EAP: Architecture Specification and Prototype

TasteBuds helps people build a community of diverse, healthy and tasty eating habits.

A7: High-level architecture. Privileges. Web resources specification

This artefact's goal is to document the entire website API. All routes and respective permission access, endpoints (CRUD) and HTTP request parameters will be defined here. The format of HTTP responses will also be available in this artefact.

1. Overview

M01: Authentication and Individual Profile	Web resources associated with user authentication and individual profile management, includes the following system features: login/logout, registration, credential recovery, view and edit personal profile information.
M02: Recipes, categories, groups and members	Web resources associated with feed, upsert recipe, search results, recipes, categories, groups and members.
M03: Chat	Web resources associated with the private messages between members.
M04: Information Pages	Web resources associated with the information pages, namely the FAQ and the About pages.
M05: Administration	Web resources associated with the administrator pages, namely the users and reports management.

2. Permissions

PUB	Public	Group of users without privileges.
MBR	Member	Authenticated member.
OWN	Owner	Users that are owners of the information (e.g. own profile, own recipe, own comment).
MOD	Moderator	Users that are moderators of a group.
ADM	Administrator	Administrators.

3. OpenAPI Specification

OpenAPI specification in YAML format to describe the web application's web resources.

The yaml code can be found here.

The Swagger generated documentation can be found here.

```yaml
openapi: 3.0.0

info:
  version: '1.0'
  title: 'TasteBuds API'
  description: 'Web Resources Specification (A7) for TasteBuds'

servers:
  - url: http://lbaw2135.lbaw-prod.fe.up.pt
    description: Production server

externalDocs:
  description: Find more info here.
  url: https://git.fe.up.pt/lbaw/lbaw2021/lbaw2135/-/wikis/EAP:-
Architecture-Specification-and-Prototype#a7-high-level-architecture-
privileges-web-resources-specification

tags:
  - name: 'M01: Authentication and Individual Profile'
  - name: 'M02: Recipes, categories, groups and members'
  - name: 'M03: Chat'
  - name: 'M04: Information'
  - name: 'M05: Web resources associated with the administrator pages'

paths:
  /:
    get:
      operationId: R1001
      summary: 'R1001: Home page'
      description: 'Provide home page. Access: PUB'
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: 'Ok. Show [UI01](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/)'

  /login:
    get:
      operationId: R1002
      summary: 'R1002: Login form'
      description: 'Provide login form. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '200':
          description: 'Ok. Show [UI02](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/signIn.php)'
    post:
      operationId: R1003
      summary: 'R1003: Login Action'
      description: 'Processes the login form submission. Access: PUB'
```

```yaml
      tags:
        - 'M01: Authentication and Individual Profile'

      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                email:
                  type: string
                password:
                  type: string
                required:
                  - email
                  - password

      responses:
        '302':
          description: 'Redirect after processing the login credentials.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful authentication. Redirect to
feed.'
                  value: '/feed'
                302Error:
                  description: 'Failed authentication. Redirect to login
form.'
                  value: '/login'

  /register:
    get:
      operationId: R1004
      summary: 'R1004: Register form'
      description: 'Provide register form. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '200':
          description: 'Ok. Show [UI03](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/signUp.php)'

    post:
      operationId: R1005
      summary: 'R1005: Register Action'
      description: 'Processes the register form submission. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
```

```yaml
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                username:
                  type: string
                email:
                  type: string
                password:
                  type: string
                name:
                  type: string
                countryId:
                  type: integer
                city:
                  type: string
              required:
                - username
                - email
                - password
                - name
                - countryId
      responses:
        '302':
          description: 'Redirect after processing the sign up.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful registration. Redirect to feed.'
                  value: '/feed'
                302Error:
                  description: 'Failed authentication. Redirect to register
form.'
                  value: '/register'

  /logout:
    post:
      operationId: R1006
      summary: 'R1006: Logout Action'
      description: 'Logout from an account. Access: MBR'
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '302':
          description: 'Redirect after processing logout, so user can login
again.'
          headers:
            Location:
```

```yaml
              schema:
                type: string
            examples:
              302Error:
                description: 'Failed authentication. Redirect to login
form.'
