Spring Bootcamp Day One Topics and Goals

# Topics

* What is a Rest Service?
  + SOAP and older web services.
  + Representational state transfer (IE goblty gook)
  + CRUD Operations
    - Create = POST
    - Read = GET
    - Update = PUT
    - Delete = DELETE
* What Is a Micro Service?
* MVC
  + Model
  + View
  + Controller
* Layered Software Design (Lasagna Code)
  + Controller Layer
  + Service Layer
  + DAO Layer
  + Controller <-> Service uses DTO’s
    - DTO = Data Transfer object
    - DAO = Data Access object
  + Service <-> DAO uses Entities or DAO’s
* Spring
  + IOC
    - Reflection
  + Start.spring.io (see related create initial spring project with Spring IO documentation TBC)
  + @RestController
  + @ResourceMapping
  + @RequestParam
* Advice: Taking Small Bites
* Logging with Logback
  + Private static final LOG Logger = LoggerFactory.getLogger(ThisObject.class)
  + Parameterized Logging statements with {}

Additional Reading:

Martin Fowler on Micro Services : <https://martinfowler.com/articles/microservices.html>

Understanding soap and rest: <https://smartbear.com/blog/test-and-monitor/understanding-soap-and-rest-basics/>

Building Restful web services with spring : <https://spring.io/guides/gs/rest-service/>

# Goals

* Get Through Content Above
* Get Jenkins running locally and ready to hit
* Get initial project created with start.spring.io
* Get initial project imported into IDE and on git hub.
* Simple GET/POST request working
* Setup Rest Template for Jenkins access
* Get the simple job runner going

## Hints

* Rest Template is a dead simple spring rest abstraction to be able to call rest services from your code. <https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/web/client/RestTemplate.html>