

# OPENAPI TREK

# BEYOND API DOCUMENTATION

STARRING  
**ARNAUD**  
**LAURET** AS  
@APIHANDYMAN

ALSO STARRING

APISTYLEBOOK.COM

ALMOST  
**BASED ON A TRUE STORY**



# "THE DOOMSDAY DOCUMENTATION"

A close-up photograph of Captain Kirk from Star Trek. He is wearing his iconic lime-green starfleet uniform. He is holding a tricorder in his hands, which is a handheld device used for scientific analysis. He has a serious, focused expression on his face. A white speech bubble originates from his mouth, containing the text.

BEAM ME A NEW  
APP, SCOTTY!



BUT REUSE  
EXISTING API!

A scene from Star Trek: The Original Series. Spock, in his blue uniform, is holding a long, thin, metallic device and looking at it with a thoughtful expression. Mr. Scott, in his red uniform, is standing across from him, looking back. A speech bubble originates from Spock's head, containing the text.

WHAT DO YOU  
NEED TO REUSE THIS  
API, MR SCOTT?

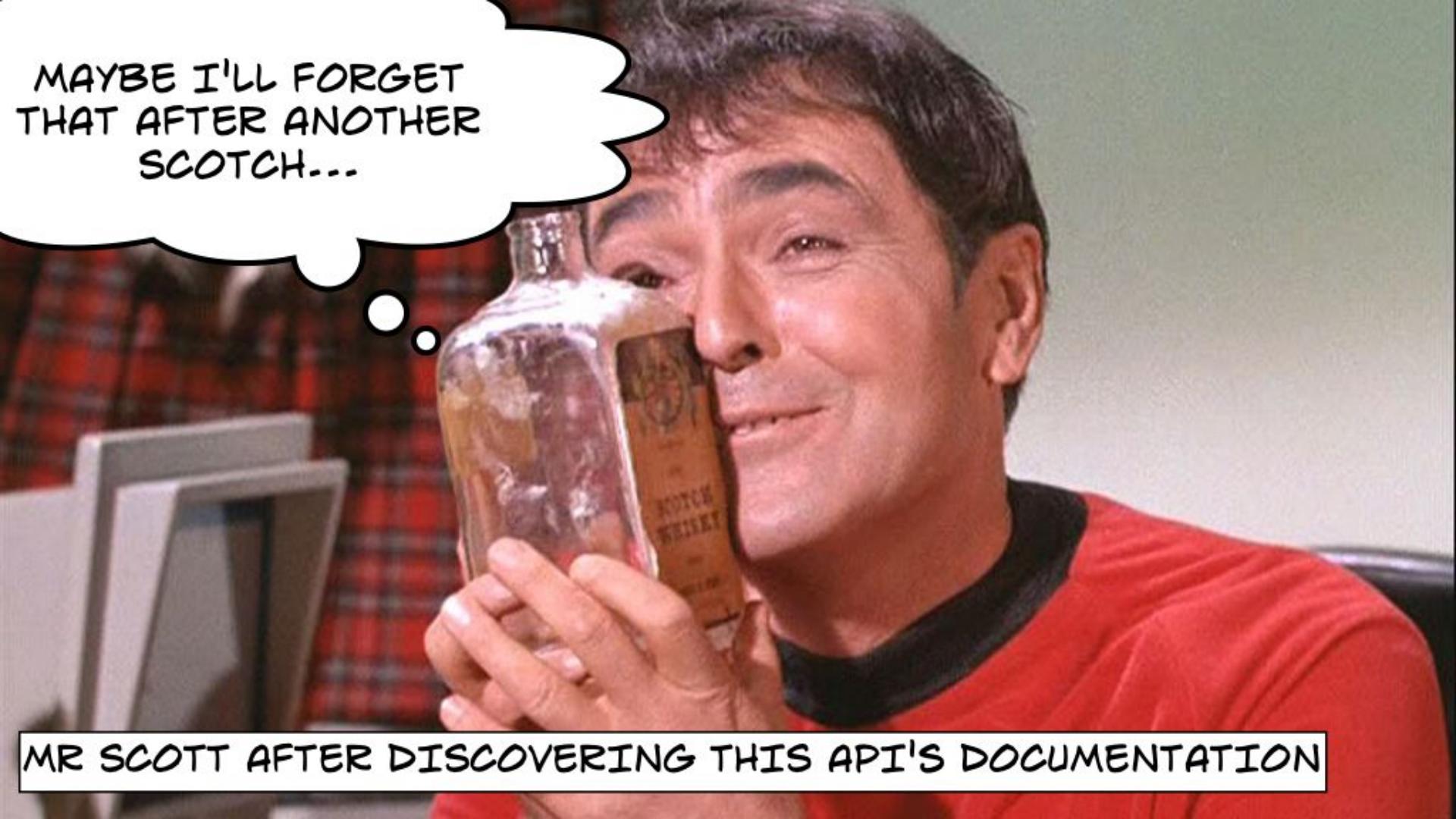


I NEED ITS  
DOCUMENTATION,  
MR SPOCK



THE BEST API THAT I  
KNOWN IS A FULLY  
DOCUMENTED ONE!

MR SCOTT ABOUT TO DISCOVER THIS API'S DOCUMENTATION



MAYBE I'LL FORGET  
THAT AFTER ANOTHER  
SCOTCH...

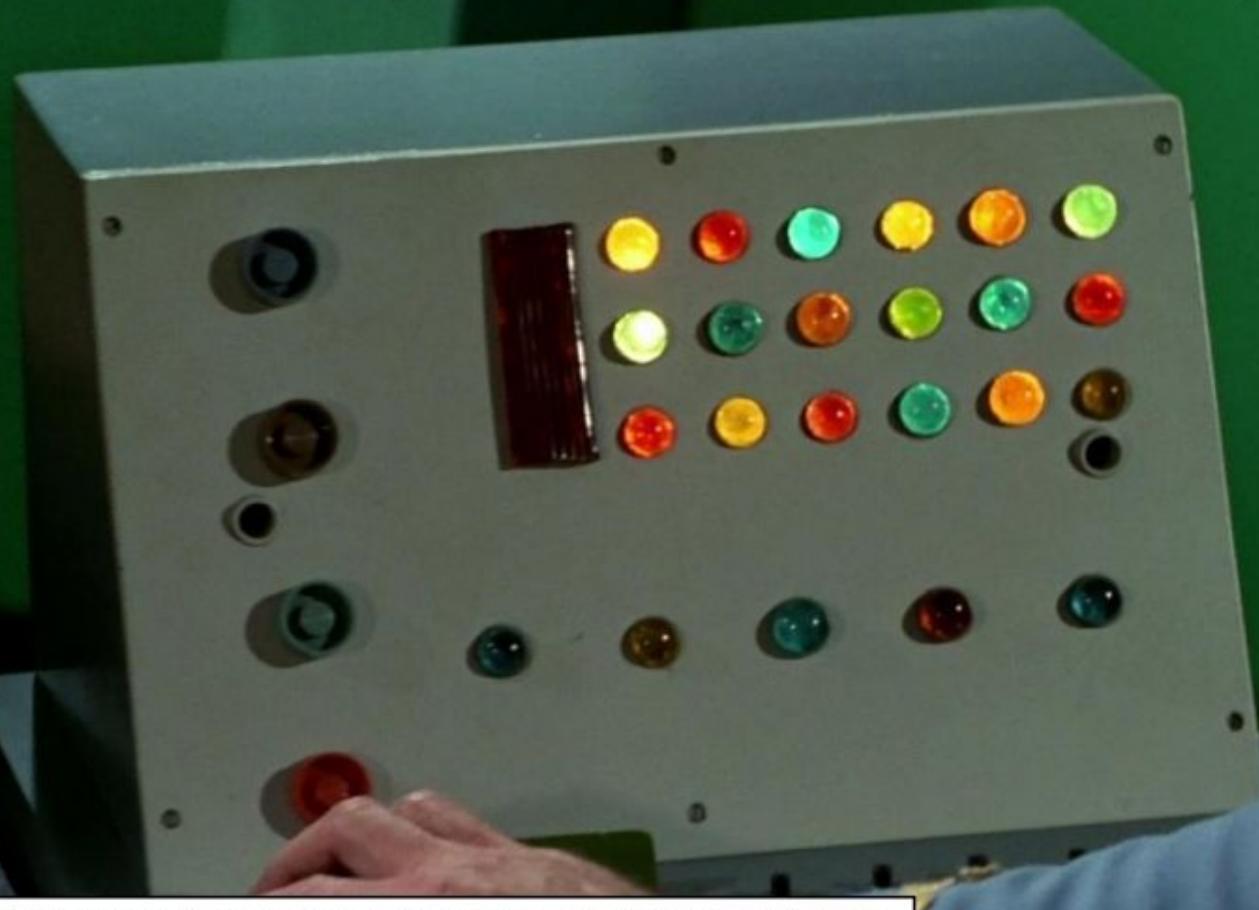
MR SCOTT AFTER DISCOVERING THIS API'S DOCUMENTATION

A classic scene from Star Trek: The Original Series. Captain Kirk (William Shatner) is in the foreground on the left, looking towards the right. Mr. Sulu (George Takei) is in the foreground on the right, looking towards the center. In the background, a group of crew members in gold uniforms are standing in a hallway. A white speech bubble originates from Mr. Sulu's position, containing the text.

ENGAGE, MR SULU.  
API AT VERSION 2

A Star Trek character in a red uniform, likely Captain Kirk, stands with hands on hips. A speech bubble originates from his head, containing the text.

BUT THIS  
TIME WE'LL DO  
DOCUMENTATION  
SERIOUSLY!



DOCUMENTATION GENERATED FROM CODE

THIS IS  
SWAGGER UI  
KEPTIN.

