

# RESTful API Design – Notes

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## Modelling

Modelling steps	Modelling rules
Identify all the participants and their roles Discover their activities Break into steps Create API definitions Validate your API	Don't worry about tools Have a consistent process Write down understandings

## Mapping activities to Nouns and Verbs – Life cycle

Products-portal ( <i>noun</i> )	
Activity	Noun/verb Mapping
List items	GET /items
View items	GET /items/:id
Search items	GET /items?search=something
Add items	POST /items/
Edit items	PUT /items/:id

Cart ( <i>noun</i> )	
Activity	Noun/verb Mapping
Add item	POST carts/:id/items/:id
Remove item	DELETE carts/:id/items/:id
Clear cart	DELETE /carts/:id
View cart	GET /carts/:id
Checkout	POST carts/:id/checkout

Order ( <i>noun</i> )	
Activity	Noun/verb Mapping
List order for customer	GET /orders/:id
Obtain order status	GET /orders/:id
Cancel order	DELETE /orders/:id

Customer ( <i>noun</i> )	
Activity	Noun/verb Mapping
Search for customer	GET /customers/:id
View customer	GET /customers/:id
Add customer	POST /customers

## Designing relationships – THREE types

**Independent:** When resources can be accessed independently.

**Dependent:** where one resource cannot exist without the parent, example: order-customer.

**Associative:** the resources with associative relationship might exist independent, but their relations also gives new properties. They can be combined to make a new resource.

## HTTP response codes

2xx	3xx	4xx
<b>200</b> ok	<b>301</b> moved permanently	<b>400</b> bad request
<b>201</b> created	<b>302</b> moved temporarily	<b>401</b> authentication required
<b>202</b> accepted		<b>403</b> forbidden
<b>204</b> no content		<b>404</b> not found

### Content type

Content-type: application/json; charset=utf-8

### Limiting the requests against the API

X-rateLimit-Limit: 200

X-rateLimit-Remaining: 155

X-rateLimit-Reset: 6584256374