**Common Pressures**

The most important job for a web app is to provide the end user with a reliable, useful, and correct experience.

**Most Important Requirement for the Web Application**

**Performance:** If your website is too slow, you’ll (obviously) lose users. In this chapter we’ll look at how patterns can help an individual user experience faster **response time,** and how patterns can help you system support a greater number of simultaneous users (**throughput).**

**Modularity:** In order for different pieces of your application to run on different boxes at the same time, your software is going to have to be modular… and modular in *just the right ways.*

**Flexibility, Maintainability,** and **Extensibility**

**Flexibility:** You need to change your system without going through some big development cycle. You might need to swap in the “limited time, special offer” components for a big sale. You might find a bug in a new component and need to swap in the older component temporarily. You need your system to be flexible.

**Maintainability:** You might need to change database vendors, and update your system quickly. You might get obscure bugs and need to track them down ASAP. The admin might decide to restructure the company’s naming service, and you’ll have to adjust – **right now.** You need your system to be maintainable.

**Extensibility:** The guys over in marketing might need a new feature to land that big client. Your users might demand that you support a brand new feature that their browsers have. Your system had better be extensible!