                value: '/login'
              302Success:
                description: 'Authentication success.'
                value: '/'

  /member/{username}/recipes:
    get:
      operationId: R1007
      summary: 'R1007: Member recipes'
      description: 'Provide member recipes page. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true

      responses:
        '200':
          description: 'Ok. Show [UI09](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/profile.php)'

  /member/{username}/favourites:
    get:
      operationId: R1008
      summary: 'R1008: Member favourited recipes.'
      description: 'Provide member favourited recipes page. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true

      responses:
        '200':
          description: 'Ok. Show [UI11](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/profile_favourites.php)'

  /member/{username}/reviews:
    get:
      operationId: R1009
```

```yaml
        summary: "R1009: Member's reviews."
        description: "Provide member's reviews page. Access: PUB"
        tags:
          - 'M02: Recipes, categories, groups and members'
        parameters:
          - in: path
            name: username
            schema:
              type: string
            required: true
        responses:
          '200':
            description: 'Ok. Show [UI10](https://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/profile_reviews.php)'

  /member/{username}/edit:
    get:
      operationId: R1010
      summary: "R1010: Edit member's profile."
      description: "Provide member's profile edition page. Access: OWN"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Ok. Show [UI12](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/edit_profile.php)'
    post:
      operationId: R1011
      summary: 'R1011: Edit profile action'
      description: 'Processes the edit profile form submission. Access:
OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true

      requestBody:
        required: false
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
```

```yaml
                name:
                  type: string
                username:
                  type: string
                email:
                  type: string
                city:
                  type: string
                country:
                  type: integer
                password:
                  type: string
                biography:
                  type: string
                visibility:
                  type: boolean
                profileImage:
                  type: string
                  format: binary
                coverImage:
                  type: string
                  format: binary
      responses:
        '302':
          description: 'Redirect after processing the edit profile form.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful edition. Redirect to profile.'
                  value: '/member/{username}/recipes'
                302Error:
                  description: 'Failed edition. Redirect to edit profile
form.'
                  value: '/member/{username}/edit'

  /member/{username}/delete:
    post:
      operationId: R1012
      summary: 'R1012: Delete account action'
      description: 'Processes the account deletion. Access: OWN, ADM'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true

      responses:
```

```yaml
          '302':
            description: 'Redirect after processing the account deletion.'
            headers:
              Location:
                schema:
                  type: string
                examples:
                  302Success:
                    description: 'Successful deletion. Redirect to homepage.'
                    value: '/'
                  302Error:
                    description: 'Failed deletion. Redirect to edit profile
form.'
                    value: '/member/{username}/edit'

  /category/{categoryId}:
    get:
      operationId: R1013
      summary: 'R1013: Category page.'
      description: 'Show a page with recipes of a certain category. Access:
PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: categoryId
          schema:
            type: integer
          required: true

      responses:
        '200':
          description: 'Ok. Show [UI17](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/category.php)'

  /recipe/{recipeId}:
    get:
      operationId: R1014
      summary: 'R1014: View recipes'
      description: 'Show an individual recipe page. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Ok. Show [UI22](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/recipe.php)'
```

```yaml
  /recipe/{recipeId}/edit:
    get:
      operationId: R1015
      summary: 'R1015: Edit recipe page.'
      description: 'Show the recipe edition page. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true

      responses:
        '200':
          description: 'Ok. Show [UI23](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/createRecipe.php)'
    post:
      operationId: R1016
      summary: 'R1016: Edit recipe action'
      description: "Edit Recipe Action. Access: OWN"
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true

      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                name:
                  type: string
                difficulty:
                  type: string
                description:
                  type: string
                servings:
                  type: integer
                preparation_time:
                  type: integer
                cooking_time:
                  type: integer
                additional_time:
                  type: integer
```

```yaml
        creation_time:
          type: string
          format: datetime
        creator:
          type: object
          properties:
            id:
              type: integer
            name:
              type: string
        category:
          type: object
          properties:
            id:
              type: integer
            name:
              type: string
        id_group:
          type: integer
        score:
          type: number
        ingredients:
          type: array
          items:
            type: object
            properties:
              ingredient:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
              unit:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
              quantity:
                type: number
        tags:
          type: array
          items:
            type: object
            properties:
              id:
                type: integer
              name:
                type: string
        steps:
          type: array
          items:
```

```yaml
                          type: object
                          properties:
                            id:
                              type: integer
                            name:
                              type: string
                            description:
                              type: string
                            images:
                              type: array
                              items:
                                type: string
                                format: binary
                    images:
                      type: array
                      items:
                        type: string
                        format: binary


      responses:
        '302':
          description: 'Redirect after processing recipe update.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Error:
                  description: 'Failed recipe update.'