Fleet

GET

/starships

Show/Hide | List Operations | Expand Operations

Gets all starships

Implementation Notes

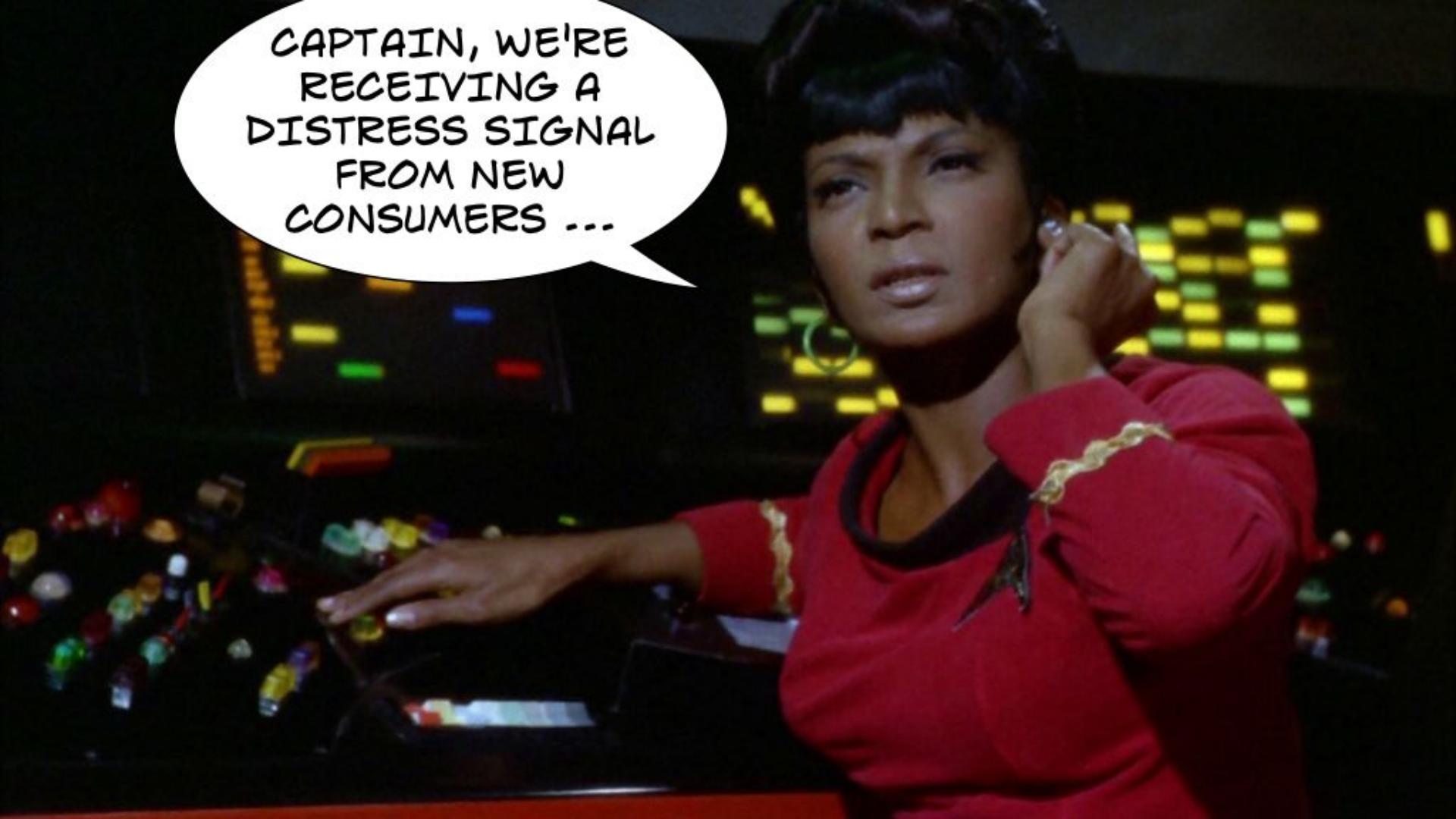
The fleet

Response Class (Status 200)

A list of starships

Model Example Value

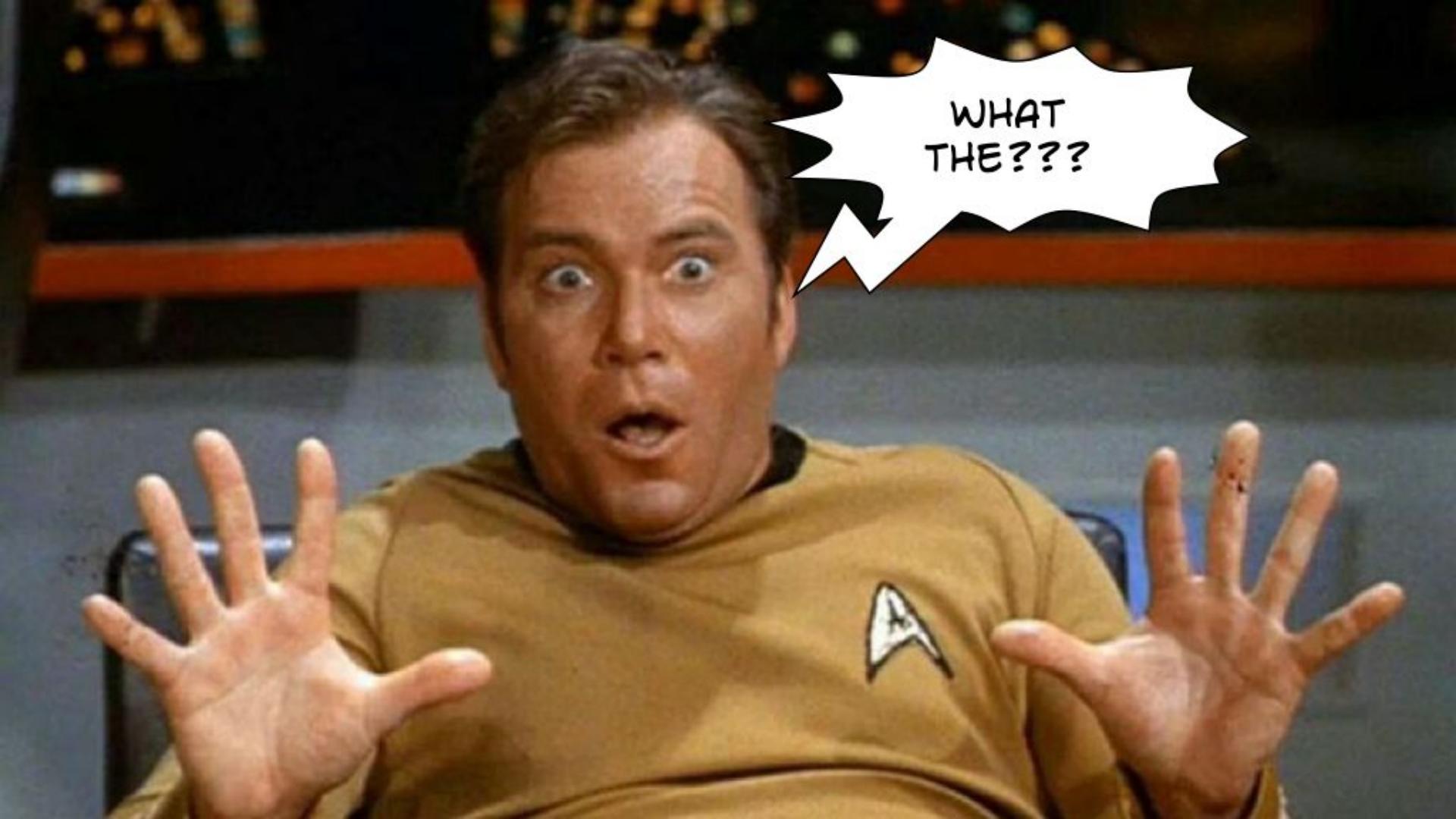
```
[  
  {  
    "class": "Constitution",  
    "code": "NCC-1701",  
    "name": "Enterprise"  
  }  
]
```



CAPTAIN, WE'RE RECEIVING A DISTRESS SIGNAL FROM NEW CONSUMERS ...

... THEY NEED  
DOCUMENTATION

PUT GENERATED  
DOCUMENTATION ON SCREEN  
BEFORE TRANSMITTING, LT.  
UHURA



WHAT  
THE???



THIS  
DOCUMENTATION  
IS HIGHLY  
ILLOGICAL

CAN WE UPDATE  
THE GENERATED  
DOCUMENTATION?



IMPOSSIBLE  
IN SUCH A SHORT TIME  
CAPTAIN!



