

DevOps in Education: A Virtually Non-Existent Course

by Emma Sax



@emmahsax

Disclaimer

Everything I say today is from my perspective and based on my personal experience. I do not intend to represent all recent college graduates, nor all workplace environments.



My background

- Attended Saint Paul Conservatory for Performing Artists
- Participated in 17 plays and shows during high school



My background cont.

- Attended University of Minnesota, Morris (UMM) in 2013
- Graduated from UMM this past May with a degree in Computer Science

UNIVERSITY OF MINNESOTA
MORRIS



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- Joined the Platform Operations team at SportsEngine in 2015
- Worked part-time for 18 months
- Full-time member of Platform Operations team working in the DevOps fashion



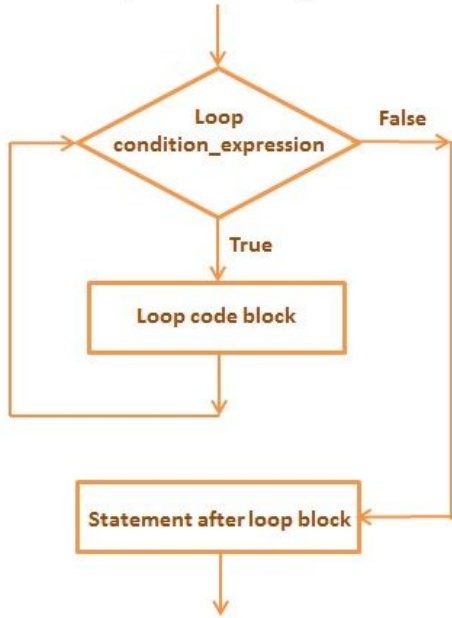
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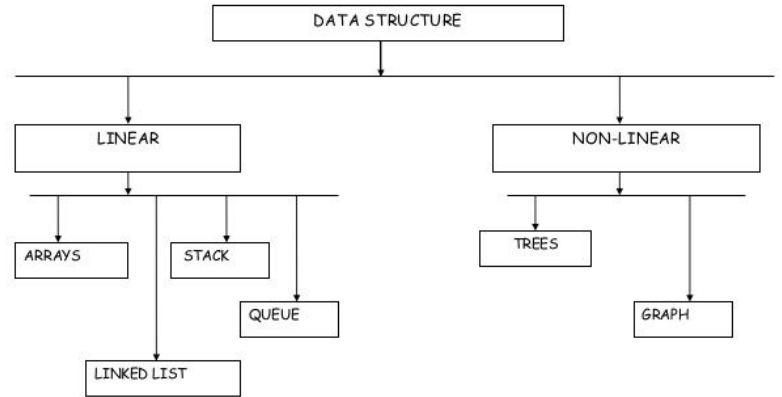


Courses I took at Morris

Loop Flow Diagram



Types of Data Structures



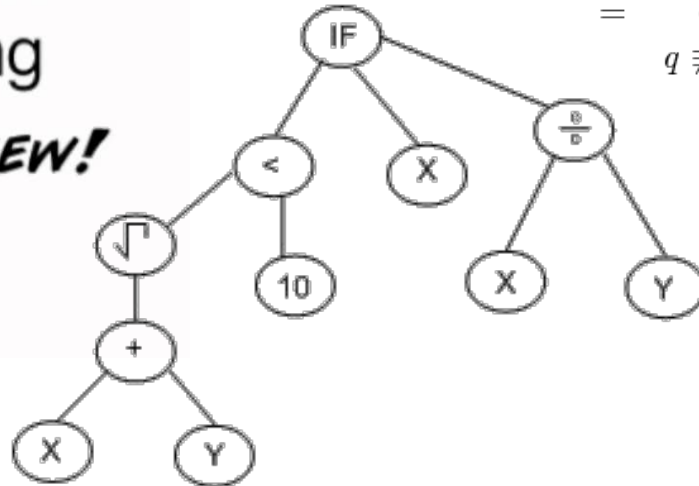
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Agile Teams
User stories
Estimation
Planning



PHEW!



