Principles of Software Engineering: System Deployment

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Grading

- Project 1 graded, working on Project 2.

Correctness of Solution (C)		Application of Formalism (F)		To Boldly Go (B)	
2	Perfect solution	2	Deep and appropriate	2	Major extensions
1	Minor glitches	1	Solid application	1	Special insights / features
0	One significant problem	0	Basic usage	0	Solid approach
-1	Several significant problems	-1	Insufficient application		
-2	Doesn't work	-2	Little or no use		

- $grade = 3.4 + 0.1 \times (C + F + B)$.

Goals

- Based on the FORMULA cloud deployment example (already on website) develop your own model of software components and computing nodes.
- Software components require memory, CPU time, etc…
- Computing nodes provide memory, CPUs, other resources. There may be heterogeneous kinds of CPUs.

Goals

- Build a “Software Component” domain in FORMULA where you can describe systems of software components.
- Build a “Computing” domain in FORMULA where you can describe available computing resources.
- Build a “Mapping” domain which explains how software can be mapped to hardware. Should include constraints, e.g. code must fit into memory.
- Synthesize a valid architecture by constructing a partial model and using the FORMULA model finder.

Thanks And Questions!

http://www.cs.washington.edu/csep503