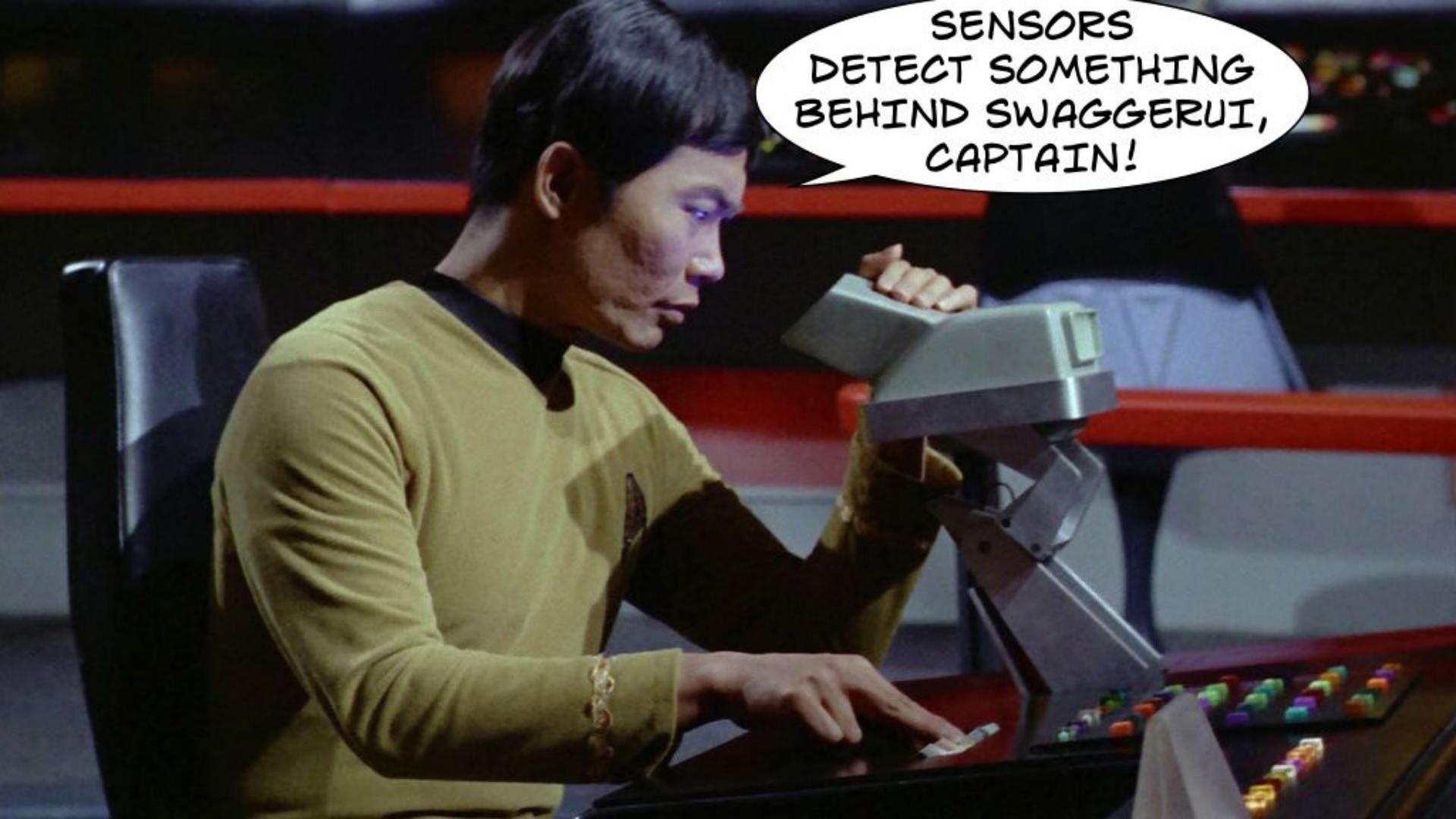
**TO BE CONTINUED...**

USS CONSTELLATION  
NCC-1017

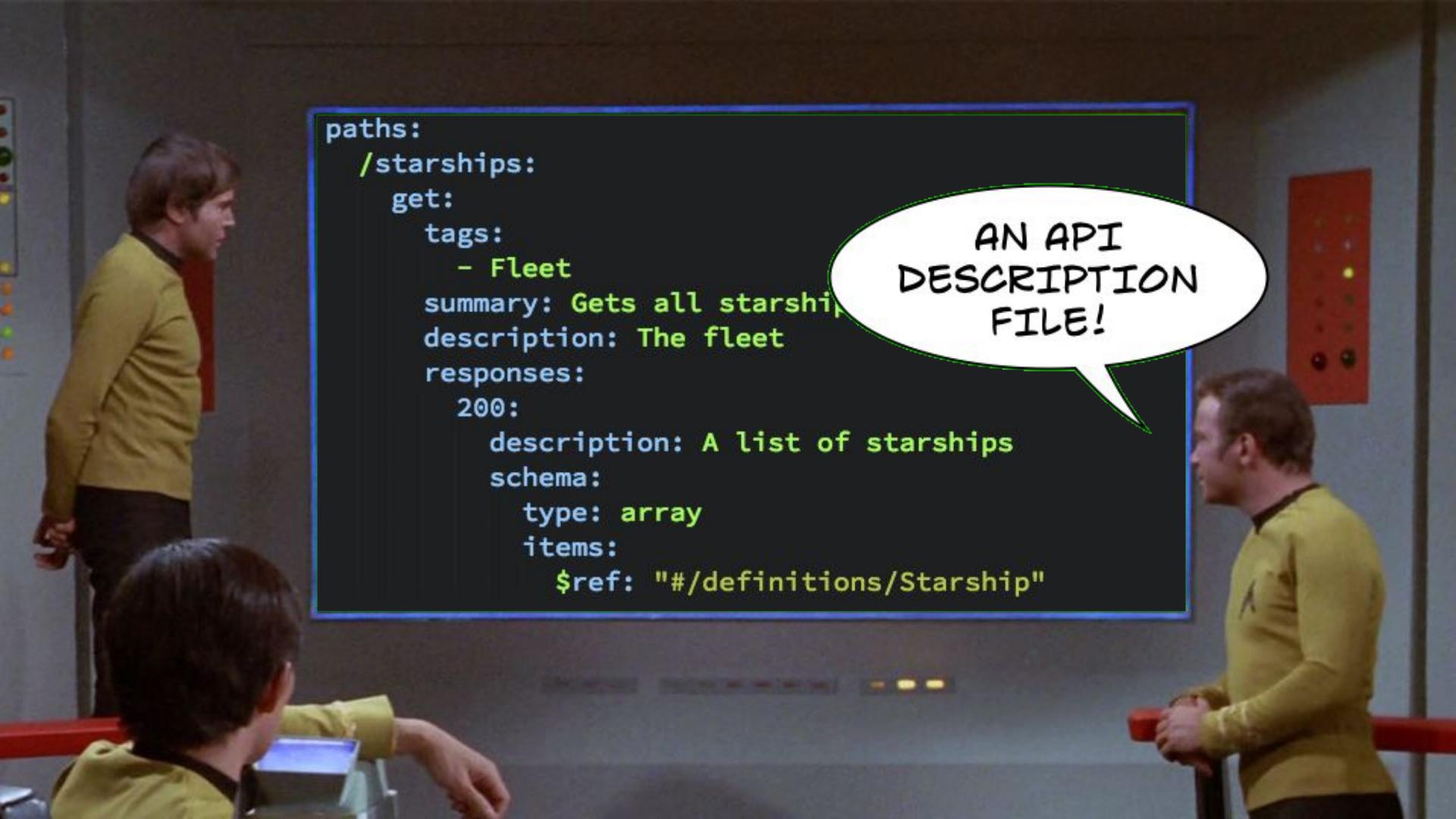
WHAT WILL HAPPEN TO THE OPENAPI STARSHIP?



**"THE OPENAPI  
MANEUVER"**

A Star Trek character, likely Mr. Scott, is shown from the side, wearing a yellow long-sleeved shirt over a dark undershirt. He is holding a grey tricorder device, which is a handheld scientific instrument used for scanning and detecting anomalies. He is looking down at the device, possibly operating it or examining its readings. The background shows the interior of a starship's control room with red and grey paneling.

SENSORS  
DETECT SOMETHING  
BEHIND SWAGGERUI,  
CAPTAIN!

A scene from Star Trek: The Original Series. In the foreground, the backs of two crew members in yellow uniforms are visible. In the center, a large screen displays a portion of an API description file. A speech bubble originates from the screen, containing the text "AN API DESCRIPTION FILE!"

```
paths:
  /starships:
    get:
      tags:
        - Fleet
      summary: Gets all starships
      description: The fleet
      responses:
        200:
          description: A list of starships
          schema:
            type: array
            items:
              $ref: "#/definitions/Starship"
```

AN API  
DESCRIPTION  
FILE!



OPENAPI FILES CAN BE WRITTEN BY HUMANS, VULCANS, KLINGONS



AND EVEN GORNS



The OAI is focused on creating, evolving and promoting a vendor neutral API Description Format based on the Swagger Specification.



apiary



Save



STARDATE 2015.11

A close-up of Mr. Spock from Star Trek, looking thoughtful with his hand to his chin. Three white thought bubbles emanate from his head, containing text. The background is dark and out of focus.

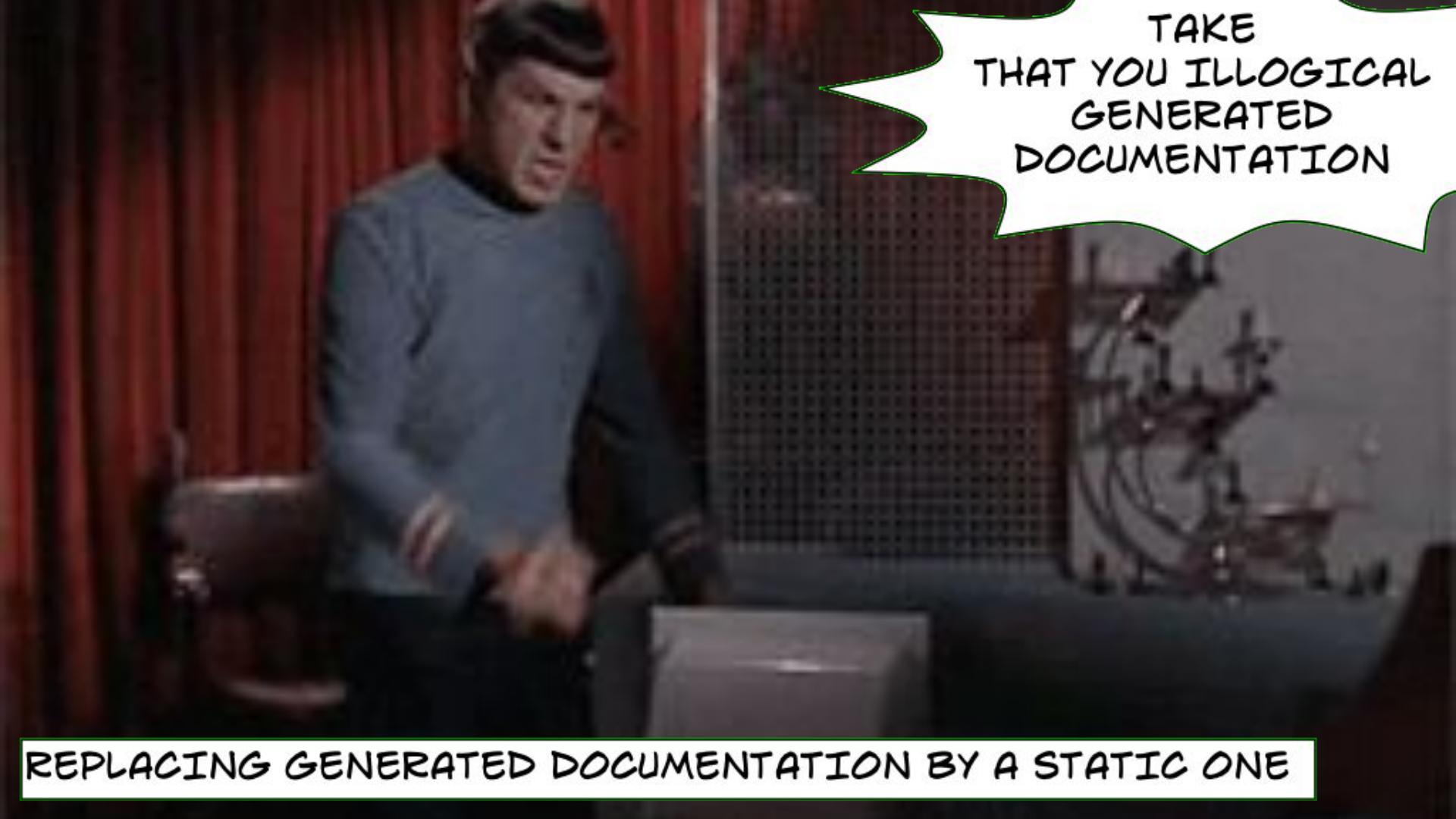
CREATED BY  
HUMANS...

USED BY  
MACHINES...

