dec. 1972), 1053-1058
- “On a ‘Buzzword’: Hierarchical Structure”
 - *IFIP Congress ‘74*.
North Holland Publishing Company, 1974 pp. 336-339
- “On the design and development of program families”
 - *IEEE Trans. On SE.*, vol. SE-2, pp.1-9, Mar. 1976

KWIC Modularization 1

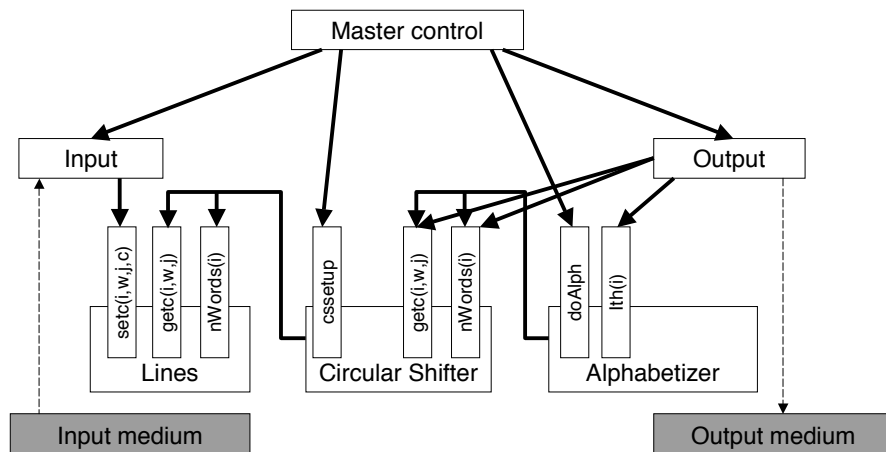


03 - Parnas

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KWIC Modularization 2



03 - Parnas

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