REST
REST Architectural Style

- It is an architectural style and not a standard
- Originally proposed by Roy Fielding who originally co-authored HTTP specifications
- JSR 311 JAX-RS implementation
**REST Characteristics**

- **Client-Server**: a pull-based interaction style

- **Stateless**: each request from client to server must contain all the information necessary to understand the request, and cannot take advantage of any stored context on the server.

- **Cache**: to improve network efficiency responses must be capable of being labeled as cacheable or non-cacheable.

- **Uniform interface**: all resources are accessed with a generic interface (e.g., HTTP GET, POST, PUT, DELETE).

- **Named resources**: the system is comprised of resources which are named using a URL.

- **Interconnected resource representations**: the representations of the resources are interconnected using URLs, thereby enabling a client to progress from one state to another.

- **Layered components**: intermediaries, such as proxy servers, cache servers, gateways, etc, can be inserted between clients and resources to support performance, security, etc.

(Courtesy: Roger L. Costello)