FASCINATING



**AWESOME!!!!**



TAKE  
THAT YOU ILLOGICAL  
GENERATED  
DOCUMENTATION

REPLACING GENERATED DOCUMENTATION BY A STATIC ONE



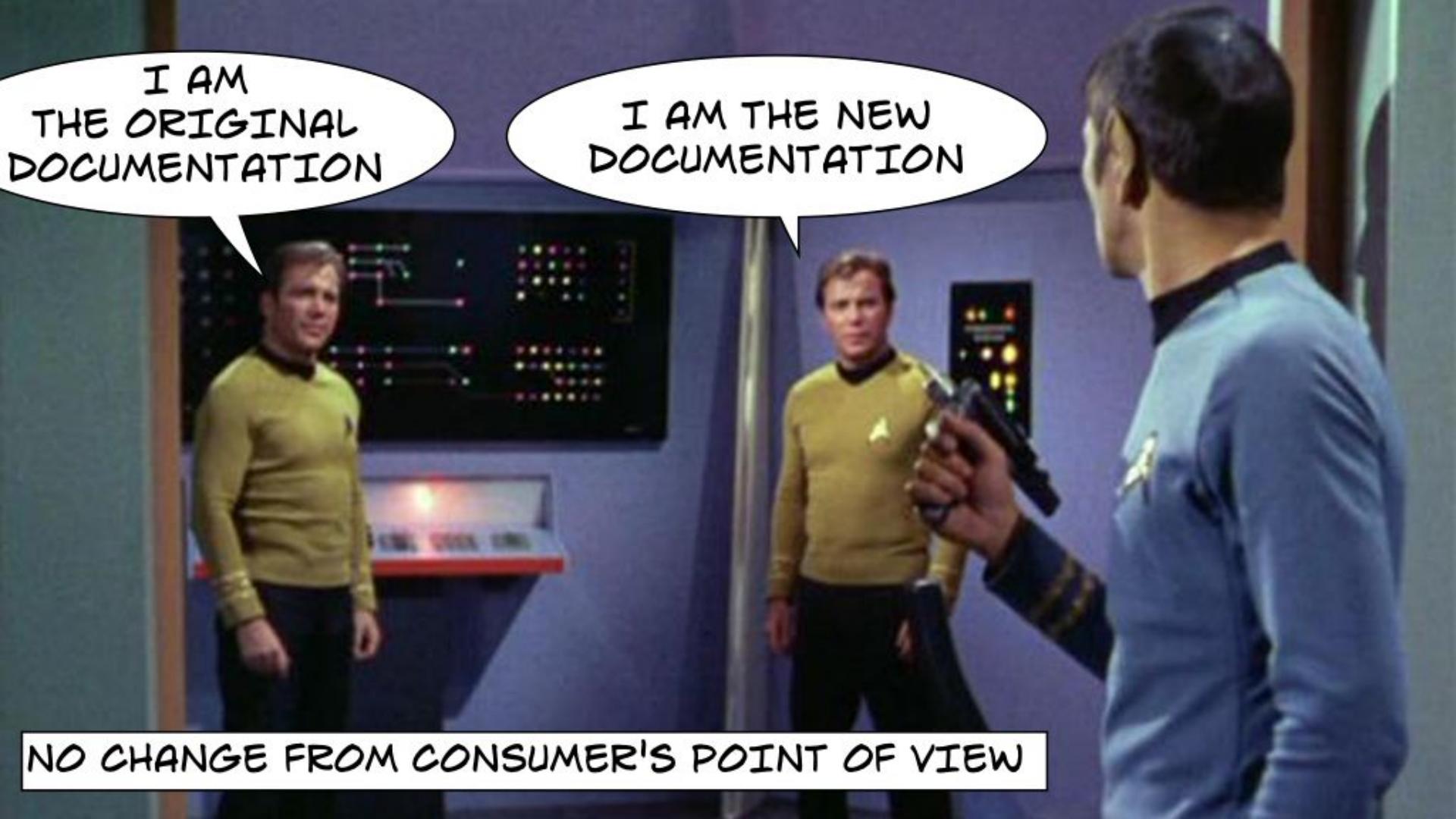
TAKE THAT YOU  
ILLOGICAL ISSUE

FIXING TECHNICAL ISSUES WITH NODEJS MODULE

A group of Star Trek crew members in their respective uniforms are dancing in a hallway. Mr. Spock (blue shirt) and Mr. Scott (red shirt) are on the left, clapping. Captain Kirk (yellow shirt) is in the center, jumping joyfully with one arm raised. Uhura (red dress) is on the right, clapping. The background shows the metallic walls of the ship's corridor.

IT WAS SO EAZY!  
I VANT TO UZE ZIS FORMAT  
EVEN MORE

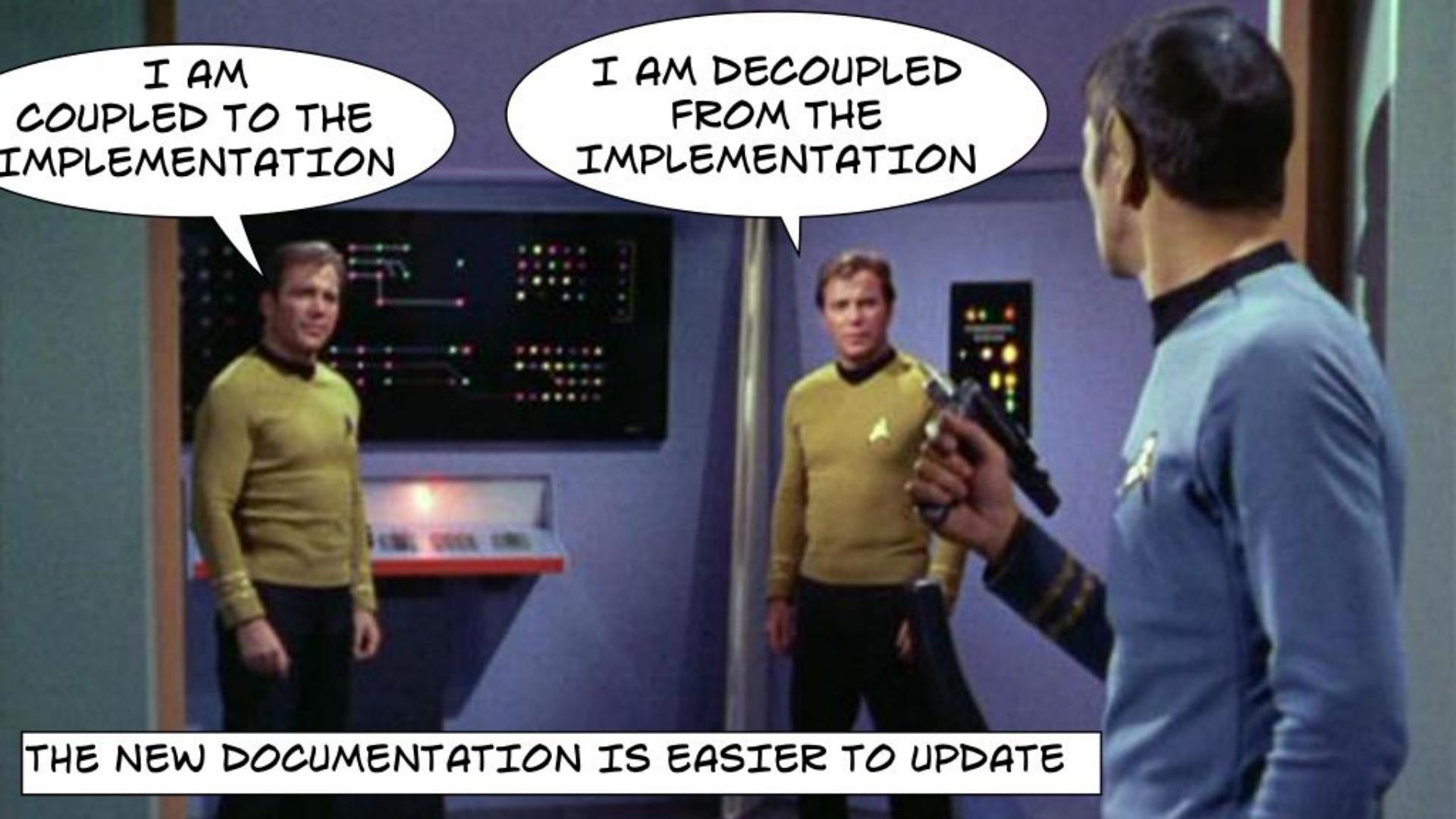
OPENAPI FILES ARE EASY TO PROCESS

A scene from Star Trek: The Original Series. On the left, Mr. Spock (Leonard Nimoy) in a yellow shirt stands in a hallway. On the right, Captain Kirk (William Shatner) in a blue shirt holds a phaser. Two speech bubbles are overlaid on the image. The first bubble, on the left, contains the text "I AM THE ORIGINAL DOCUMENTATION". The second bubble, on the right, contains the text "I AM THE NEW DOCUMENTATION".

I AM  
THE ORIGINAL  
DOCUMENTATION

I AM THE NEW  
DOCUMENTATION

NO CHANGE FROM CONSUMER'S POINT OF VIEW

A scene from Star Trek: The Original Series. Spock, in his yellow uniform, stands on the left in a hallway with a control panel behind him. Kirk, in his blue uniform, stands on the right facing Spock. Two white speech bubbles are superimposed on the image. The first bubble, on the left, contains the text "I AM COUPLED TO THE IMPLEMENTATION". The second bubble, on the right, contains the text "I AM DECOUPLED FROM THE IMPLEMENTATION".

