

Reuse OpenAPI descriptions

WASA: Web and Software Architecture

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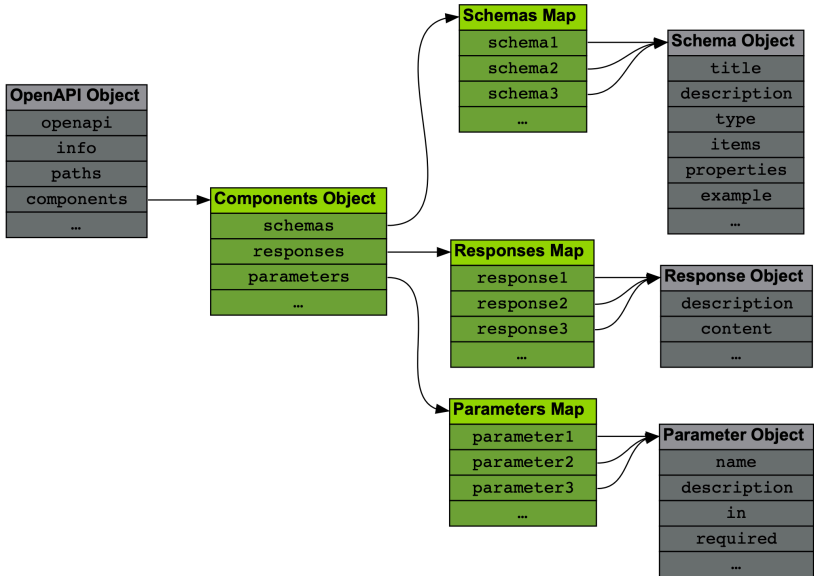
Where do we use this?

```
schema:
  type: object
  properties:
    guess-count:
      type: integer
      minimum: 1
      maximum: 10
    guess-outcome:
      type: string
      enum:
        - hi
        - lo
        - correct
```

We can replace an object with a reference to a *component*

- reduce code size
- reduce maintenance
- reduce errors

The components object



guess-result component

```
components:
  schemas:
    guess-result:
      type: object
      properties:
        guess-count:
          type: integer
          minimum: 1
          maximum: 10
        guess-outcome:
          type: string
          enum:
            - hi
            - lo
            - correct
```

Example of use

```
description: game not found
get:
  summary: list guesses
  description: |
    Return a list of all guesses in reverse chronological
    order,
    including the responses received (hi/lo/correct)
  responses:
    "200":
      description: Request accepted, all guesses listed in
        content
      content:
        application/json:
          schema:
            type: array
            items:
              $ref: "#/components/schemas/guess-result"
```

final-result component

```
final-result:  
  type: object  
  properties:  
    id:  
      type: integer  
    outcome:  
      type: string  
      enum:  
        - win  
        - lose  
    guesses:  
      type: integer
```

Please see the code for the complete Hi Lo Game example API:

- <http://gamificationlab.uniroma1.it/notes/hilo-game-final.yaml>

- <https://www.openapis.org>
- <https://oai.github.io/Documentation/>