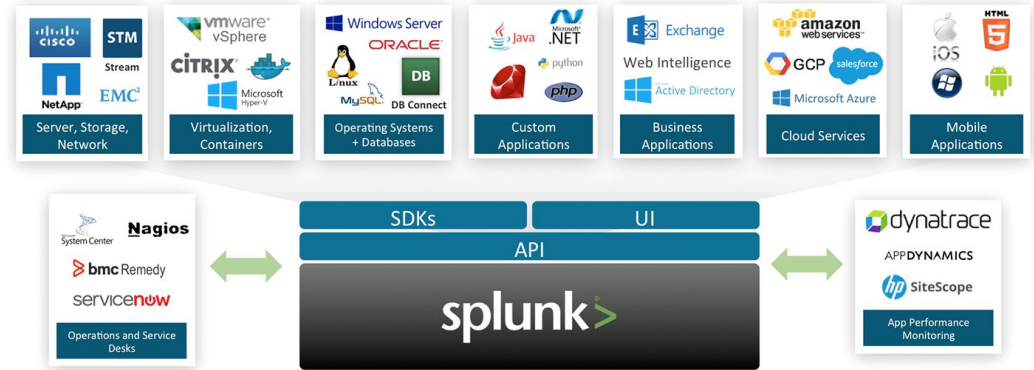
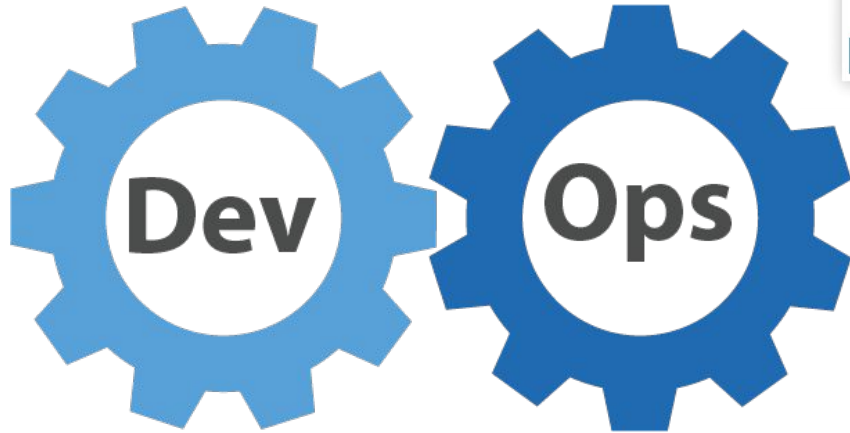
Proving (3.16) $(p \neq q) \equiv (q \neq p)$:

$$\begin{aligned} & p \neq q \\ = & \langle \text{Def. of } \neq \text{ (3.10)} \rangle \\ & \neg(p \equiv q) \\ = & \langle \text{Symmetry of } \equiv \text{ (3.2)} \rangle \\ & \neg(q \equiv p) \\ = & \langle \text{Def. of } \neq \text{ (3.10), with } p, q := q, p \rangle \\ & q \neq p \end{aligned}$$

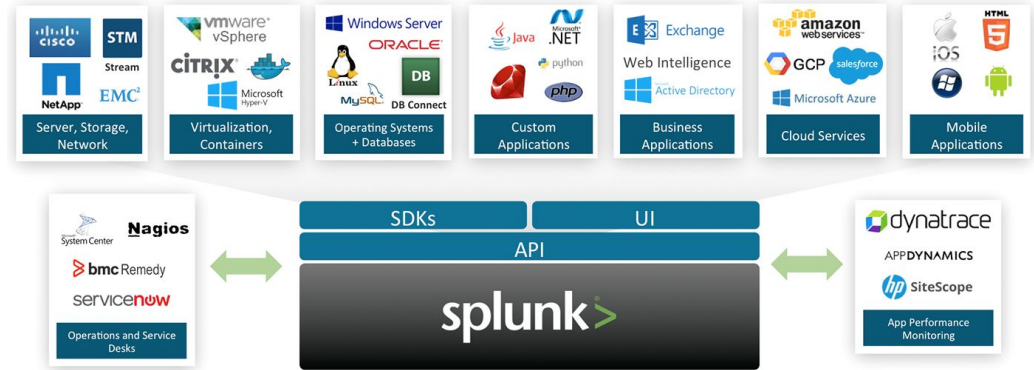
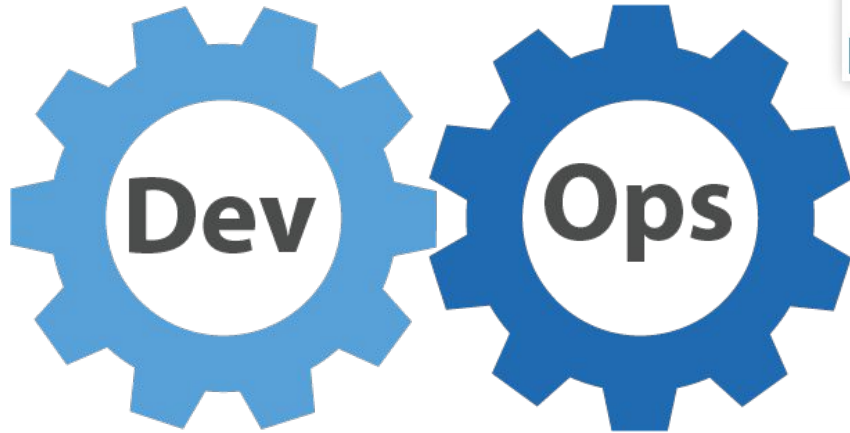


