DevOps in Education: A Virtually Non-Existent Course

by Emma Sax

@emma_sax4

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.

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My background

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

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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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My background cont.

- 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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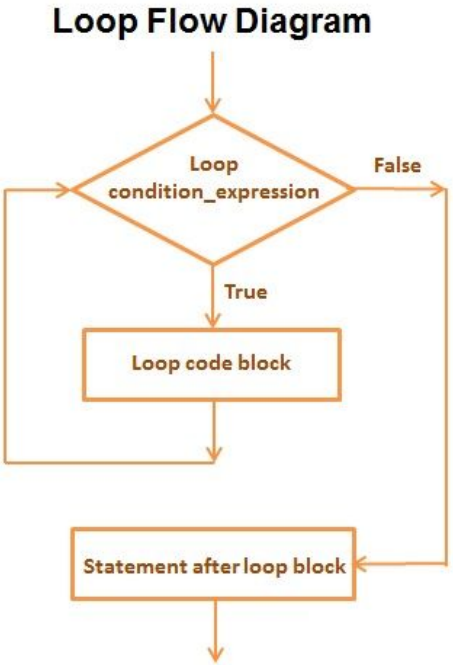
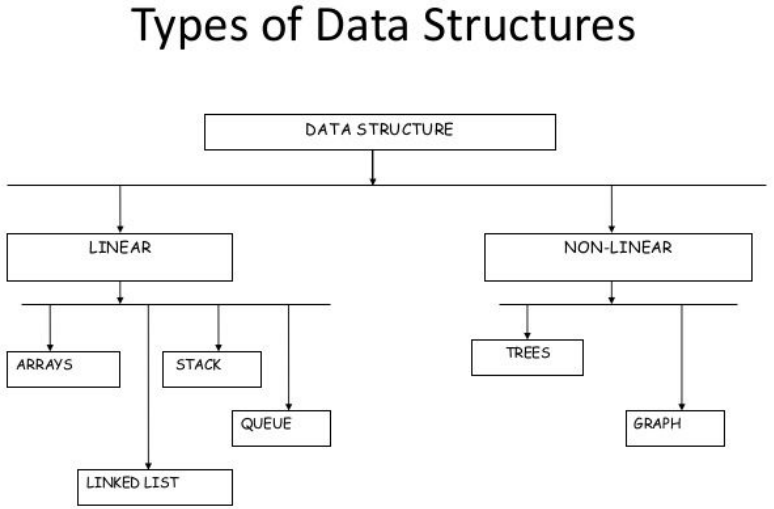
Courses I took at Morris





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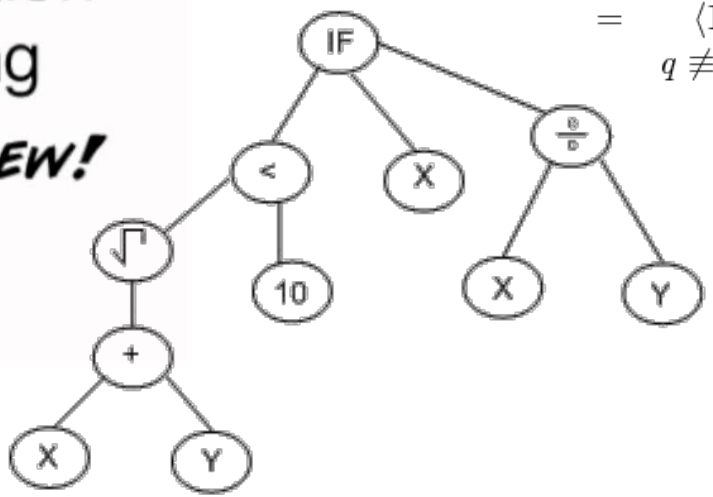
Courses I took at Morris

Agile Teams
User stories
Estimation
Planning

PHEW!

