# Hypermedia controls

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@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”: [ ]
}
```

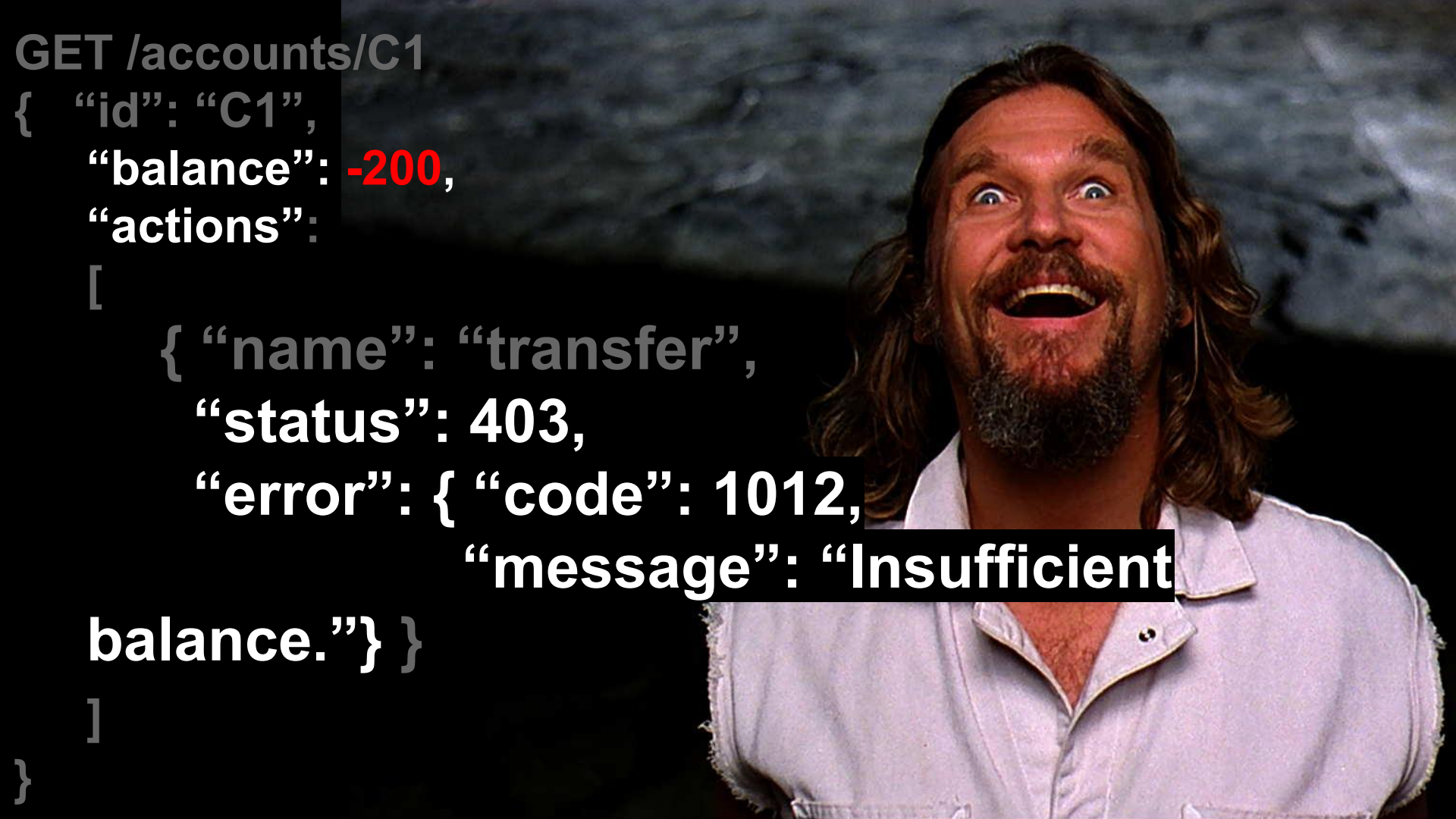
