Akbar and Ahmed are walking across the desert. Akbar carries five loaves of bread while Ahmed carries three. Along the way, they meet a fellow traveller, Birbal. She asks them if she could share their meal.

The two men agreed so they sat down and shared the eight loaves of bread. As they are decent and sensitive people, all three of them ate the same amount of bread.

As they parted ways, Birbal gave her thanks and handed the two men eight coins. How many coins should each man receive?

# SCRUM Level 1

**Sprint Planning** 

## Sprint Backlog

- Contains a breakdown of all tasks to be done, based on the needs of not just the Product Owner, but the entire team
- We expect items in this column to be unassigned
- We also expect items in this column to have complexity, effort and/or priority estimates

## To Do

 Items placed here are expected to be done by the end of the sprint period

• Items in this column may or may not be assigned

• Also: On Hold

## In Progress

- Items placed here are definitely assigned to a team member
- It is unusual for there to be more than one item in this column assigned to the same person.
- Also: Software Dev, Code Review, QA

#### Done

- Surprisingly (or maybe not) different teams have varying definitions of "Done"
- Passed code review?
- Passed automated testing?
- Passed QA?
- Deployed on staging?
- Deployed on production?

# REST Level 2

HEAD, PUT, POST and DELETE

### **GET**

- Most HTTP Requests are use the GET HTTP method
- GET /users (give me a list of users)
- GET /users?age=17 (give me a list of users aged 17 yo)
- GET /users/21.xml (give me the details of user #21 in XML format)
- GET /users/tyrion (give me the details of user tyrion)
- GET /assets/style.css (give me the stylesheet named style.css)
- GET /favicon.ico (give me the favicon for this domain)

### **POST**

Semantically speaking, POST means "create a new object"

POST /users HTTP/1.1

Content-Length: 44

Content-Type: application/x-www-form-urlencoded

first\_name=Cersei&last\_name=Lannister&age=29 or

age=29&first\_name=Cersei&last\_name=Lannister

#### **POST**

- If a POST request succeeds, the proper response is 201 Created
- 200 OK will also be alright IF you are returning an HTTP body
- If it fails because of incorrect parameters, 400 Bad Request
- If the object already exists, 409 Conflict
- Generally speaking, though, 400 Bad Request is a safe catch-all

A PUT request is an attempt to update or overwrite an object

PUT /users/eddard HTTP/1.1

Content-Length: 11

Content-Type: application/x-www-form-urlencoded

status=dead

A PUT request is an attempt to update or overwrite an object

PUT /users/eddard HTTP/1.1

Content-Length: 18

Content-Type: application/json

{"status": "dead"}

A PUT request is an attempt to update or overwrite an object

PUT /users/eddard HTTP/1.1

Content-Length: 21

Content-Type: application/xml

<status>dead</status>

A PUT request is an attempt to update or overwrite an object

```
PUT /assets/style.css HTTP/1.1
Content-Length: 46
Content-Type: text/css

.ninja {
   color: #000000;
   visibility: hidden;
}
```

- When a PUT request succeeds, respond with 204 No Content
- Again, 200 OK is fine IF Content-Length > 0
- If the incoming Content-Type is not supported or inappropriate, use
   415 Unsupported Media Type
- If the object is not there, 404 Not Found
- If the parameters are otherwise valid, but would cause conflict, for example, putting role=king for /users/joffrey while /users/robert is still king, use 409 Conflict
- Again, if in doubt, 400 Bad Request

#### **HEAD**

- Functionally identical to GET, except it never returns an HTTP body
- Content-Length is still a positive amount
- Useful for saving bandwidth, especially if you already have a cached copy of the object
- Both GET and HEAD methods are idempotent
- PUT and DELETE are also idempotent (but not safe)

## **DELETE**

- Self-explanatory, removes the object
- On success, return 204 No Content
- As usual, if the object does not exist, 404 Not Found