Proving (3.16) $(p \not\equiv q) \equiv (q \not\equiv p)$:

$$
\begin{array}{ll}
 & p \not\equiv q \\
= & \quad \langle \text{Def. of } \not\equiv \ (3.10) \rangle \\
 & \neg(p \equiv q) \\
= & \quad \langle \text{Symmetry of } \equiv \ (3.2) \rangle \\
 & \neg(q \equiv p) \\
= & \quad \langle \text{Def. of } \not\equiv \ (3.10), \text{ with } p, q := q, p \rangle \\
 & q \not\equiv p
\end{array}
$$



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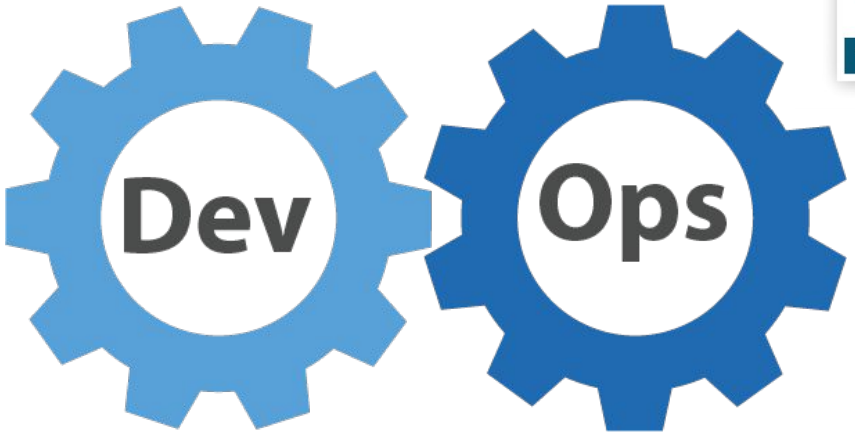
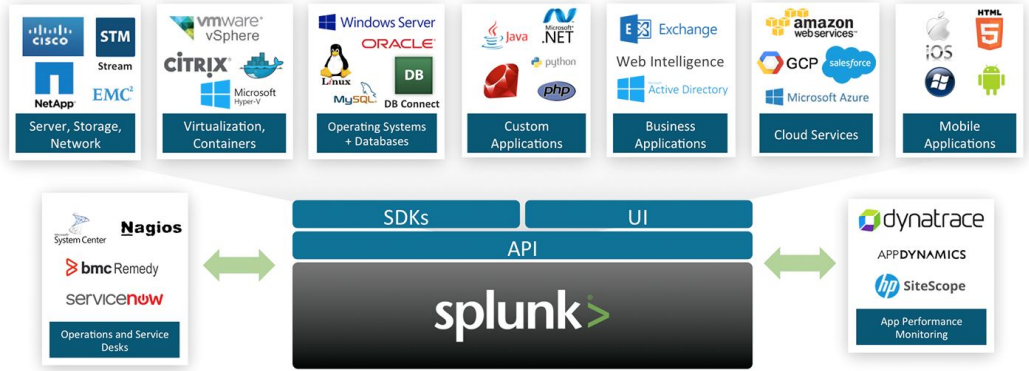
Courses I didn't take at Morris





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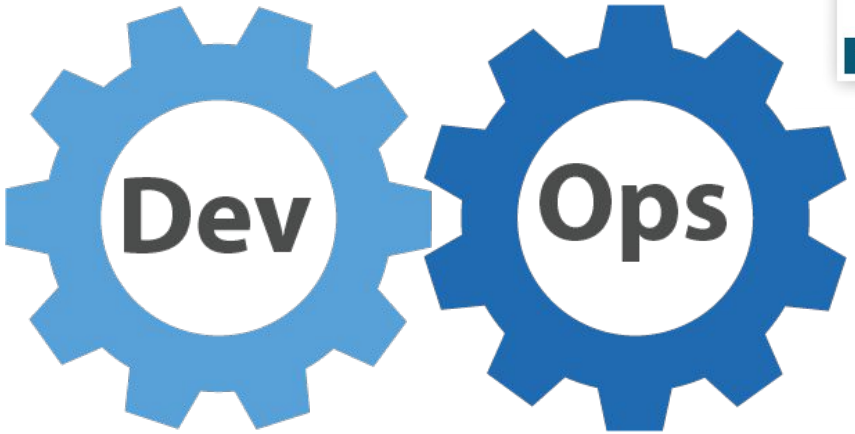