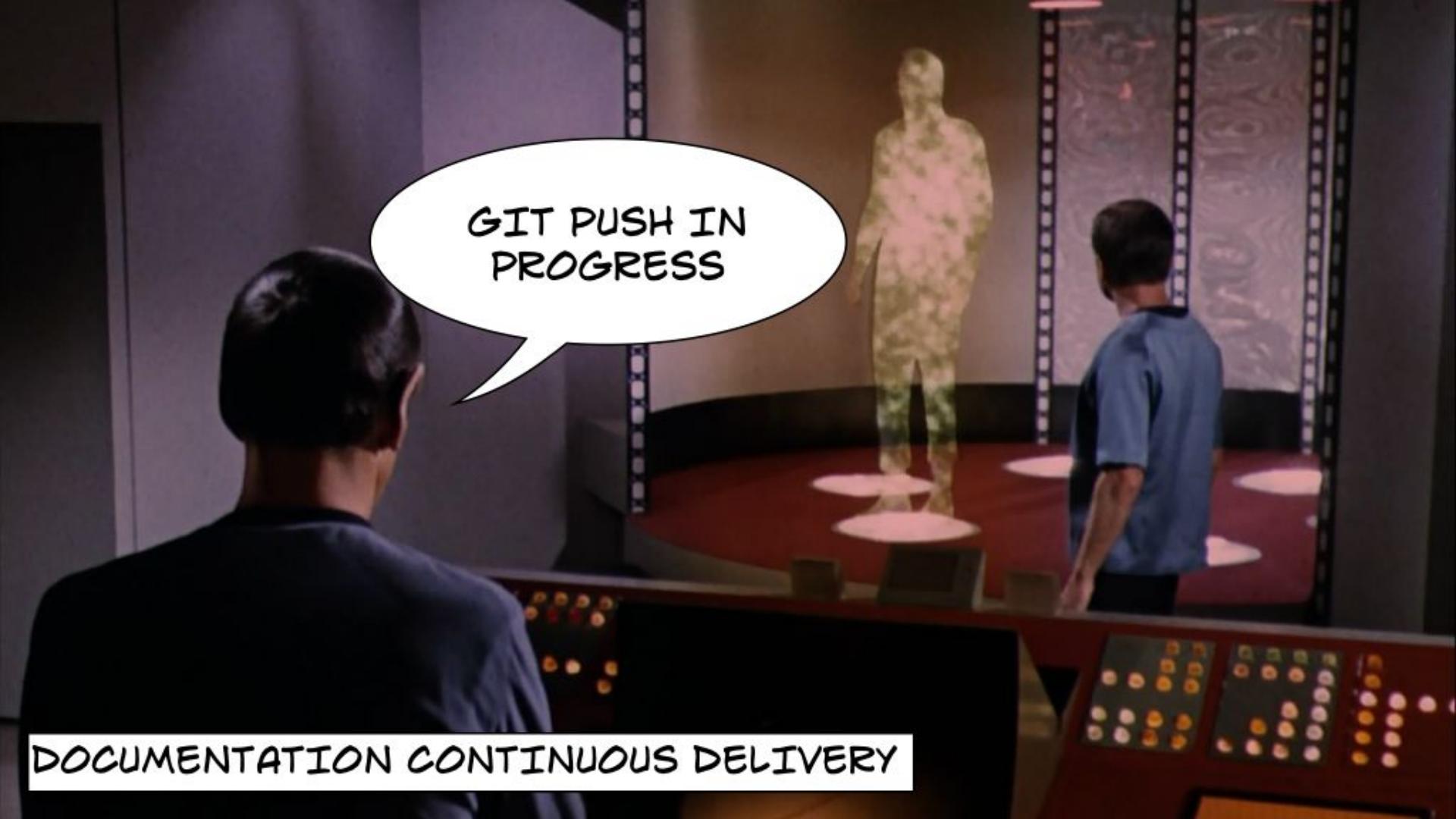
I AM  
COUPLED TO THE  
IMPLEMENTATION

I AM DECOUPLED  
FROM THE  
IMPLEMENTATION

THE NEW DOCUMENTATION IS EASIER TO UPDATE

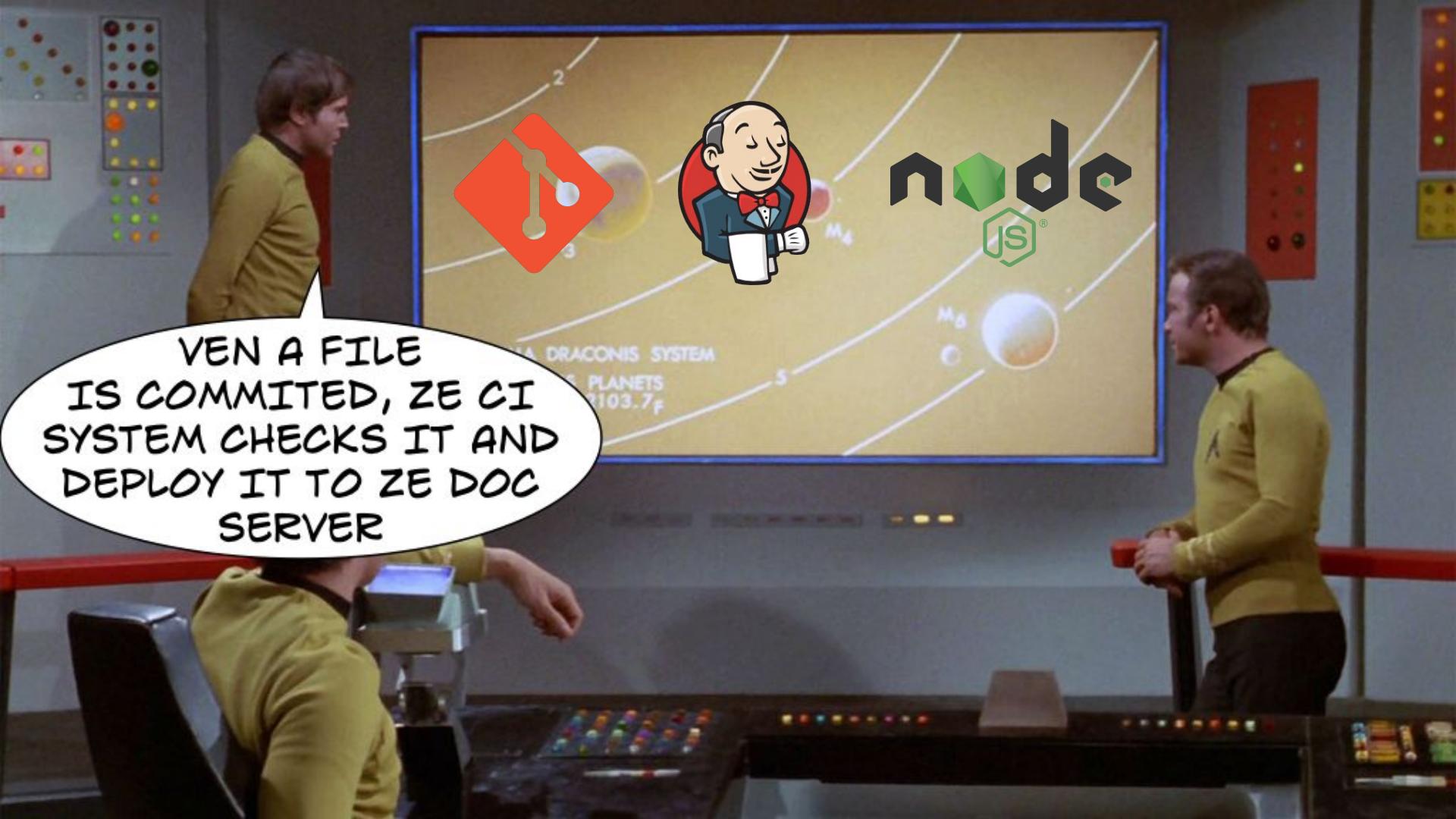


"OPENAPI OUR  
YESTERDAYS"



GIT PUSH IN  
PROGRESS

DOCUMENTATION CONTINUOUS DELIVERY



VEN A FILE  
IS COMMITTED, ZE CI  
SYSTEM CHECKS IT AND  
DEPLOY IT TO ZE DOC  
SERVER

A man with short brown hair, wearing a green Starfleet-style uniform with a black collar, is sitting cross-legged on a large, fluffy, brownish-orange creature. He has a serious expression and is looking slightly to his left. A speech bubble originates from his mouth.

ALL THESE  
FILES! THERE'S NO  
SENSE SHOWING  
ALL THAT!

INSIDE OUT DOCUMENTATION ORGANIZATION



MASTER FILE

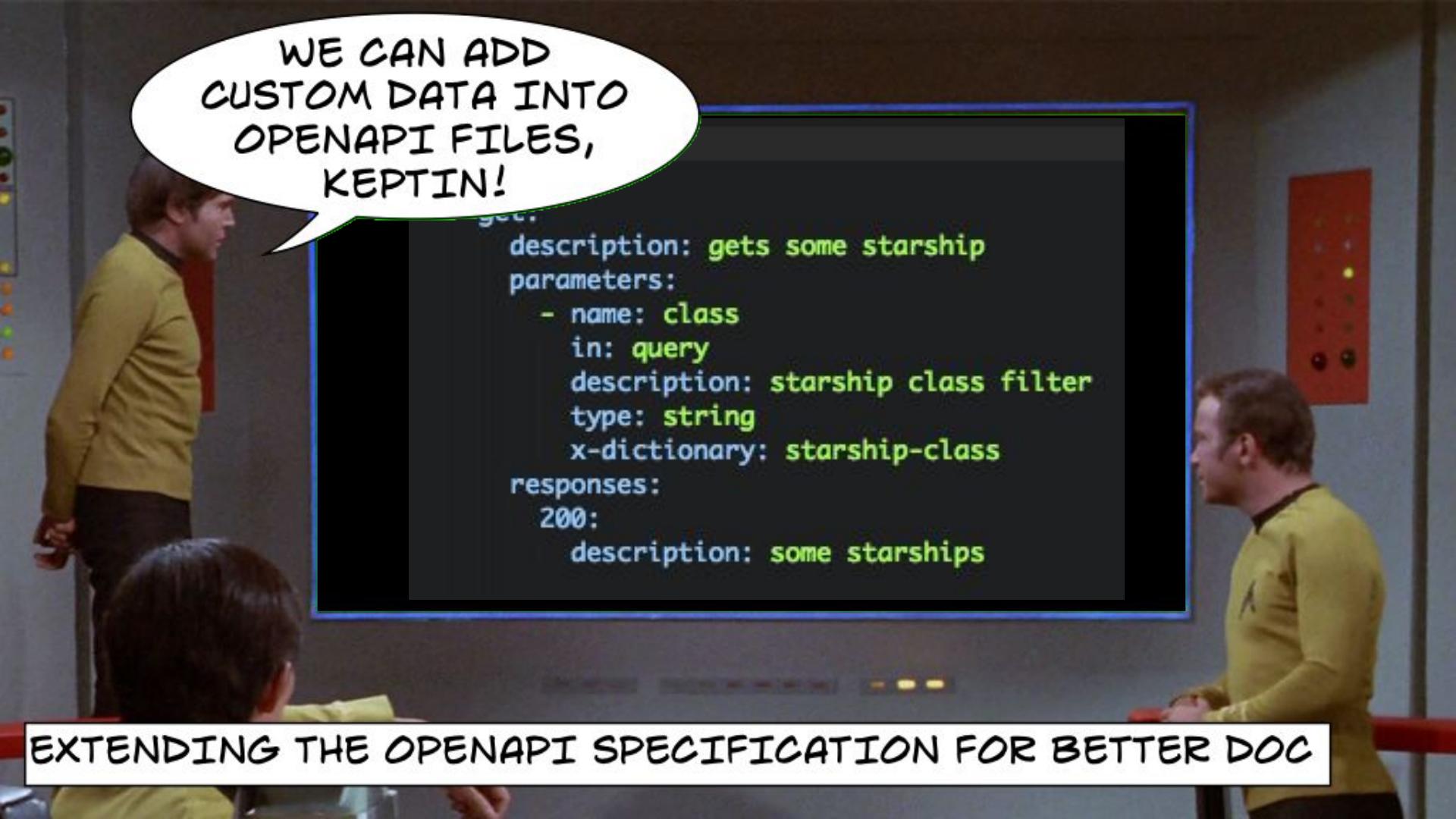
LET'S AGGREGATE  
THEM INTO A MASTER  
FILE



SOURCE FILES



THIS  
NEW CONSUMER  
ORIENTED  
DOCUMENTATION IS  
SO CUTE!



