

GCSE Bitesize Computer Science

Facebook's Jackson Gabbard on high and low languages

I'm Jackson Gabbard. I'm an engineer at the Facebook London office. I've been at Facebook about 4 years and across those 4 years I've worked on a lot of different teams, which includes, like, Facebook Timeline for mobile devices. I also worked on the App Center, and then I also spent a little bit of time working on Facebook Groups. The programming languages that we use at Facebook vary greatly. I work primarily in JavaScript. I also write a lot of PHP. We also have Android, which is basically entirely Java, although they do use Python in the build process with the Android application.

Then there's the iOS team, which obviously is using objective C because that's how you build iOS apps. And we also have the security teams, and they work in a bunch of different languages, including Haskell, Python, PHP. Newsfeed has been written in a bunch of different languages over a bunch of years by a bunch of different engineers. The first stab at it, I believe, was written in pure PHP, and what we found was that PHP is a great language for prototyping, for building things quickly and shipping them, but eventually you're going to hit performance ceilings with PHP because it's not a very memory-efficient language. It's not a very CPU-efficient language. So I believe Newsfeed has been rewritten a couple of times and its current implementation, I think, is Java-based, but it might be C++. Either Java or C++ is a good candidate for this sort of problem because those are sort of systems-level languages.