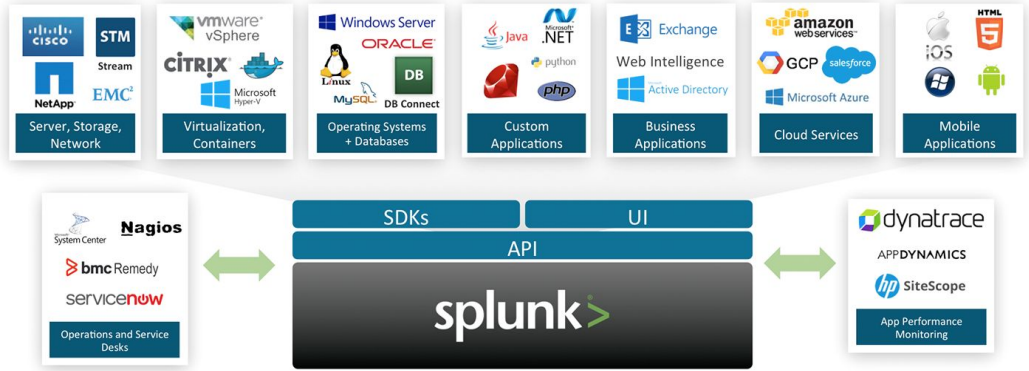

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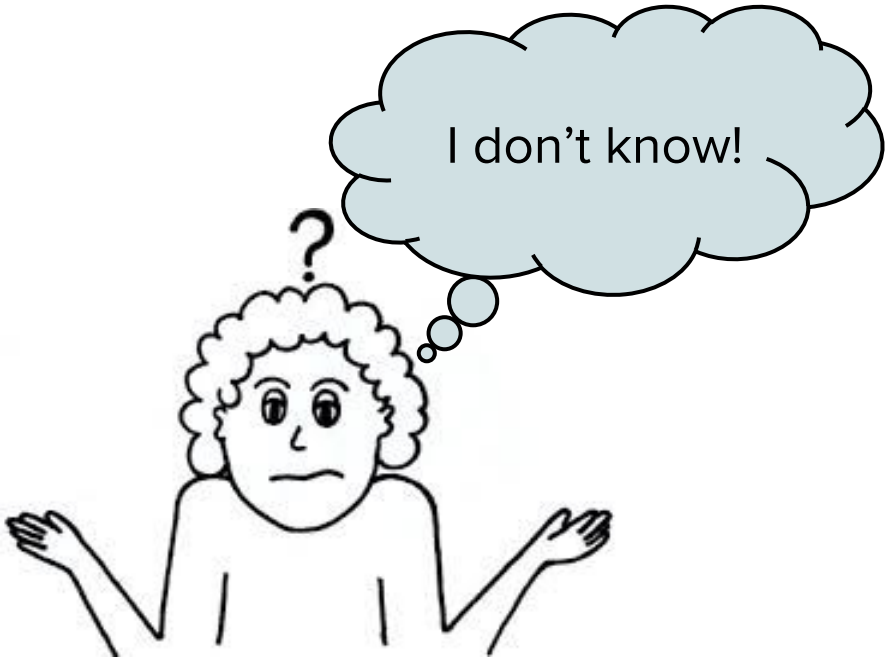
Why don't they teach Operations courses? Why is Operations hard to teach?



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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:

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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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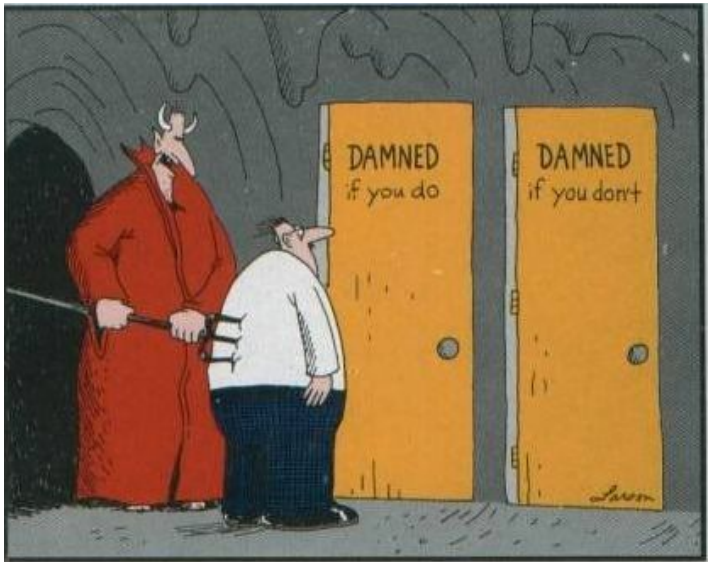
In summary...

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



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

Thank You!

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* My GitHub username has changed as of May 2, 2019. The YouTube recording of this Ignite talk uses my old GitHub username. The username here has been updated.