                  value: '/recipe/{recipeId}/edit'
                302Success:
                  description: 'Recipe successfully updated.'
                  value: '/recipe/{recipeId}'

/recipe/{recipeId}/delete:
  post:
    operationId: R1017
    summary: 'R1017: Delete recipe action'
    description: 'Processes the recipe deletion. Access: OWN, ADM'
    tags:
      - 'M02: Recipes, categories, groups and members'

    parameters:
      - in: path
        name: recipeId
        schema:
          type: integer
        required: true

    responses:
      '302':
        description: 'Redirect after processing the recipe deletion.'
        headers:
```

```yaml
              Location:
                schema:
                  type: string
                examples:
                  302Success:
                    description: 'Successful deletion. Redirect to homepage.'
                    value: '/'
                  302Error:
                    description: 'Failed deletion. Redirect to recipe page.'
                    value: '/recipe/{recipeId}'


  /recipe:
    get:
      operationId: R1018
      summary: 'R1018: Create Recipe.'
      description: 'Provides the create recipe page. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      responses:
        '200':
          description: 'Ok. Show [UI19](http://lbaw2135-piu.lbaw-prod.fe.up.pt/pages/createRecipe.php)'
    post:
      operationId: R1019
      summary: 'R1019: Create recipe action'
      description: 'Create new recipe action. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'

      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                title:
                  type: string
                mainCategory:
                  type: integer
                description:
                  type: string
                tags:
                  type: array
                  items:
                    type: integer
                difficulty:
                  type: string
                servings:
                  type: integer
                images:
                  type: array
                  items:
```

```yaml
                type: string
                format: binary
            visibility:
              type: boolean
            ingredients:
              type: array
              items:
                type: object
                properties:
                  quantity:
                    type: number
                  unit:
                    type: integer
                  name:
                    type: string
                required:
                  - quantity
                  - unit
                  - name
            preparationTime:
              type: integer
            cookingTime:
              type: integer
            additionalTime:
              type: integer
            steps:
              type: array
              items:
                type: object
                properties:
                  name:
                    type: string
                  description:
                    type: string
                  images:
                    type: array
                    items:
                      type: string
                      format: binary
                required:
                  - name
                  - description
        required:
          - title
          - mainCategory
          - description
          - tags
          - difficulty
          - servings
          - images
          - visibility
          - ingredients
          - preparationTime
          - cookingTime
```

```yaml
                - steps

      responses:
        '302':
          description: 'Redirect after processing recipe creation.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Error:
                  description: 'Failed recipe creation.'
                  value: '/recipe'
                302Success:
                  description: 'Recipe successfully created.'
                  value: '/recipe/{recipeId}'

  /group/{groupId}:
    get:
      operationId: R1020
      summary: 'R1020: Group page.'
      description: 'Show a page with recipes and information of a certain
group. Access: PUB.'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true

      responses:
        '200':
          description: 'Ok. Show [UI16](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/group.php)'

  /group/{groupId}/edit:
    get:
      operationId: R1021
      summary: 'R1021: Edit group page.'
      description: 'Shows the group edition page. Access: MOD.'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true

      responses:
```

```yaml
        '200':
          description: 'Ok. Show [UI24](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/edit_group.php)'
    post:
      operationId: R1022
      summary: 'R1022: Edit group action'
      description: 'Processes the group edition form submission. Access:
MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                name:
                  type: string
                description:
                  type: string
                visibility:
                  type: boolean
                coverImage:
                  type: string
                  format: binary
                profileImage:
                  type: string
                  format: binary
      responses:
        '302':
          description: 'Redirect after processing the group edition.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful group edition. Redirect to group
page.'
