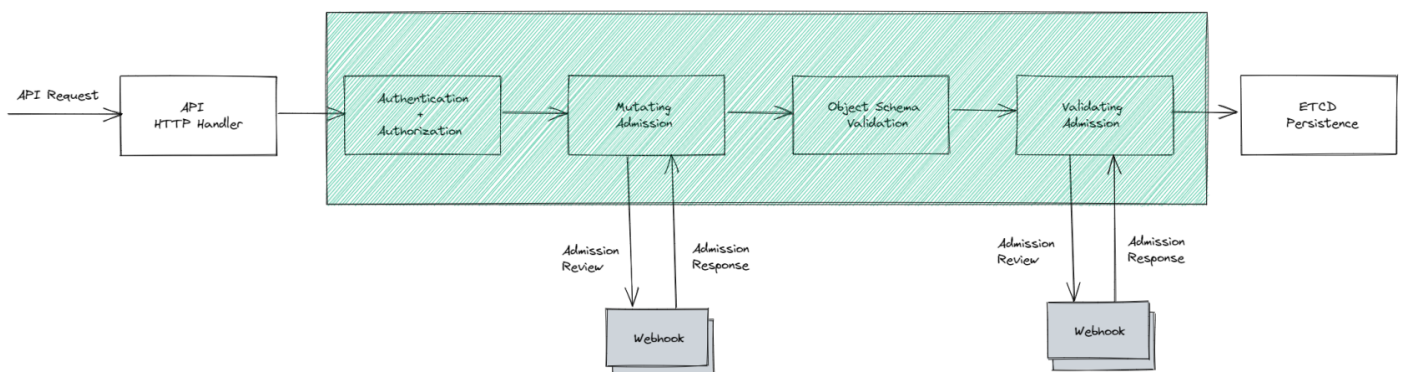# Kubernetes API

Kubernetes is an object based system - everything is managed and stored in objects, and it also provides the tools to manage those objects.

Each object contains of three parts:

1. **Metadata**: Information about the object, like its name and labels.
2. **Specification (spec)**: What you want Kubernetes to do—your "desired state." For example, "run 3 replicas of my app."
3. **Status**: What's actually happening right now—Kubernetes updates this as it works to match the current state to the desired state.

This interaction with objects happens through the Kubernetes API, which is the core interface of Kubernetes. The Kubernetes API provides a universal way for users, automation tools, and Kubernetes itself to interact with the objects stored in the system. It allows you to create, update, delete, and retrieve information about the various object resources (like Pods, Deployments, Services, etc.) within a Kubernetes cluster.