

A photograph of a street scene. In the foreground, a road leads towards a bridge. A large orange banner is stretched across the top of the frame, with the text "IF YOU HIT THIS SIGN, YOU WILL HIT THAT BRIDGE" written in black capital letters. In the background, there is a brick building with a gabled roof and a brick wall. A utility pole is visible on the left side of the road.

IF YOU HIT THIS SIGN,
YOU WILL HIT THAT BRIDGE

Hypermedia controls

Arnaud Lauret, AXA Banque
@apihandyman

GET /accounts/C1

```
{  
  "id": "C1",  
  "balance": <how much money I have>,  
  "actions": <hypermedia controls>  
  [  
    { "name": "transfer",  
      "method": "POST",  
      "href": "https://bank.com/transfers"}  
  ]  
}
```

**Different ways to fill the set of
hypermedia controls**

#1

**Takeshi's Castle's
Knock knock**

Balance **-200**

Transfer 100

403 Forbidden

{

 “code”: 1012,

 “message”: “Insufficient
balance.”

}



Balance **20000**

Transfer 100

503 Service unavailable

{

“code”: 1214,

“message”: “No
transfer between 1am
and 2am.”

}



What you can possibly do

- Poor end user experience
 - Waste of time
- Poor developer experience
 - Unnecessary API calls
 - Consumer side business logic

#2

**This is bowling.
There are rules.**


```
GET /accounts/C1
```

```
{  
  "id": "C1",  
  "balance": -200,  
  "actions": []  
}
```



```
GET /accounts/C1
```

```
{
```

```
  "id": "C1",
```

```
  "balance": 20000,
```

```
  "actions": []
```

```
}
```



What you can actually do

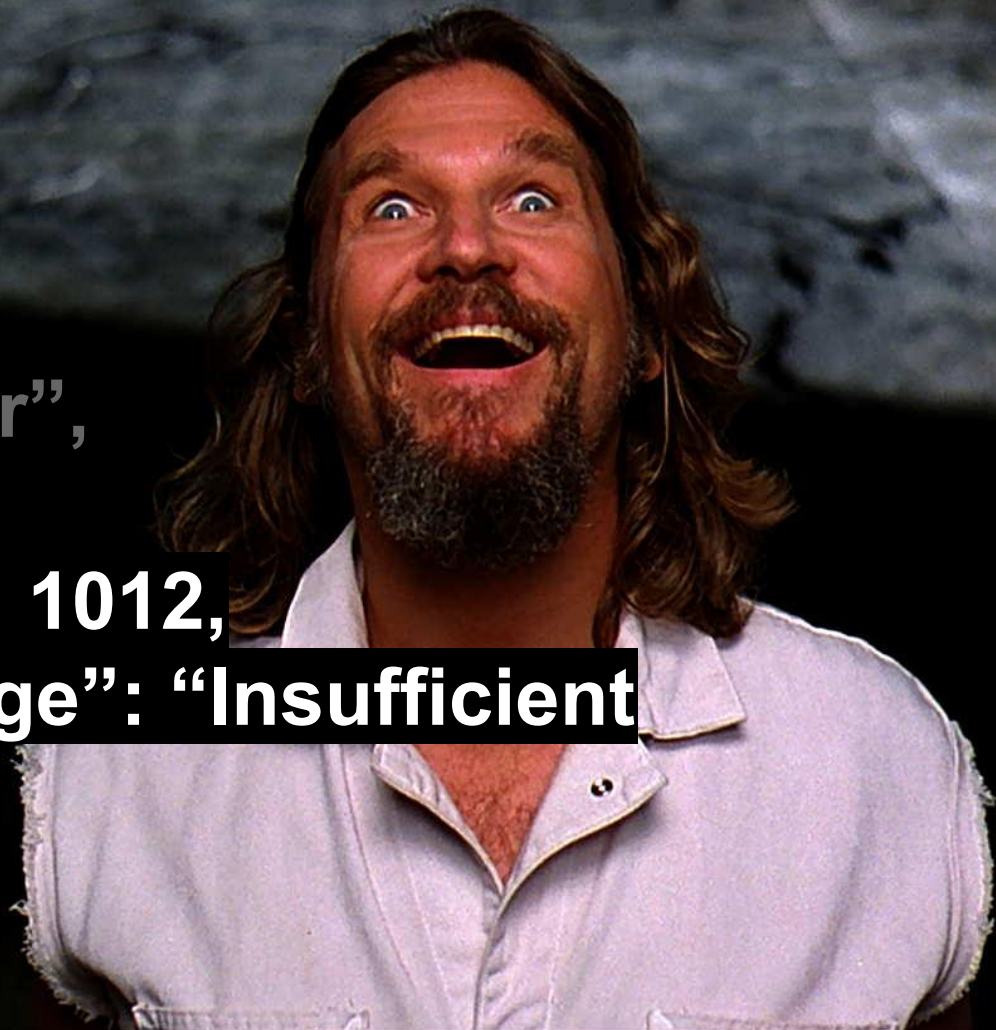
- Poor end user experience
 - Frustration
- Poor developer experience
 - Consumer side business logic

