

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

# PUT

- 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

# PUT

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

PUT /users/edward HTTP/1.1

Content-Length: 18

Content-Type: application/json

```
{“status”: “dead”}
```

# PUT

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

PUT /users/edward HTTP/1.1

Content-Length: 21

Content-Type: application/xml

<status>dead</status>

# PUT

- 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;  
}
```

# PUT

- 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
- 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

A Kanban board for 'Team Winter' with four columns: Sprint Backlog, To Do, In Progress, and Done. Each column has a header with a title and a three-dot menu icon. The Sprint Backlog column is empty with an 'Add a card...' button. The To Do column contains eight cards, each with a yellow progress bar, a task description, and an 'HS' label. The In Progress column is empty with an 'Add a card...' button. The Done column contains one card with an orange progress bar, a task description, and a 'KH' label, with an 'Add a card...' button below it.


Sprint Backlog	To Do	In Progress	Done
Add a card...	[2] GET - JSON Support HS	Add a card...	[4] GET - Default Index Page KH
	[2] GET - XML Support HS		Add a card...
	[2] POST - 201 Created		
	[2] POST - 415 Unsupported Media Type		
	[2] POST - 409 Conflict		
	[2] HEAD - 200 OK		
	[2] HEAD - 404 Not Found		
	[2] DELETE - 404 Not Found		
	[2] DELETE - 204 No Content		

# Team Summer

[3] DELETE - Respond with 204 No Content if file delete is successful



[3] DELETE - Return a 404 Not Found error if file is unavailable



[2] HEAD - Respond with 200 OK if head is found

MR

[2] HEAD - Return a 404 NOT FOUND error if head is unavailable

MR

[1] PUT - Return 204 if file has no content

H

[1] PUT - Respond 400 for unknown errors

H

[1] PUT - Respond 404 if object is

To Do

Add a card...

In Progress

Add a card...

Done

Add a card...

# Team Spring

The image shows a screenshot of a Team Spring Kanban board. The board is divided into four main sections: a Sprint Backlog on the left and three columns (To Do, In Progress, Done) on the right. The Sprint Backlog contains a list of tasks with progress bars and assignee tags. The three columns on the right are currently empty, each with an 'Add a card...' prompt.

**Sprint Backlog**

- [1] Create default index page (Assignee: JT)
- [2] Allow webserver to support XML (Assignee: NS)
- [2] Allow webserver to support JSON (Assignee: NS)
- [1] 201 Created (Assignee: YE)
- [1] 409 Conflict (Assignee: YE)
- [2] 415 Unsupported Media Type (Progress: 0/2)
- [2] 204 No Content (Progress: 0/2)
- [1] 400 Bad Request

**To Do**

Add a card...

**In Progress**

Add a card...

**Done**

Add a card...

# Team Monsoon

**Sprint Backlog**

- [12]GET - Create default index page
- [8]PUT - Respond with 400 when Bad Request error occurs
- [8]HEAD - Respond with 200 when request is successful
- [8]DELETE - Respond with 204 if object has been successfully deleted

Add a card...

**To Do**

- [8]DELETE - Respond with 404 if file does not exist (POGI)
- [8]HEAD - Respond with 404 when file does not exist (PAPI)
- [8]PUT - Respond with 204 when file has no content
- [8]POST - Respond with 409 when file conflict exists
- [8]POST - Respond with 415 if file type is not supported

**In Progress**

- [8]POST - Respond with 201 when file is created

Add a card...

**Done**

- [12]GET - Add JSON support
- [12]GET - Add XML support

Add a card...



# Team Autumn

**Sprint Backlog** ...

Add a card...

**To Do** ...

[1] Create the 415 status code for POST

AD

Add a card...

**In Progress** ...

[2] Create a default index page

1/1

BC

[1] Create the 404 status code for PUT

BC

[2] Create the 201 and 409 status codes for POST

0/2

AD

[2] Create the 204 and 400 status codes for PUT

0/2

BC

[1] Create the 415 status code for PUT

BC

**Done** ...

[2] Create a JSON supporter

AB

[2] Create an XML supporter

AB

[2] Create the 204 and 404 status codes for DELETE

2/2

JS

[2] Create the 200 and 404 status codes for HEAD

2/2

JS

Add a card...

# 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>