WE CAN ADD  
CUSTOM DATA INTO  
OPENAPI FILES,  
KEPTIN!

```
get:  
  description: gets some starship  
  parameters:  
    - name: class  
      in: query  
      description: starship class filter  
      type: string  
      x-dictionary: starship-class  
  responses:  
    200:  
      description: some starships
```

EXTENDING THE OPENAPI SPECIFICATION FOR BETTER DOC

DICTIONARY DATA  
WILL ALWAYS BE UP TO  
DATE, KEPTIN!

```
description: |
  starship class filter

value | description
-----|-----
constitution | A big starship
challenger | A small starship
if you read this you're too close | Don't mess with this one
type: string
x-dictionary: starship-class
enum:
- constitution
- challenger
- if you read this you're too close
```

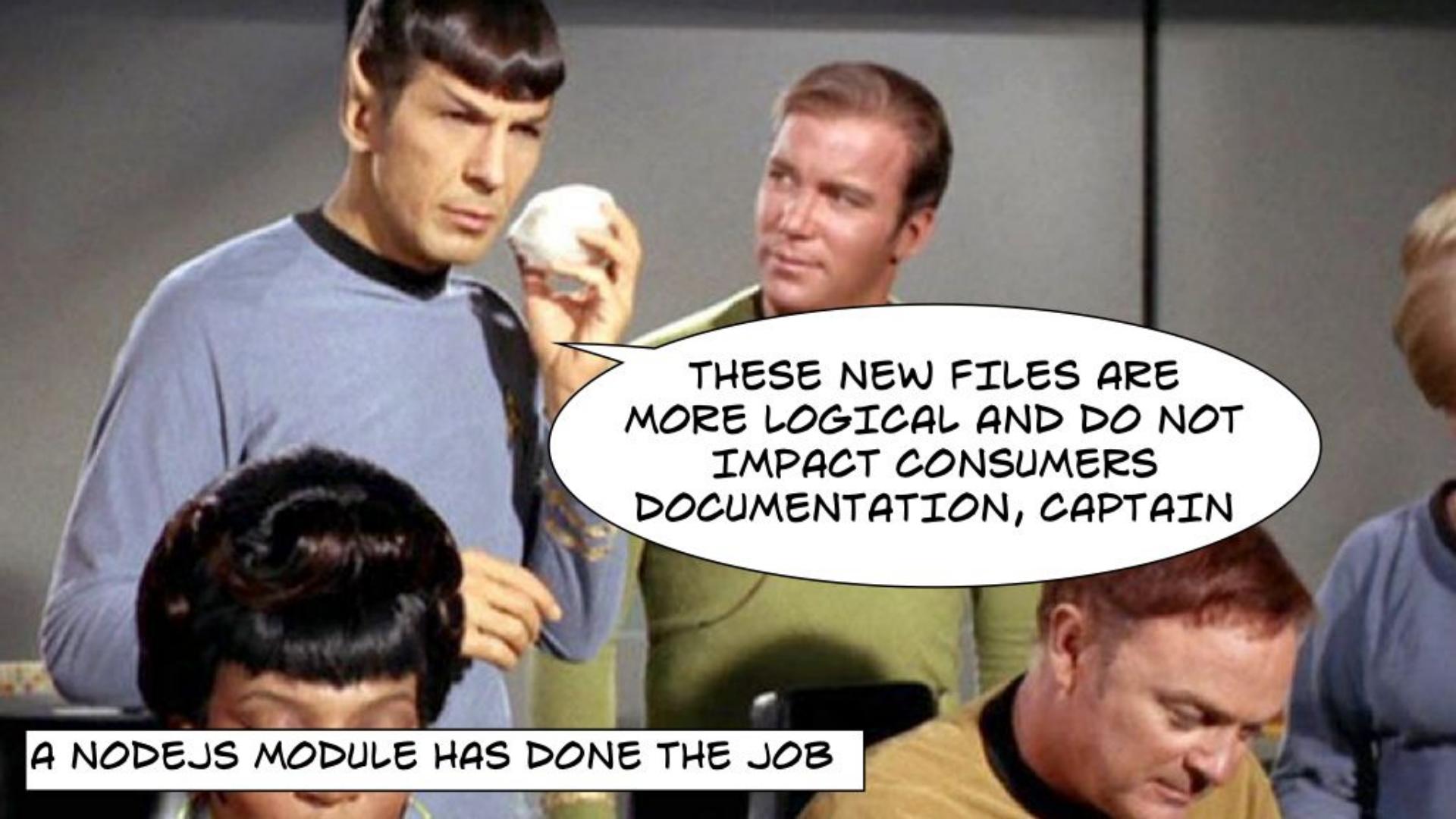
PROCESSING X-TENSION DURING THE CI PROCESS



THE OPENAPI  
SOURCE FILES ARE TOO  
HARD TO UPDATE!

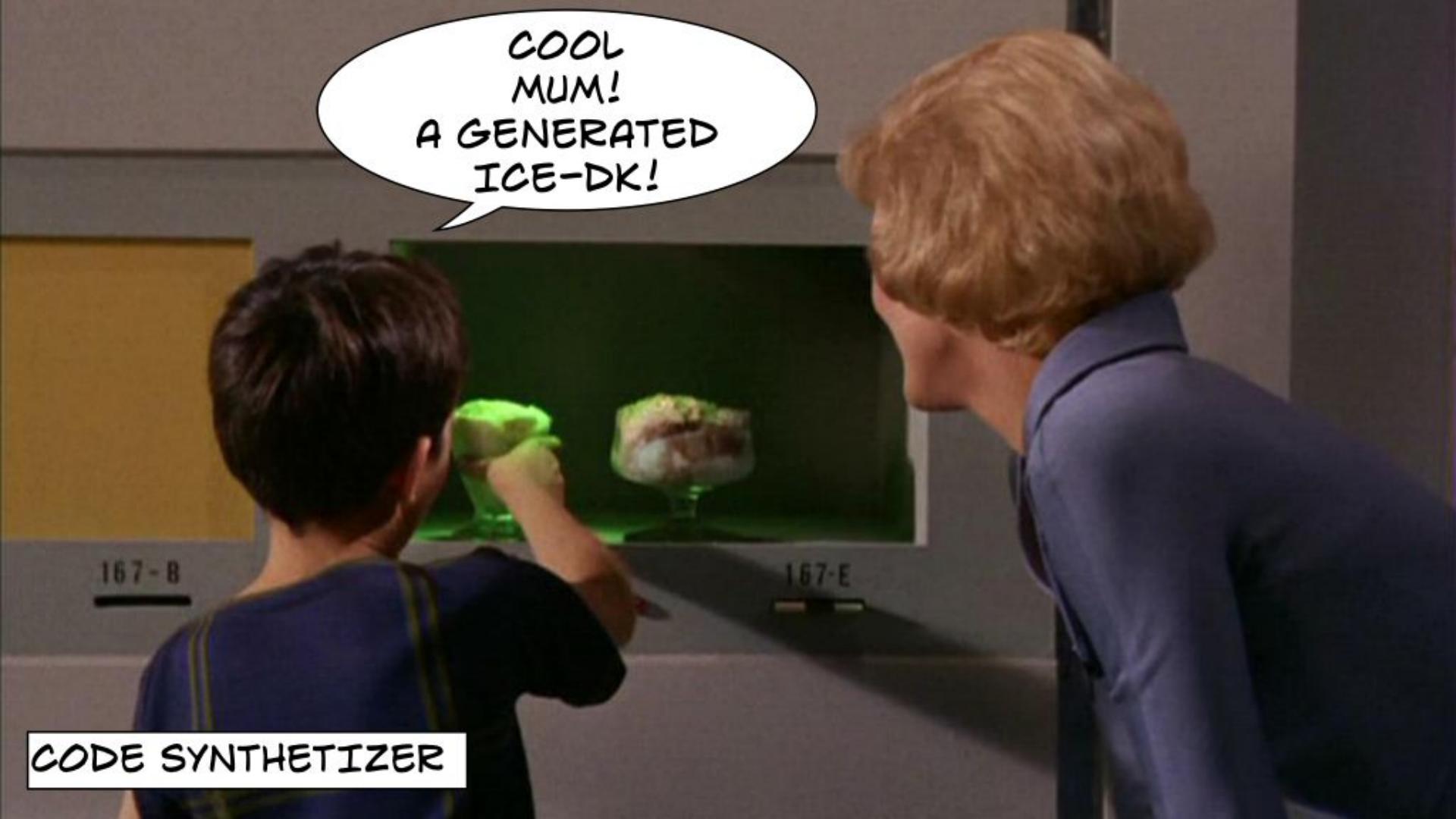
FROM TECHNICAL TO FUNCTIONNAL SOURCE FILES

IGN



THESE NEW FILES ARE  
MORE LOGICAL AND DO NOT  
IMPACT CONSUMERS  
DOCUMENTATION, CAPTAIN

A NODEJS MODULE HAS DONE THE JOB



COOL  
MUM!  
A GENERATED  
ICE-DK!