# SCRUM Level 2

Daily Scrum

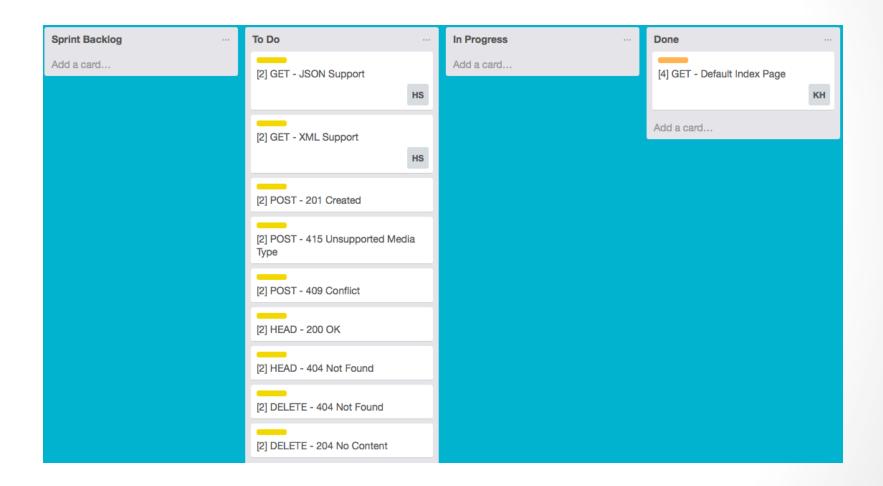
## Daily Scrum

- Also known as stand-up meetings, typically < 15 mins</li>
- Always takes place at the same time and same place
- Each member briefly outlines:
  - What he/she did yesterday
  - What he/she will do today
  - What blockers are/were being encountered
- Take note, the goal is to inform others what you're up to
- DO NOT try to solve problems in this meeting, save it for later

