

After reading other posts and lastly [erayajk](#) post about [Aztec Technical Aspects](#) I found the following questions can be valuable for devs coming from the community as me.

As I understood from the context,

Aztec allows developers to build privacy preserving smart contracts, ZK-Snark programming language, [Noir](#).

After checking documentation and reading articles about Aztec I have following mostly architecture-related questions.

1. Why do we need [barretenberg](#)? What is its place in the project?
2. Why do we need noir? I know that it's a custom language made by the Aztec team for creating circuits but maybe showing its functionality inside the whole project will give more insight.
3. Why we are using typescript(not only) [here?](#).
4. Is [this package](#) consists of most of the functionalities or why there are different languages there with similar rate?

TypeScript 53.5%

C++ 34.4%

Solidity 4.8%

Roff 4.0%

1. Do we have the picture overall design where I can see entry points and the flow between all of these components?

I am interested in smart contract vulnerabilities and the product itself

. I set up aztec-packages and barretenberg in my local, run tests successfully understood the role of Rollup, Decoder, and other few smart contracts functionalities but still not clear about product flow.