                  value: '/group/{groupId}'
                302Error:
                  description: 'Failed edition. Redirect back to group
edition page.'
                  value: '/group/{groupId}/edit'

  /group/{groupId}/delete:
    post:
```

```yaml
      operationId: R1023
      summary: 'R1023: Delete group action'
      description: 'Processes the group deletion. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true

      responses:
        '302':
          description: 'Redirect after processing the group deletion.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful group deletion. Redirect to home
page.'
                  value: '/'
                302Error:
                  description: 'Failed creation. Redirect back to group
edition page.'
                  value: '/group/{groupId}/edit'

  /group:
    get:
      operationId: R1024
      summary: 'R1024: Create group page.'
      description: 'Show the group creation page. Access: MBR.'
      tags:
        - 'M02: Recipes, categories, groups and members'

      responses:
        '200':
          description: 'Ok. Show [UI24](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/edit_group.php)'
    post:
      operationId: R1025
      summary: 'R1025: Create group action'
      description: 'Creates a new group. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'
      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
```

```yaml
              properties:
                profilePhoto:
                  type: string
                  format: binary
                name:
                  type: string
                description:
                  type: string
                visibility:
                  type: boolean
                coverPhoto:
                  type: string
                  format: binary
              required:
                - profilePhoto
                - name
                - description
                - visibility
                - coverPhoto
      responses:
        '302':
          description: 'Redirect after processing the group creation.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful group creation. Redirect to
group page.'
                  value: '/group/{groupId}'
                302Error:
                  description: 'Failed creation. Redirect back to group
creation page.'
                  value: '/group'

  /feed:
    get:
      operationId: R1026
      summary: 'R1026: Feed.'
      description: 'Provides the feed page. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      responses:
        '200':
          description: 'Ok. Show [UI18](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/feed.php)'

  /chat/{recipientId}:
    get:
      operationId: R1027
      summary: 'R1027: Read messages'
      description: 'Read private messages sent to another user. Access:
MBR'
```

```yaml
      tags:
        - 'M03: Chat'
      parameters:
        - in: path
          name: recipientId
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Ok. Show [UI08](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/privateMessages.php)'

  /search/{searchQuery}:
    get:
      operationId: R1028
      summary: 'R1028: Search results page'
      description: 'Provide results from the performed search. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: searchQuery
          schema:
            type: string
          required: true
        - in: query
          name: sort
          schema:
            type: string
          required: false
        - in: query
          name: sortparam
          schema:
            type: string
          required: false
        - in: query
          name: category
          schema:
            type: string
          required: false
        - in: query
          name: tag
          schema:
            type: string
          required: false
        - in: query
          name: rating
          schema:
            type: string
          required: false
        - in: query
          name: ingredient
          schema:
```

```yaml
                type: string
              required: false
          - in: query
            name: date
            schema:
                type: string
            required: false
          - in: query
            name: duration
            schema:
                type: string
            required: false
          - in: query
            name: difficulty
            schema:
                type: string
            required: false
        responses:
          '200':
            description: 'Ok. Show [UI15](http://lbaw2135-piu.lbaw-prod.fe.up.pt/pages/search.php)'

  /admin/reports:
    get:
      operationId: R1029
      summary: 'R1029: Reports page.'
      description: 'Show all the comment and recipe reports to the admin. Access: ADM'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      responses:
        '200':
          description: 'Ok. Show [UI15](http://lbaw2135-piu.lbaw-prod.fe.up.pt/pages/reportsManagement.php)'

  /admin/users:
    get:
      operationId: R1030
      summary: 'R1030: Users management section.'
