

Postman Pro is the contract between operations and engineering at Coursera

Coursera is an education platform that pioneered the concept of MOOCs (massive open online courses) in early 2012 with the mission to provide universal access to the world's best education.

Massive proliferation of APIs

Coursera's education platform caters to 2 sets of users - learners and university partners. While the learners get to pick courses spanning different domains, the partners seed the ecosystem with fresh course content. Internally, Coursera has dedicated engineering teams attached to these sets of users, building the product in a service-oriented architecture.

Every product feature built for the learner side has a corresponding administration feature on the partner side. Due to early investment in development, they lowered the barrier to easily bring up new services and corresponding REST APIs (modeled using open-source schema language Courier) to communicate amongst themselves. This has resulted in a massive proliferation of hundreds of APIs.

Growth strains operations and engineering

With a strong focus on "learners first", Coursera in 2015 transformed their learner side product based on user feedback and went through a massive growth phase. While the corresponding self-serve partner side product was being built, this pace of innovation required a dedicated operations team to help partners quickly upload new content to support the increasing demand in learner courses.

This situation, according to Roshan Sumbaly - engineering lead at Coursera, felt like Zeno's paradox, as there was always catch up to play on features on the partner side. The operations team had to request engineers to manually help update the content every time partners wanted to change or add something to their courses. If not addressed immediately, these interruptions could have resulted in a significant productivity drop for the engineers.

Contract between operations and engineering

Coursera was quick to adopt Postman Collections for critical endpoints. Postman's easy to use GUI made it a perfect tool for the operations team - who could then, with minimal knowledge of the internals of REST, use these Collections to get their job done. This empowered the operations team to support partners, breaking the time-sensitive dependency on engineering. Engineers could share the set of well-documented endpoints that were guarded by validation and internal-only auth rules. As these Collections were defined fairly early in the development cycle, it is also being adopted as the agreement between front end and back end developers.

Just as APIs were initially the exclusive domain of developers, Postman's initial audience was developers. However, we are seeing adoption across teams in organizations that make APIs accessible to others, empowering entire companies to operate efficiently with an API based workflow system.



Coursera is an education platform that partners with top universities and organizations worldwide, to offer courses online for anyone to take. With a mission to provide universal access to the world's best education, Coursera supports 17+ million learners, 1700+ courses and 140+ partners.



DEVELOPMENT TEAM

75 engineers



DEVELOPMENT LANGUAGES

React, Scala,
Cassandra



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Postman became the contract between operations and engineering.

Roshan Sumbaly
Engineering Lead



For more information please visit getpostman.com