API First Design Approach

What is API First Design

It's an approach in which design started by defining all the APIs in a way that every functional requirement of your application will be met through the consumption of an API.

A website, native app or an desktop app running for internal clients , is really nothing more than a consumer of APIs.

What are the benefits

Collaboration and speed to market is the key here.

By designing your API first, you are able to start a discussion with your stakeholders (your internal team, customers, or possibly other teams within your organization who want to consume your API) well before you might have coded yourself past the point of no return.

This collaboration then allows you to build user stories, mock your API, and generate documentation that can be used to further socialize the intent and functionality of the service you're building.

All of this can be done to validate and test your direction and plans without investing too much in the plumbing that supports a given API.

Also, when your application is split into building blocks of APIs, then your system is free to grow, adapt to new load and demand, and accommodate new consumers of existing services without having to stop the world to re-architect yet another closed system.

How will it work

To put it simply, you'll design your APIs before you design anything else.

You'll start a discussion with all stakeholder to review, validate and finalize your APIs.

Once the design is finalized, you will distribute them to your back end developers and potential API consumers.

While they start working on the back of API designs, API developers will now start developing and deploying the said APIs.

End Architecture