GET /accounts/C1

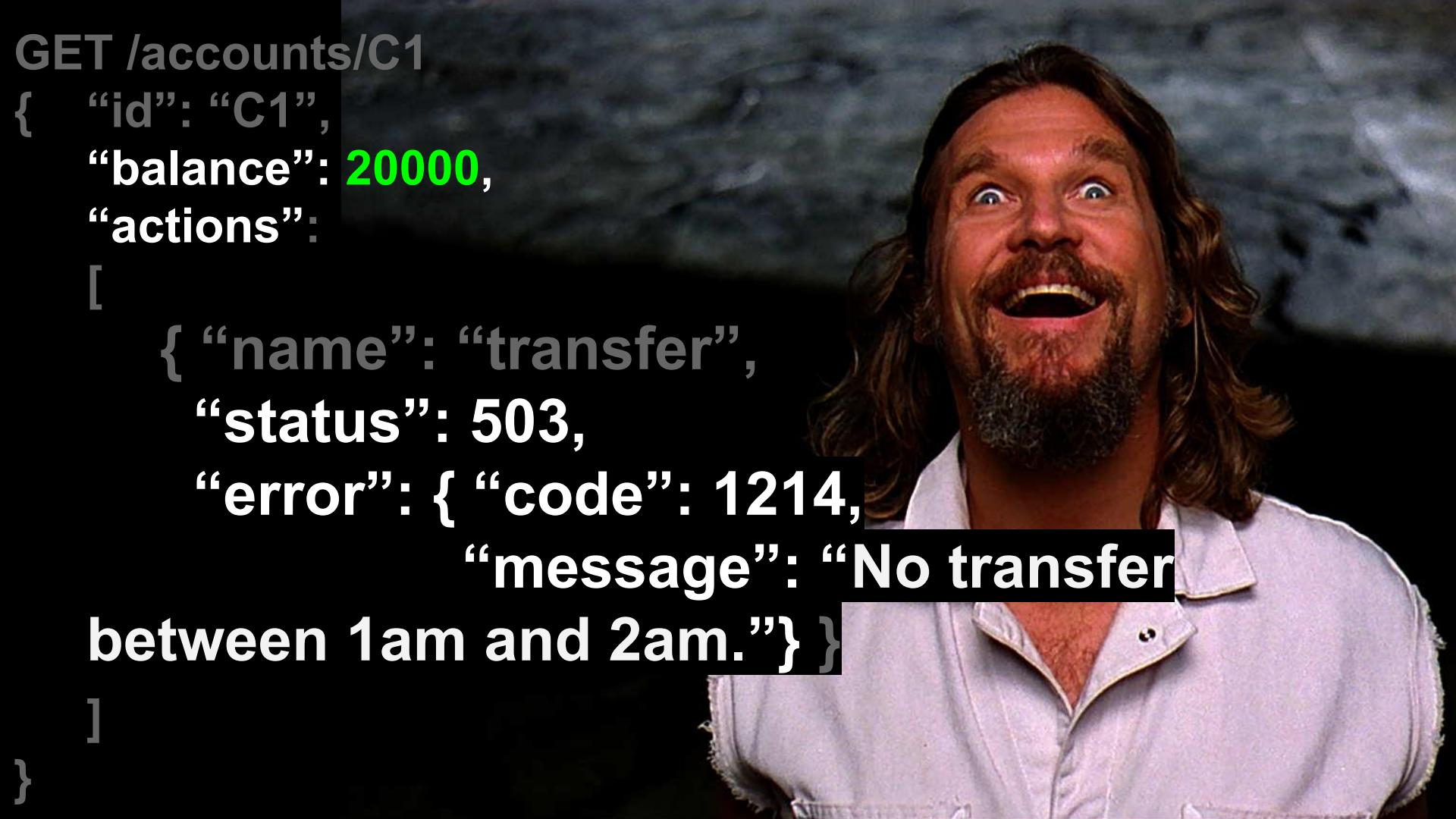
```
{
    “id”: “C1”,
    “balance”: 20000,
    “actions”: [ ]
}
```

# What you can actually do

