SPRING FRAMEWORK GURU

Richardson Maturity Model

Steps Towards the Glory of REST

Richardson Maturity Model (RMM)

- Established by Leonard Richardson in a 2008 Q-Con Presentation

- A model used to describe the maturity of RESTful services

- Unlike SOAP, there is no formal specification for REST

- RMM is used to describe the quality of the RESTful service

RMM Levels

Level 3: Hypermedia Controls

Level 2: HTTP Verbs

Level 1: Resources

Level 0: The Swap of POX

Core Technologies

HYPERMEDIA

HTTP

URI

Level 0: Swamp of POX

- POX - Plain Old XML

- Uses implementing protocol as a transport protocol

- Typically uses one URI and one kind of method

- Examples - RPC, SOAP, XML-RPC

Level 1: Resources

- Uses Multiple URIs to identify specific resources

- Examples:

  - http://www.example.com/product/1234

  - http://www.example.com/product/5687

- Still uses a single method (ie GET)

Level 2: HTTP Verbs

- HTTP Verbs are used with URIs for desired actions

- Examples:

  - GET /products/1234 - to return data for product 1234

  - PUT /products/1234 (with XML body) to update data for product 1234

  - DELETE /products/1234 to delete product 1234

- Most common in practical use

Level 3: Hypermedia

- Representation now contains URIs which may be useful to consumers

- Helps client developers explore the resource

- No clear standard at this time

- Spring provides an implementation of HATEOS

Summary

- Level 1 - breaks large service into distinct URIs

- Level 2 - Introduces Verbs to implement actions

- Level 3 - provides discoverability, making the API more self documenting

SPRING FRAMEWORK GURU