

BDD AND OPENAPI

Behavior driven development and the OpenAPI Spec

GOALS

- Learn what BDD and OpenAPI is
- See BDD and OpenAPI in action
(live-demo!)

The project

Create a simple betting website/api.

**Seeing all
games**

As a user I want to see all games
which I can currently bet on.

Betting

As a user I want to be able to bet
on one game.

Profile

As a user I want to see my profile
including my balance.

THE PROBLEM

Understanding and communicating to the team what the customer wants

ONE SOLUTION

Behavior driven development

Defining Behaviors

Given that there are 5 games available.

When the client looks at all games.

Then the client should see 5 games.

Defining Behaviors II

Given that there is a game available with id 1.

And the client has a balance of 10.

When the client bets 5 on game with id 1.

Then the client should have a balance of 5.

Defining Behaviors III

Given that the client has bet 5 on game with id 1.

And the client has a balance of 10.

When the client won the bet.

Then the client should have a balance of 20.

OpenAPI

API documentation and generator

GET

```
/profile:
  get:
    summary: 'Get full profile by id'
    tags:
      - profile
    parameters:
      - name: profileId
        in: path
        required: true
        description: 'The profile id'
        schema:
          type: string
    operationId: getProfileById
    responses:
      '200':
        description: successful operation
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Profile'
```

POST

```
/games
  post:
    summary: 'Bet on a given game'
    tags:
      - games
    parameters:
      - name: gameId
        in: path
        required: true
        description: 'The game id to bet on'
        schema:
          type: string
    operationId: betOnGameById
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/BetRequest'
    responses:
      '200':
```

SCHEMAS

Profile:

```
type: object
properties:
  profileId:
    type: number
  name:
    type: string
  wallet:
    type: number
```

Game:

```
type: object
properties:
  gameId:
    type: number
  name:
    type: string
  done:
    type: boolean
  optionA:
    type: string
  optionB:
    type: string
```

AND MORE

Security Schemes
Server Definitions

...

What now?

Convert to code!



DEMO

WORKFLOW

Requirements

BDD statements

OpenAPI Spec

Actual code

Actual code

 **Profit!** 

FIN