VII. Port Binding

What is a port? What is a Unix socket?

- **IP sockets** (especially TCP/IP sockets) are a mechanism allowing communication between processes over the **network**. In some cases, you can use TCP/IP sockets to talk with processes running on the same computer (by using the loopback interface, a.k.a. 127.0.0.1).
- A **Unix socket** is an **inter-process** communication mechanism that allows bidirectional data exchange between processes running on the **same machine**.

VII. Port Binding

Ports vs. Unix Sockets

- Unix domain sockets know that they're executing on the same system, so they can avoid some checks and operations (like routing); which makes them faster and lighter than IP sockets.
- If you plan to communicate with processes on the **same host**, this is a better option than **IP sockets**.
- This requires adding a webserver library to the app by using dependency declaration, such as Tornado for Python, Thin for Ruby, or Jetty for Java and other JVM-based languages to create a port-bound IP/port-facing service.