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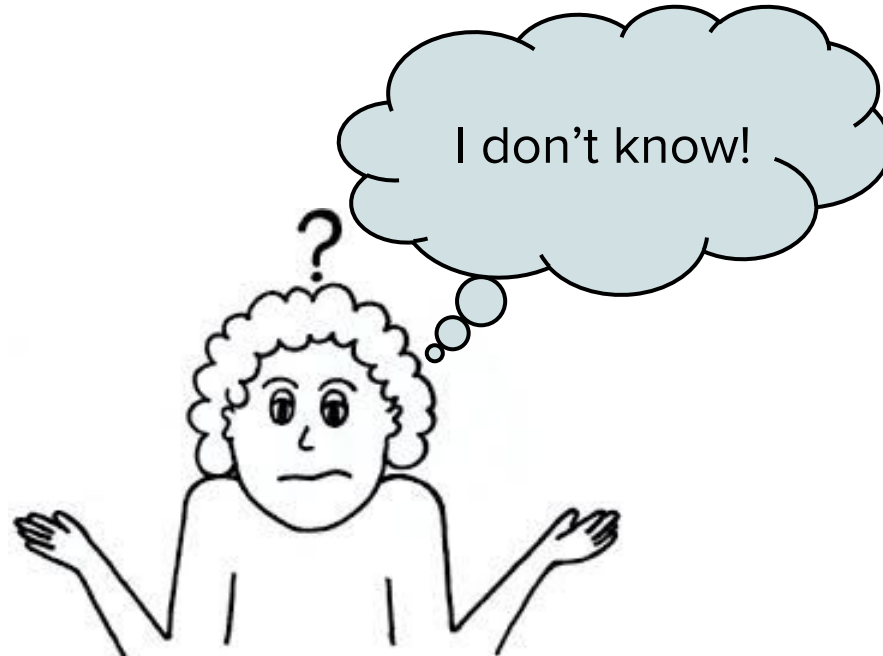
Courses I didn't take at Morris



Courses I didn't take at Morris



Why don't they teach Operations courses? Why is Operations hard to teach?



My first hunch:

If you work in Operations, you may have to **wake up at 2am** to **try to fix** something you **don't know how to fix** when everything's like this:



More realistic hunches...

1. Every workplace works differently.
2. It can be difficult to mimic real-world scenarios in a classroom environment.
3. Operations, and especially DevOps, is all about constant learning.

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Constant Learning in DevOps

Discovering and experimenting with 3rd-party systems

Expanding your knowledge base

Vetoing risky code changes

Operating your entire platform.... yikes

Providing your developers with helpful tools

Spreading communication and collaboration



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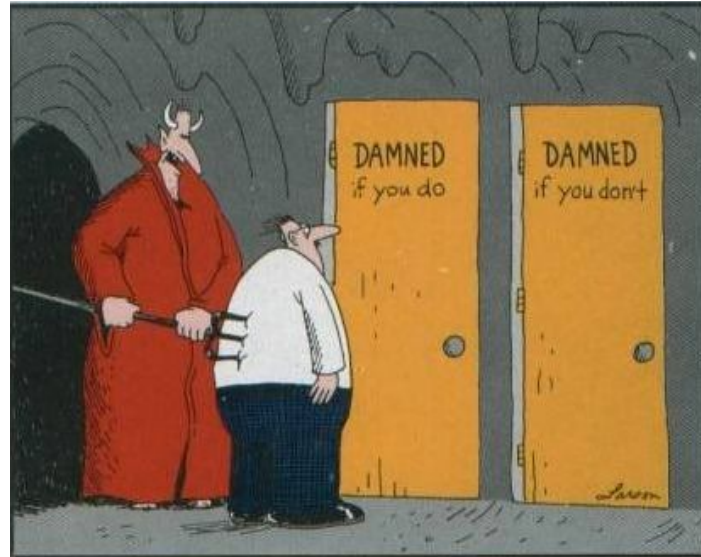
Providing your developers with helpful tools

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In summary...

DevOps is hard to learn unless you have some prior background knowledge.



**Is there a way to better
prepare our students for a
DevOps career & culture?**

Thank You!



emmahsax *



@emmahsax *

* My Twitter and GitHub usernames have changed as of February 20, 2021. Recordings of this Ignite talk uses my old Twitter and GitHub usernames. The usernames here has been updated.