      description: 'Provides the users management section. Access: PUB'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      responses:
        '200':
          description: 'Ok. Show [UI14](http://lbaw2135-piu.lbaw-prod.fe.up.pt/pages/usersManagement.php)'

  /about:
    get:
      operationId: R1031
      summary: 'R1031: About page'
      description: 'Provide information about TasteBuds. Access: PUB'
      tags:
        - 'M04: Information'
```

```yaml
      responses:
        '200':
          description: 'Ok. Show [UI06](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/about.php)'

  /faq:
    get:
      operationId: R1032
      summary: 'R1032: FAQ page'
      description: 'Provide FAQ page. Access: PUB'
      tags:
        - 'M04: Information'

      responses:
        '200':
          description: 'Ok. Show [UI07](http://lbaw2135-piu.lbaw-
prod.fe.up.pt/pages/faq.php)'

  /api/user:
    post:
      operationId: R2001
      summary: 'R2001: Member account'
      description: 'Create a member account. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                name:
                  type: string
                username:
                  type: string
                email:
                  type: string
                city:
                  type: string
                country:
                  type: integer
                password:
                  type: string
                profileImage:
                  type: string
                  format: binary
              required:
                - name
                - username
                - email
                - country
                - password
      responses:
```

```yaml
        '200':
          description: 'OK'

  /api/user/{username}:
    get:
      operationId: R2002
      summary: 'R2002: Member information'
      description: 'Get member information in JSON. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'OK. The authenticated user has access to all user
information.'
          content:
            application/json:
              schema:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
                  username:
                    type: string
                  city:
                    type: string
                  country:
                    type: object
                    properties:
                      id:
                        type: integer
                      abbreviation:
                        type: string
                      name:
                        type: string
                  creationDate:
                    type: string
                    format: datetime
                  score:
                    type: number
                  biography:
                    type: string
                  recipes:
                    type: integer
                  followers:
                    type: integer
                  following:
```

```yaml
                type: integer
              example:
                id: 2
                name: "Mark Hasmunsen"
                username: mark_h
                city: Bergen
                country:
                  - id: 165
                    abbreviation: "NO"
                    name: Norway
                creationDate: "2019-05-09"
                score: 4.7
                biography: "Black metal fan making food, what could go
wrong?"
                recipes: 14
                followers: 34
                following: 13
      '201': # TODO: CHANGE THIS!!!!!!
        description: "OK. The requested user is private and the
authenticated user doesn't follow him."
        content:
          application/json:
            schema:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
                username:
                  type: string
                recipes:
                  type: integer
                followers:
                  type: integer
                following:
                  type: integer
              example:
                id: 2
                name: Mark Hasmunsen
                username: mark_h
                recipes: 14
                followers: 34
                following: 13
  put:
    operationId: R2003
    summary: 'R2003: Edit profile'
    description: 'Edit member information. Access: OWN'
    tags:
      - 'M02: Recipes, categories, groups and members'

    parameters:
      - in: path
        name: username
```

```yaml
          schema:
            type: string
          required: true

      requestBody:
        required: false
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                name:
                  type: string
                username:
                  type: string
                email:
                  type: string
                city:
                  type: string
                country:
                  type: integer
                password:
                  type: string
                biography:
                  type: string
                visibility:
                  type: boolean
                profileImage:
                  type: string
                  format: binary
                coverImage:
                  type: string
                  format: binary
      responses:
        '200':
          description: 'Updated User'
    delete:
      operationId: R2004
      summary: 'R2004: Delete member'
      description: 'Delete a member account. Access: OWN, ADM'
      tags:
        - 'M02: Recipes, categories, groups and members'
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Deleted User'

  /api/user/{username}/recipes:
```

```yaml
      get:
        operationId: R2005
        summary: 'R2005: Member recipes'
        description: "Gets the member's recipes in JSON. Access: PUB"
        tags:
          - 'M02: Recipes, categories, groups and members'
        parameters:
          - in: path
            name: username
            schema:
              type: string
            required: true
        responses:
          '200':
            description: 'OK'
            content:
              application/json:
                schema:
                  type: array
                  items:
                    type: object
                    properties:
                      id:
                        type: string
                      title:
                        type: string
                      description:
                        type: string
                      creationDate:
                        type: string
                        format: datetime
                      rating:
                        type: number
                      numberOfReviews:
                        type: integer
                      category:
                        type: string
                      tags:
                        type: array
                        items:
                          type: object
                          properties:
                            id:
                              type: integer
                            name:
                              type: string
                      inFavourites:
                        type: boolean
                  example:
                    - id: 1
                      title: Classic Tiramisu
                      description: Classic Italian dessert made with
ladyfingers and mascarpone cheese.