CODE SYNTHETIZER



USING OPENAPI SPECIFICATION ON DESIGN TIME

# NCC-1701

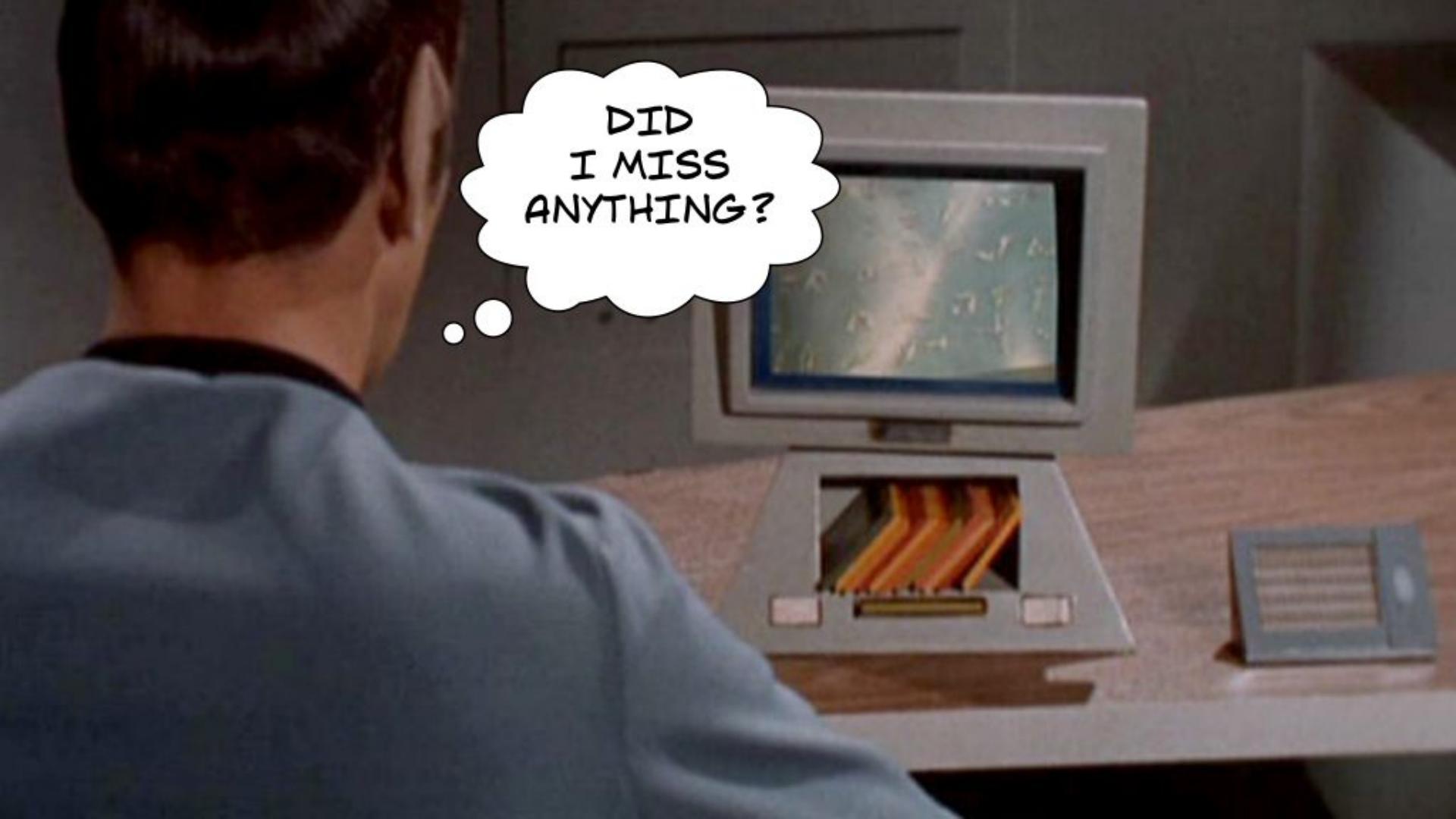
## HEAVY CRUISER

### Constitution Class

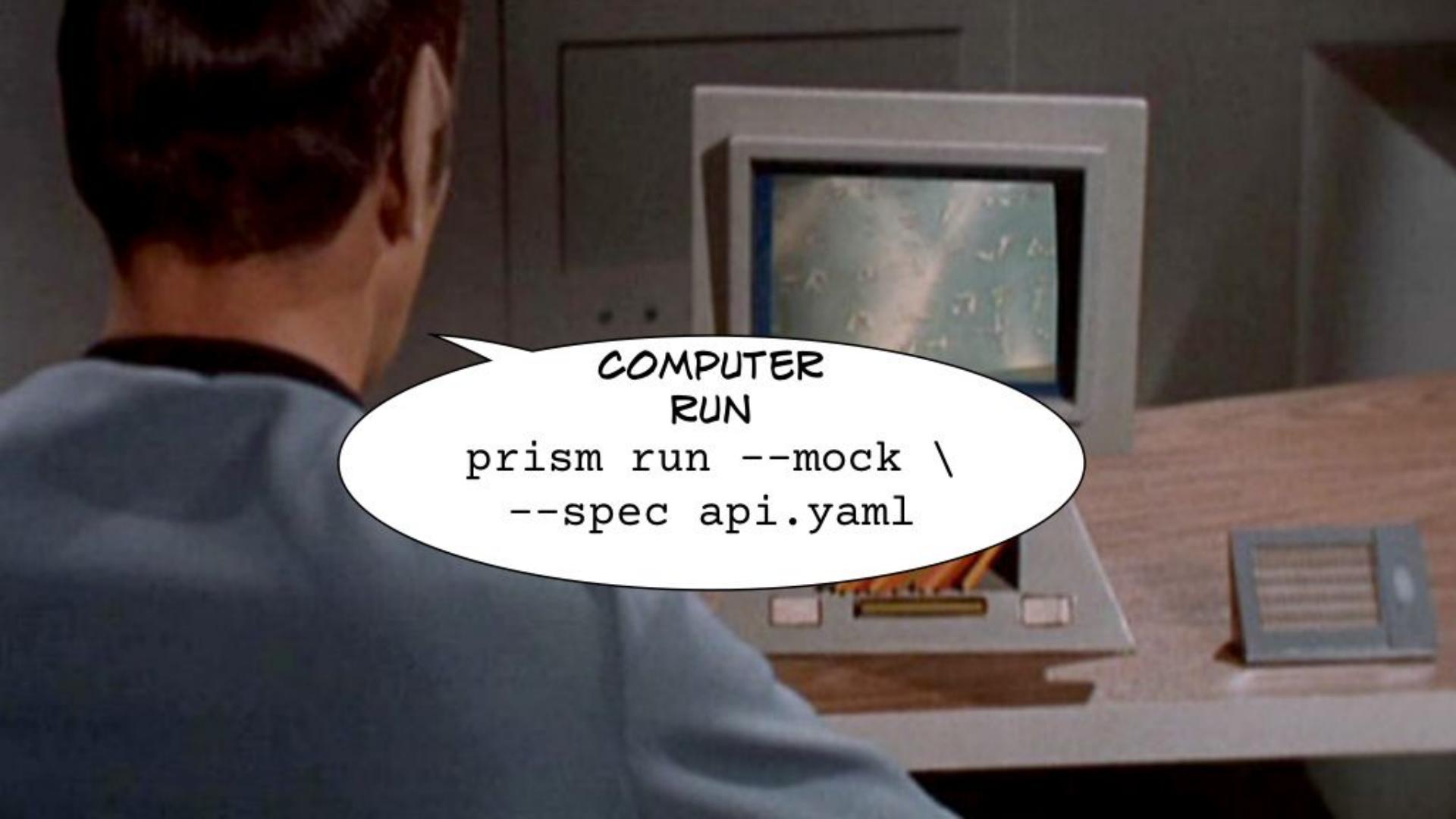
Space - the final frontier. These are the voyages of the Starship Enterprise. Its five-year mission: to explore strange new worlds, to seek out new life and new civilizations; to boldly go where no man has gone before.™

- ○
- ○
- ○

SPECIFICATIONS		CHARACTERISTICS	
Length	326m	Speed	Warp 5
Mass	1.2E+09 kg	Armament	Phaser array
Power	1.5E+09 W	Defenses	Deflector Grids
Engines	Four Impulse Power	Perimeter	Outer Deflector



DID  
I MISS  
ANYTHING?

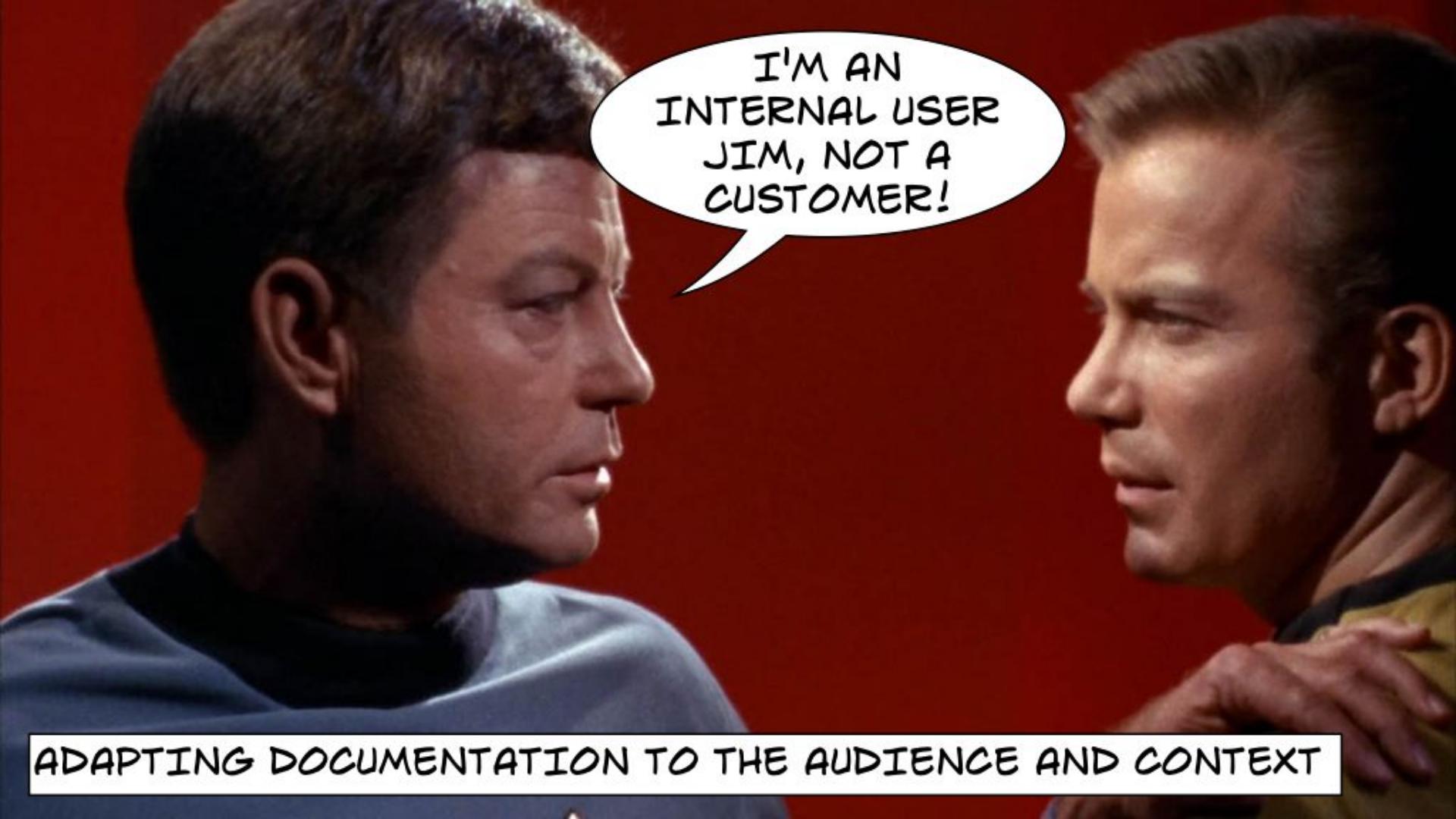
A man with dark hair, seen from the side and back, is looking at a vintage-style computer monitor. The monitor displays a landscape scene with green trees and a blue sky. The computer system includes a keyboard and a small monitor on top. A speech bubble originates from the man's head.