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

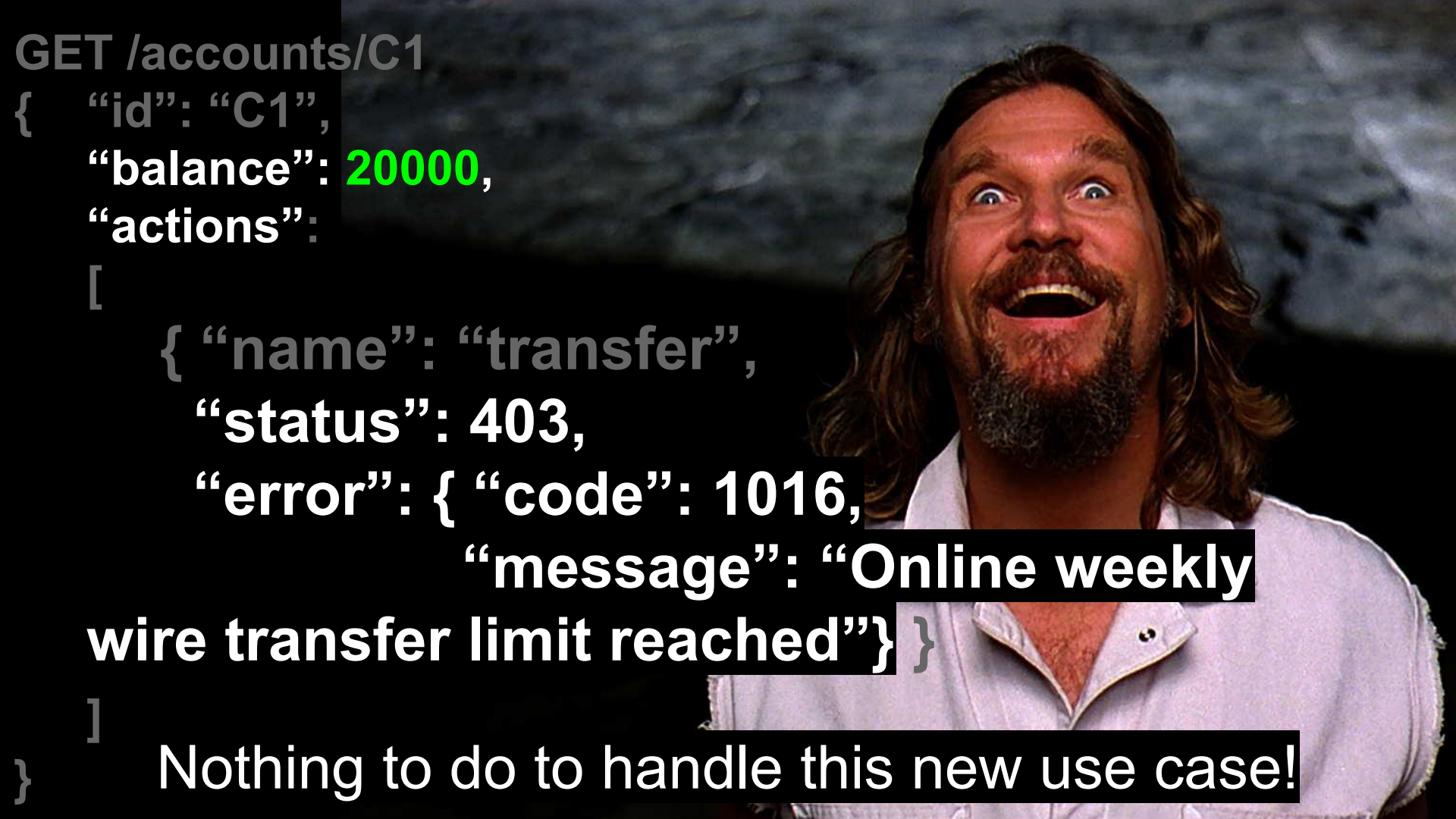
# #3
# The Dude abides


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