                      creationDate: 22-01-2021
```

```yaml
                        rating: 4.5
                        numberOfReviews: 5
                        category: Dessert
                        tags:
                          - id: 45
                            name: "Vegetarian"
                          - id: 32
                            name: "Zero sugar"
                        inFavourites: false

  /api/user/{username}/reviews:
    get:
      operationId: R2006
      summary: 'R2006: Member reviews'
      description: "Gets the member's reviews in JSON. Access: PUB"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'OK'
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    recipeTitle:
                      type: string
                    postTime:
                      type: string
                      format: datetime
                    givenRating:
                      type: integer
                    givenComment:
                      type: string
                    recipeRating:
                      type: number
                    numberOfReviews:
                      type: integer
                example:
                  - recipeTitle: Traditional Irish Stew
                    postTime: 2 hours ago
                    givenRating: 4
                    givenComment: Absolutely delicious! Explosion of
flavour...
                    recipeRating: 4.6
                    numberOfReviews: 20
```

```yaml
  /api/user/{username}/favourites:
    get:
      operationId: R2007
      summary: 'R2007: Member favourites'
      description: 'Gets the members favourite recipes in JSON. Access:
PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'OK'
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    recipeTitle:
                      type: string
                    description:
                      type: string
                    creationTime:
                      type: string
                      format: datetime
                    rating:
                      type: number
                    numberOfReviews:
                      type: integer
                    category:
                      type: string
                    tags:
                      type: array
                      items:
                        type: object
                        properties:
                          id:
                            type: integer
                          name:
                            type: string
              example:
                - id: 1
                  recipeTitle: Classic Tiramisu
                  description: Classic Italian dessert made with
ladyfingers and mascarpone cheese.
```

```yaml
                    creationDate: 22-01-2021
                    rating: 4.5
                    numberOfReviews: 5
                    category: Dessert
                    tags:
                      - id: 45
                        name: "Vegetarian"
                      - id: 32
                        name: "Zero sugar"

  /api/user/{username}/following:
    get:
      operationId: R2008
      summary: 'R2008: Members that the member is following'
      description: 'Gets the members that the member is following in JSON.
Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'OK'
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
                    username:
                      type: string
                example:
                  - id: 2
                    name: Jamie Oliver
                    username: jamieOliverChef
                  - id: 3
                    name: Kyren Wilson
                    username: kyren77

  /api/user/{username}/followers:
    get:
      operationId: R2009
      summary: 'R2009: Member''s followers'
      description: "Gets the list of members that follow the user in JSON.
Access: PUB"
```

```yaml
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'OK'
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
                    username:
                      type: string
                  example:
                    - id: 4
                      name: Judd Trump
                      username: trump00
                    - id: 5
                      name: Paul Morphy
                      username: _morphy_

  /api/user/{username}/groups:
    get:
      operationId: R2010
      summary: "R2010: Member's groups"
      description: 'Gets the groups that the member is part of in JSON.
Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Success'
          content:
            application/json:
              schema:
                type: array
                items:
```

```yaml
                      type: object
                      properties:
                        id:
                          type: integer
                        name:
                          type: string
                    example:
                      - id: 1
                        name: Oporto Vegetarians
                      - id: 2
                        name: Lisbon Vegetarians

  /api/user/{username}/request:
    post:
      operationId: R2011
      summary: 'R2011: Create follow request'
      description: 'Creates a follow request (if profile is public becomes
a follower instantly). Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Created'

  /api/user/request/{username}:
    post:
      operationId: R2012
      summary: 'R2012: Accept follow request'
      description: 'Accepts a follow request. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: username
          schema:
            type: string
          required: true

      responses:
        '200':
          description: 'Accepted'
    delete:
      operationId: R2013
      summary: 'R2013: Decline follow request'
      description: 'Declines a follow request. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
```

```yaml
        - in: path
          name: username
          schema:
            type: string
          required: true
      responses:
        '200':
          description: 'Deleted'

  /api/users:
    get:
      operationId: R2014
      summary: 'R2014: Get all members'
      description: 'Gets all the registered members of the website in JSON.