#3

The Dude abides

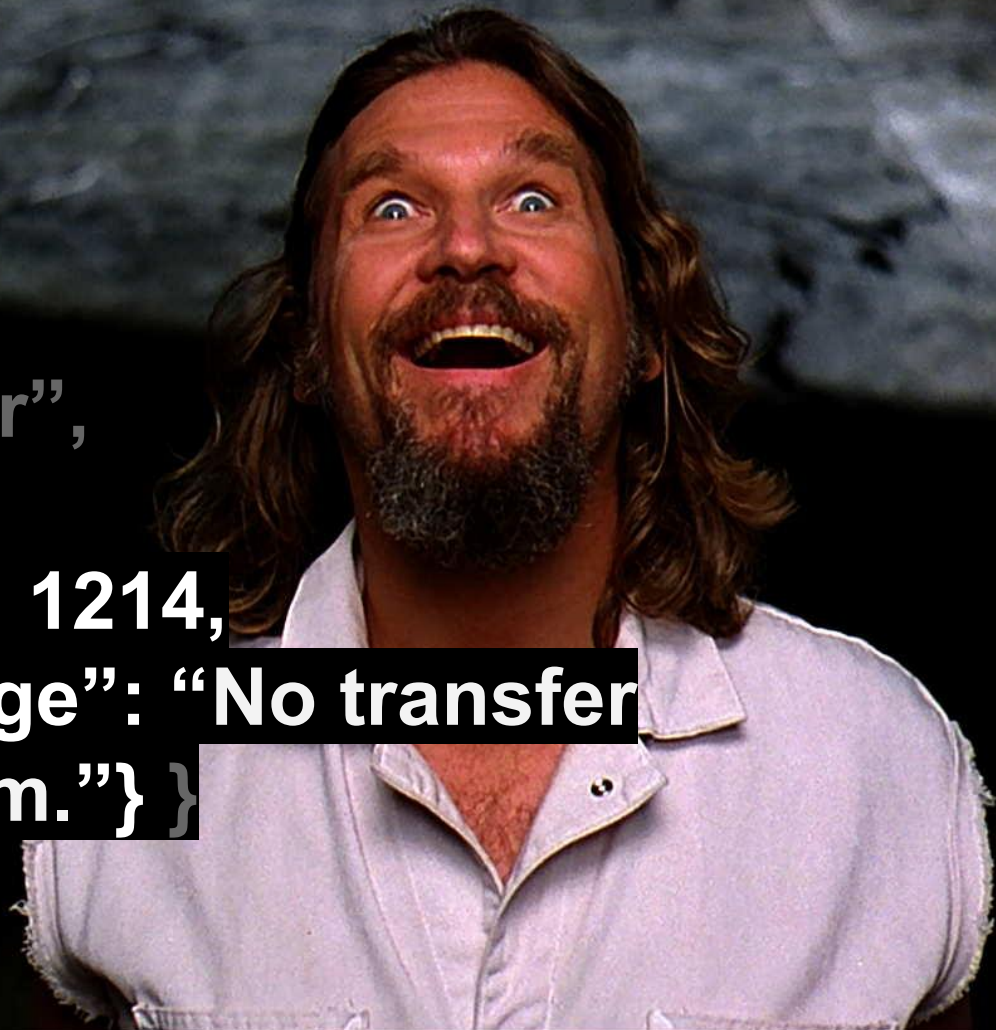
```
GET /accounts/C1
```

```
{ "id": "C1",  
  "balance": -200,  
  "actions":  
  [  
    { "name": "transfer",  
      "status": 403,  
      "error": { "code": 1012,  
                 "message": "Insufficient  
balance."} }  
  ]  
}
```



```
GET /accounts/C1
```

```
{  "id": "C1",  
  "balance": 20000,  
  "actions":  
  [  
    { "name": "transfer",  
      "status": 503,  
      "error": { "code": 1214,  
                 "message": "No transfer  
between 1am and 2am." } }  
  ]  
}
```



