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Reading 02

10 Possible Points

9/1/2022

Attempt 1 VIN PROGRESS
Next Up: Submit Assignment

Unlimited Attempts Allowed

∨ Details

Software architecture

We began last week by talking about definitions of quality, and now we are going to begin discussing design and how design affects quality. Software Architecture is a popular topic in software design, and having the right architecture for the problem at hand can make a huge difference in product quality. This week we will begin with an overview of software architecture, which will frame a few design case studies we will examine this semester.

To read

- [required] David Garlan and Mary Shaw. Sections 1-3. <u>An Introduction to Software Architecture</u>
 (https://www.cs.cmu.edu/afs/cs/project/able/ftp/intro-softarch/intro-softarch.pdf), Carnegie Mellon University, Tech Report CMU-CS-94-166, 1994, pp. 1-15.
- [required] Nenad Medvidovic and Richard N. Taylor. <u>Separating fact from fiction in software architecture (https://canvas.vt.edu/courses/156121/files/23790869/download?wrap=1)</u>. In *Proceedings of the Third International Workshop on Software Architecture*, ACM Press, 1998, pp. 105-108.
- [optional] George H. Fairbanks. Chapter 1. Just Enough Software Architecture [textbook]. Marshall & Brainerd, 2010, pp. 1-11.

To turn in

Prepare a brief (no more than one page) written answer to the following two questions. Write up your answer using MS Word or LaTex, and generate a PDF version in a file named R02-yourPID.pdf. One well-presented paragraph for each question is sufficient.

1. What are the important similarities and differences between an "architectural style" and a

"programming paradigm" (like functional programming logic programming dataflow etc.)?

(https://canvas.vt.edu/courses/156121/modules/items/2003690)

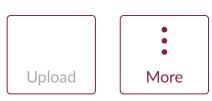
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Upload your PDF to this assignment here on Canvas.

∨ View Rubric

Criteria	Ratings				Pts
Question 1 view longer description	5 pts Good: shows critical engagement with the readings assigned	3 pts Marginal: repeats content from the reading without additional insight	1 pts Minimal answer: does not show engagement with the reading	0 pts No answer	/ 5 pts
Question 2 view longer description	5 pts Good: shows critical engagement with the readings assigned	3 pts Marginal: repeats content from the reading without additional insight	1 pts Minimal answer: does not show engagement with the reading	0 pts No answer	/ 5 pts

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