

Customizing REST Payloads



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Spring Data REST Projections



```
public class Model {  
    @Id  
    @GeneratedValue(strategy=GenerationType.AUTO)  
    private Long id;  
  
    private String name;  
    private BigDecimal price;  
    private String woodType;  
    private Date yearFirstMade;  
    private ModelType modelType;  
  
    @ManyToOne  
    @JoinColumn(name="MODELTYPE_ID")  
    private ModelType modelType;  
}
```

Creating a Projection

Fender

American Stratocaster

\$1000.00

Guitar Specs

Type

Electric

Frets

22

Wood Type

Maple, Alder, Ash, Popular

```
@Projection(name="modelDetail", types={Model.class})
public interface ModelDetail {
    String getName();
    String getPrice();
    Manufacturer getManufacturer()
    ...
}
```



Interfaces go in model or entity package or sub-package

Projections: Pros and Cons

Cons

Read only

Clients can ignore them

Not a service layer

Pros

Customizable payloads

Buffers entity changes

Minimal coding

Jackson Payload Options

Jackson JSON Parser

<https://github.com/FasterXML/jackson>

```
@Entity
public class User {
    private String username;
    @JsonIgnore
    private String password;
}
```

```
@Configuration
public class SpringDataRestConfiguration extends RepositoryRestMvcConfiguration {
    @Override
    protected void configureJacksonObjectMapper(ObjectMapper objectMapper) {
        super.configureJacksonObjectMapper(objectMapper);
        objectMapper.setPropertyNamingStrategy(new FirstLetterCapsStrategy());
        objectMapper.setDateFormat(new ISO8601DateFormat());
    }
}
```

Summary

```
{
  "firstName": "John",
  "lastName": "Smith",
  "isAlive": true,
  "age": 25,
  "address": {
    "streetAddress": "21 2nd Street",
    "city": "New York",
    "state": "NY",
    "postalCode": "10021-3100"
  },
  "phoneNumbers": [
    {
      "type": "home",
      "number": "212 555-1234"
    },
    {
      "type": "office",
      "number": "646 555-4567"
    }
  ],
  "children": [],
  "spouse": null
}
```

Projections

Virtual/View projections

Projection excerpts

Projection pros and cons

Jackson JSON parser