smaplot

FRONTEND ARCHITECTURE

Scalable web applications enhanching your business

scalable secure performant

The digital portfolio of your company is one of the cornerstones of your success. Independent if your business is a web application you may want to give your customers a set of digital services extending your products.

Choosing the right architecture for web applications is crucial. Without the right architecture you may run into multiple issues today or in the future.

Finding a good architecture

A suitable architecture does a bit more than solving the problem at hand. It uses the least resources necessary, keeping in mind that foreseeable modifications can still be done with reasonable effort. As a result, the chosen architecture tries to be as solid as possible – reducing the risk of rewrites or larger changes.

Depending on the web application and requirements a modular architecture may be a good fit. Modular architectures allow you to scale development almost infinitely. In a good modular setup new teams can be onboarded without much friction. Even better, such setups allow these teams to be fully independent – keeping their processes and development autonomous.

In cases where a modular architecture seems unnecessary there are still plenty of decisions to make to obtain an ideal result. It all starts with the basic working principles of the web application. Should it be fully dynamic and work on the client in form of a so-called single-page application (SPA)?

Can it be fully static and pre-computed like a static-site generator (SSG)? Maybe the two extremes of a SPA and SSG don't fit – but a compromise like a server-side rendered (SSR) page works well.

Identifying the right technology

Having decided on the core principles – which might boil down to a flavor of SPA, SSR, and SSG – a technology to incorporate that pattern can be selected. While there are certain choices that are tuned for the chosen architecture, it makes more sense to **use something that aligns well with the experience and preferences of the development team.** In the end, most technologies can be used with any architecture.

smapiot supports you

Together with you we identify what your requirements are and which architecture makes the most sense. We derive the **right technology setup** and help you tune it to get the **best performance and scalability** behavior for your product.

With our extensive knowledge and experience we also make sure that **security best practices** are followed.

Sounds interesting? Then get in touch with us!

info@smapiot.com or book your appointment at: architecture.meet.smapiot.com