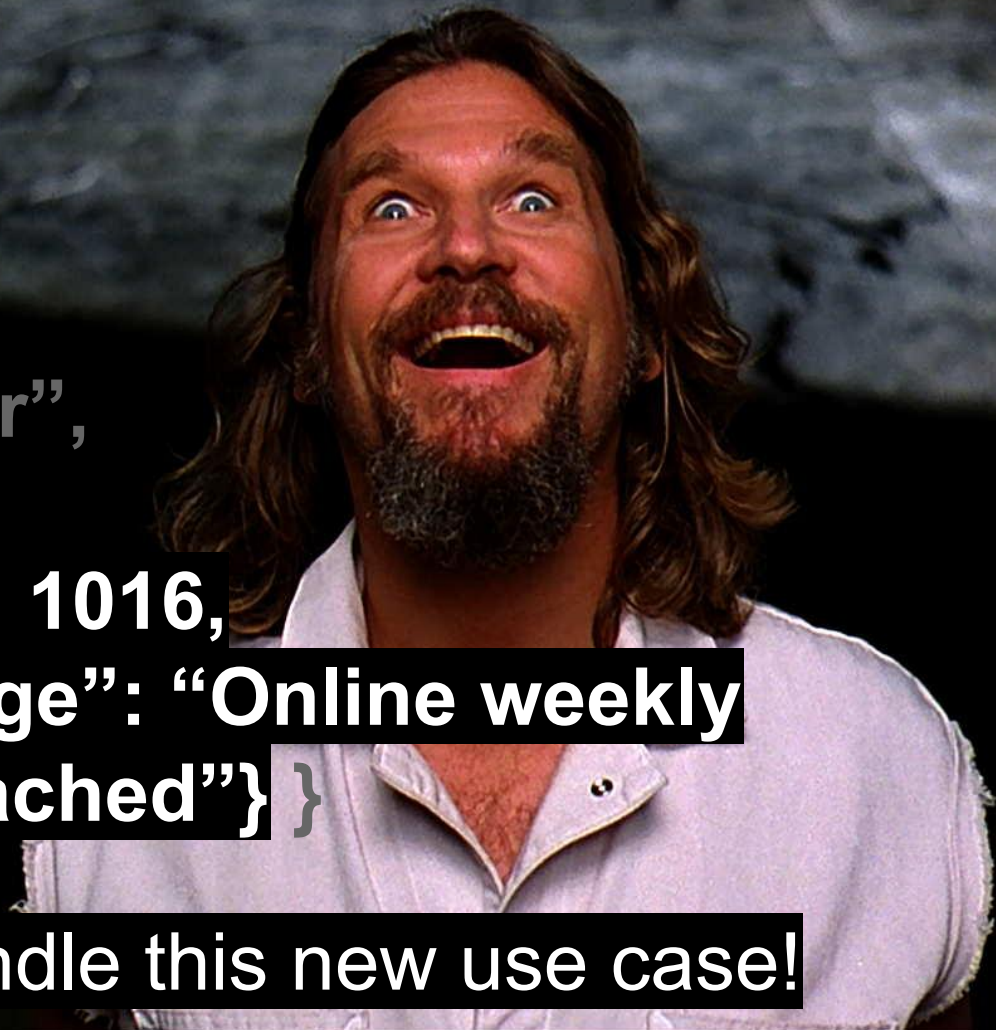
What you can do or not and why

- Good end user experience
 - No more waste of time
 - No more frustration
- Good developer experience
 - No more unnecessary API calls
 - No more consumer side business logic
 - And ...

```
GET /accounts/C1
```

```
{ "id": "C1",  
  "balance": 20000,  
  "actions":  
  [  
    { "name": "transfer",  
      "status": 403,  
      "error": { "code": 1016,  
                 "message": "Online weekly  
wire transfer limit reached"} }  
  ]  
}
```

Nothing to do to handle this new use case!



Thanks