COMPUTER  
RUN

prism run --mock \  
--spec api.yaml



**"TOMORROW IS  
OPENAPI!"**



I'M AN  
INTERNAL USER  
JIM, NOT A  
CUSTOMER!

ADAPTING DOCUMENTATION TO THE AUDIENCE AND CONTEXT



MULTIPLE VERSIONS OF DOCUMENTATION



THE  
IMPLEMENTATION  
I AM

I AM THE  
SPECIFICATION

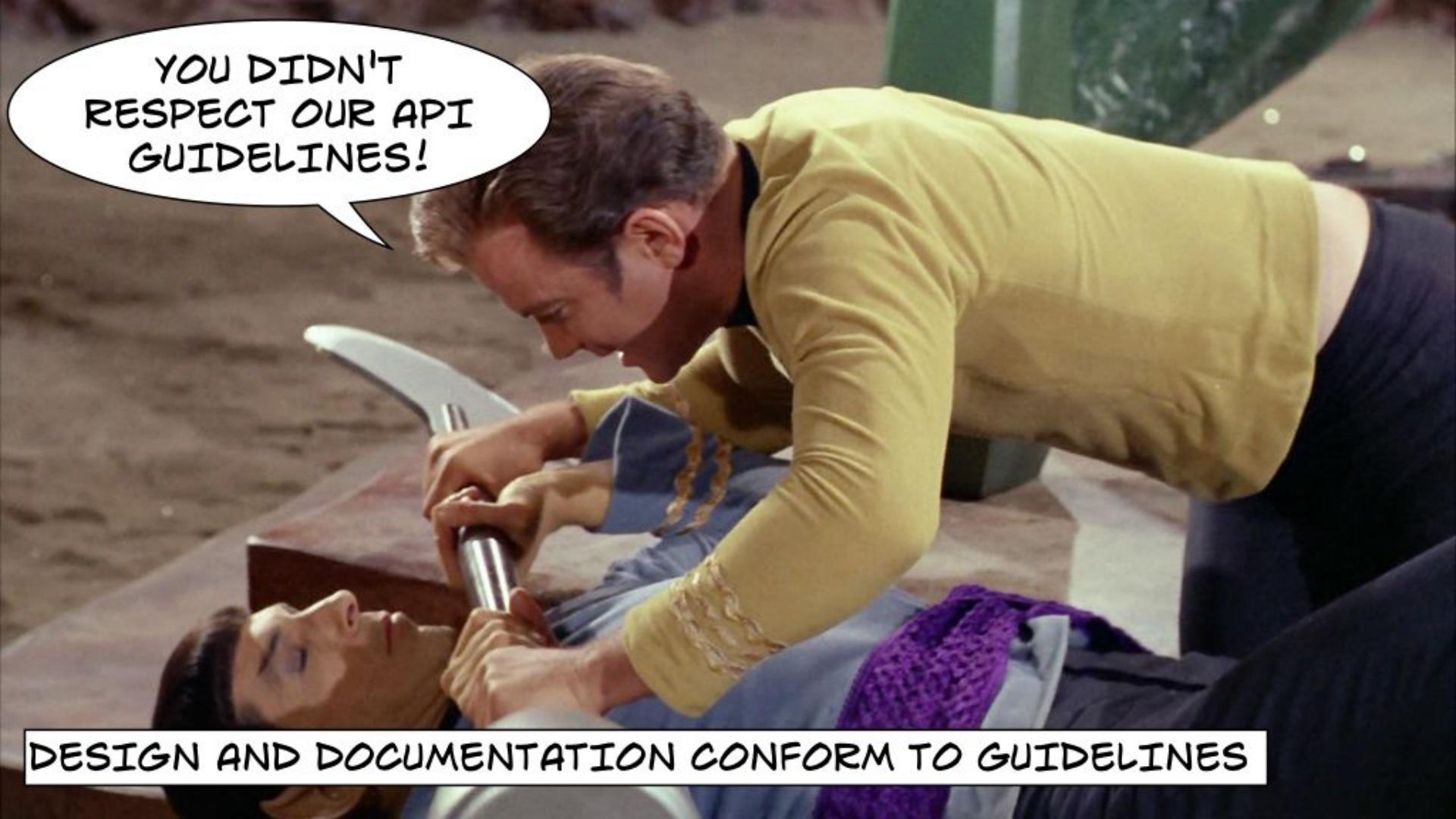
WHAT YOU SPEC IS WHAT YOU GET



SPOCK,  
YOU LOOK...  
DIFFERENT.

YOU  
TOO, CAPTAIN.  
FASCINATING.

AVOID BREAKING CHANGE

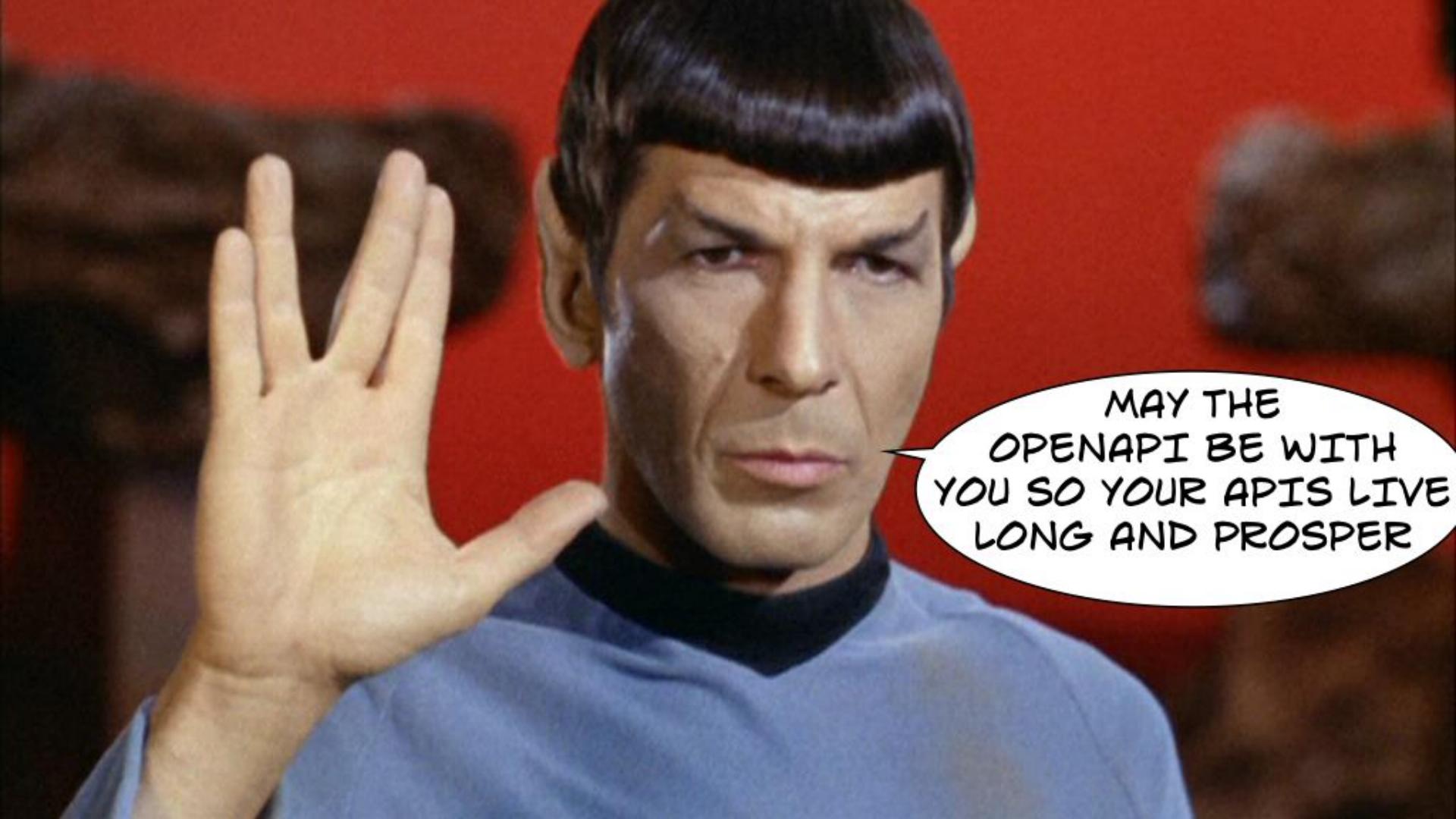


YOU DIDN'T  
RESPECT OUR API  
GUIDELINES!

DESIGN AND DOCUMENTATION CONFORM TO GUIDELINES



"TO BOLDY GO..."

A close-up of Mr. Spock from Star Trek. He has his right hand raised with the palm facing forward, as if he is taking an oath or making a statement. He is looking directly at the camera with a serious expression. A white speech bubble originates from his mouth, containing the text "MAY THE OPENAPI BE WITH YOU SO YOUR APIs LIVE LONG AND PROSPER".

MAY THE  
OPENAPI BE WITH  
YOU SO YOUR APIs LIVE  
LONG AND PROSPER

A scene from a Star Trek episode showing the bridge. Captain Kirk is on the left, Mr. Spock is on the right, and a character in a pink robe is standing in the center. The background features the red hull of the ship and several circular windows.

A  
apihandyman.io  
PRODUCTION

**STAR TREK CREATED BY  
Gene Roddenberry**

DON'T MISS NEW STAR TREK EPISODES  
[www.startrekcontinues.com](http://www.startrekcontinues.com)