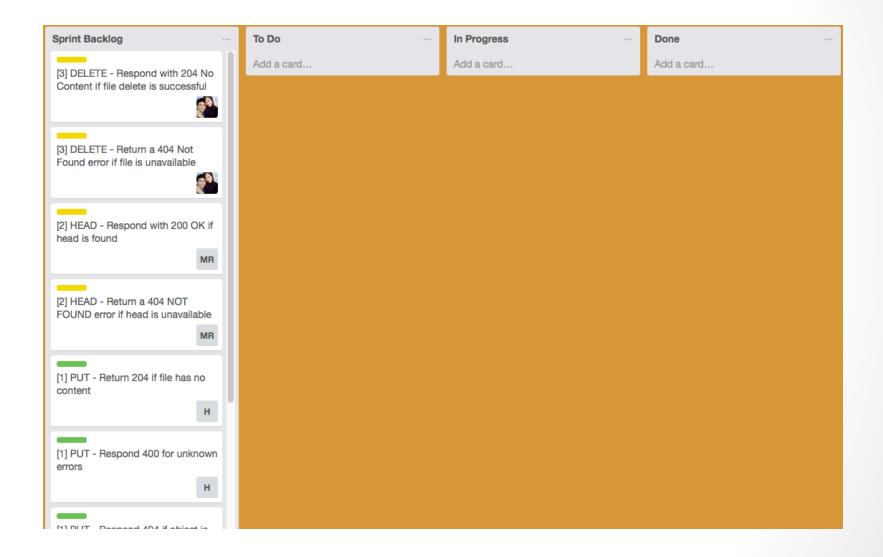
## Jojo's Bizarre Adventure



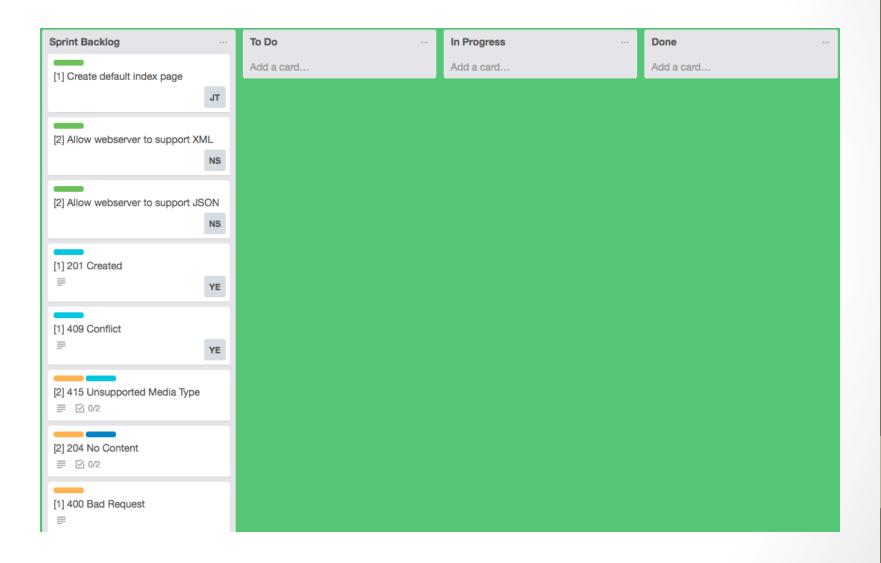
## **Team Winter**



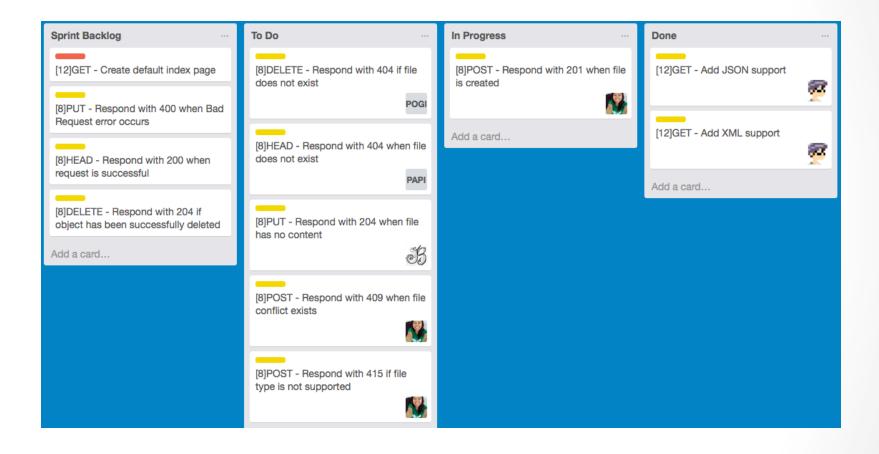
## Team Summer



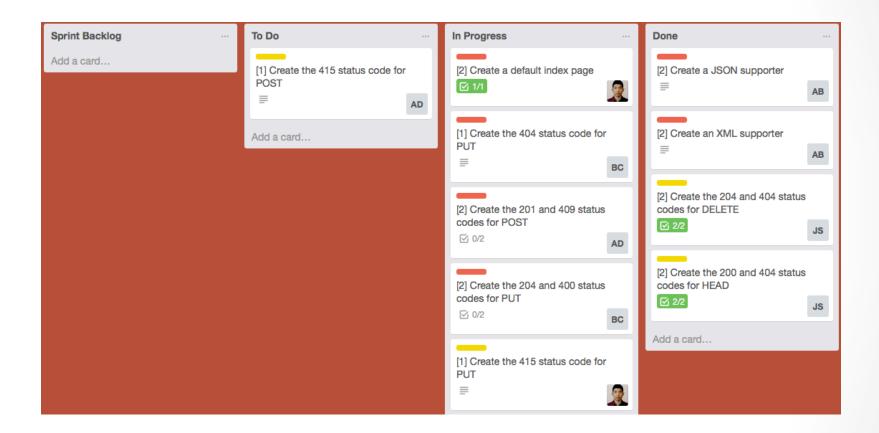
## **Team Spring**



## Team Monsoon



### Team Autumn



# GIT Level 3

Daily Scrum

## Gitflow Workflow

- master the product accessible by the client
- develop the product accessible by the developers
- feature-branches self-explanatory
- release-branches branch from develop, merge into master
- hotfix branch from master, merge into master AND develop

## Another (Hybrid) Workflow

- master
- develop
- feature-branches
- release-branches
- hotfix
- staging-branches throw-away branches

## References

https://www.atlassian.com/git/tutorials/comparing-workflows