Access: ADM'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
                    username:
                      type: string
                    email:
                      type: string
                    country:
                      type: string
                    city:
                      type: string
                    numberOfPosts:
                      type: integer
                    numberOfComments:
                      type: integer
                    numberOfReports:
                      type: integer
                example:
                  - id: 1
                    name: Sarah Colbert
                    username: sarahc
                    email: sarah@gamil.com
                    country: Portugal
                    city: Porto
                    numberOfPosts: 10
                    numberOfComments: 20
```

```yaml
                  numberOfReports: 0
                - id: 2
                  name: Biggus Dickus
                  username: biggus_dickus
                  email: biggus@dickus.mp
                  country: Italy
                  city: Rome
                  numberOfPosts: 15
                  numberOfComments: 69
                  numberOfReports: 2

  /api/recipe:
    post:
      operationId: R2101
      summary: 'R2101: Create recipe'
      description: 'Creates a new recipe. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'
      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                title:
                  type: string
                mainCategory:
                  type: integer
                description:
                  type: string
                tags:
                  type: array
                  items:
                    type: integer
                difficulty:
                  type: string
                servings:
                  type: integer
                images:
                  type: array
                  items:
                    type: string
                    format: binary
                visibility:
                  type: boolean
                ingredients:
                  type: array
                  items:
                    type: object
                    properties:
                      quantity:
                        type: number
                      unit:
```

```yaml
                      type: integer
                  name:
                    type: string
                required:
                  - quantity
                  - unit
                  - name
            preparationTime:
              type: integer
            cookingTime:
              type: integer
            additionalTime:
              type: integer
            steps:
              type: array
              items:
                type: object
                properties:
                  name:
                    type: string
                  description:
                    type: string
                  images:
                    type: array
                    items:
                      type: string
                      format: binary
                required:
                  - name
                  - description
          required:
            - title
            - mainCategory
            - description
            - tags
            - difficulty
            - servings
            - images
            - visibility
            - ingredients
            - preparationTime
            - cookingTime
            - steps
      responses:
        '200':
          description: 'Success'

  /api/recipe/{recipeId}:
    get:
      operationId: R2102
      summary: 'R2102: Get recipe'
      description: "Gets the recipe's information in JSON. Access: PUB"
      tags:
        - 'M02: Recipes, categories, groups and members'
```

```yaml
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'OK. The authenticated user has access to the
recipe.'
          content:
            application/json:
              schema:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
                  difficulty:
                    type: string
                  description:
                    type: string
                  servings:
                    type: integer
                  preparation_time:
                    type: integer
                  cooking_time:
                    type: integer
                  additional_time:
                    type: integer
                  creation_time:
                    type: string
                    format: datetime
                  creator:
                    type: object
                    properties:
                      id:
                        type: integer
                      name:
                        type: string
                  category:
                    type: object
                    properties:
                      id:
                        type: integer
                      name:
                        type: string
                  id_group:
                    type: integer
                  score:
                    type: number
                  ingredients:
                    type: array
```

```yaml
              items:
                type: object
                properties:
                  ingredient:
                    type: object
                    properties:
                      id:
                        type: integer
                      name:
                        type: string
                  unit:
                    type: object
                    properties:
                      id:
                        type: integer
                      name:
                        type: string
                  quantity:
                    type: number
          tags:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
          steps:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
                description:
                  type: string
        example:
          - id: 2
            name: Tofu à brás
            difficulty: easy
            description: "Tofu feito com batatas"
            servings: 5
            preparation_time: 10
            cooking_time: 40
            additional_time: 0
            creation_time: "2020-10-09 08:57"
            creator:
              id: 10
              name: "Ana Maria Braga"
            category:
              id: 1
```

```yaml
                      name: "Pratos principais"
                    ingredients:
                      - ingredient:
                          id: 40
                          name: tofu
                        unit:
                          id: 3
                          name: kilograms
                        quantity: 400
                      - ingredient:
                          id: 20
                          name: potato
                        unit:
                          id: 3
                          name: kilograms
                        quantity: 600
                    tags:
                      - id: 30
                        name: vegetarian
                      - id: 45
                        name: portuguese cuisine
                    steps:
                      - id: 354
                        name: "Faça a receita"
                        description: "Prepare o tofu à brás, depois disso
pode comê-lo"
    put:
      operationId: R2103
      summary: 'R2103: Edit recipe'
      description: "Alters the recipe's information. Access: OWN"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                name:
                  type: string
                difficulty:
                  type: string
                description:
                  type: string
                servings:
                  type: integer
                preparation_time:
```

```yaml
            type: integer
cooking_time:
  type: integer
additional_time:
  type: integer
creation_time:
  type: string
  format: datetime
creator:
  type: object
  properties:
    id:
      type: integer
    name:
      type: string
category:
  type: object
  properties:
    id:
      type: integer
    name:
      type: string
id_group:
  type: integer
score:
  type: number
ingredients:
  type: array
  items:
    type: object
    properties:
      ingredient:
        type: object
        properties:
          id:
            type: integer
          name:
            type: string
      unit:
        type: object
        properties:
          id:
            type: integer
          name:
            type: string
      quantity:
        type: number
tags:
  type: array
  items:
    type: object
    properties:
      id:
        type: integer
```

```yaml
                          name:
                            type: string
                      steps:
                        type: array
                        items:
                          type: object
                          properties:
                            id:
                              type: integer
                            name:
                              type: string
                            description:
                              type: string
                            images:
                              type: array
                              items:
                                type: string
                                format: binary
                      images:
                        type: array
                        items:
                          type: string
                          format: binary

      responses:
        '200':
          description: 'Updated Recipe'
    delete:
      operationId: R2104
      summary: 'R2104: Delete recipe'
      description: 'Deletes the recipe. Access: OWN, ADM'
      tags:
        - 'M02: Recipes, categories, groups and members'
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Deleted Recipe'

  /api/recipe/{recipeId}/favourite:
    post:
      operationId: R2105
      summary: 'R2105: Add a favourite recipe'
      description: "Adds the recipe to the user's favourite list. Access:
MBR"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
```

```yaml
          name: recipeId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Success'
    delete:
      operationId: R2106
      summary: 'R2106: Remove a favourite recipe'
      description: "Remove the recipe from the user's favourite list.
Access: MBR"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Success'

  /api/recipe/{recipeId}/report:
    post:
      operationId: R2107
      summary: 'R2107: Creates a report of a recipe'
      description: 'Creates a report of a recipe. Access: MBR'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: recipeId
          schema:
            type: integer
          required: true
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: string        # Reason
      responses:
        '200':
          description: 'Reported Recipe'

  /api/group:
    post:
      operationId: R2201
      summary: 'R2201: Create group'
      description: 'Creates a group. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'
```

```yaml
      requestBody:
        required: true
        content:
          multipart/form-data:
            schema:
              type: object
              properties:
                name:
                  type: string
                description:
                  type: string
                visibility:
                  type: boolean
                groupImage:
                  type: string
                  format: binary
                coverImage:
                  type: string
                  format: binary
              required:
                - name
                - description
                - visibility
                - groupImage
      responses:
        '200':
          description: 'Created Group'

  /api/group/{groupId}:
    get:
      operationId: R2202
      summary: 'R2202: Group information'
      description: 'Gets the information about a group. Access: PUB'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: "OK. The authenticated user has access to the
group''s' information."
          content:
            application/json:
              schema:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
```

```yaml
                  description:
                    type: string
                  visibility:
                    type: boolean
                  numberOfRecipes:
                    type: integer
                  numberOfMembers:
                    type: integer
                example:
                  id: 2
                  name: Vegetarianos do Porto
                  description: Este é o melhor grupo de vegetarianos do
Porto.
                  visibility: false
                  numberOfRecipes: 14
                  numberOfMembers: 56
        '201': #TODO: Change
          description: "OK. The authenticated user has access to the
group's information and membership requests."
          content:
            application/json:
              schema:
                type: object
                properties:
                  id:
                    type: integer
                  name:
                    type: string
                  description:
                    type: string
                  visibility:
                    type: boolean
                  numberOfRecipes:
                    type: integer
                  numberOfMembers:
                    type: integer
                  membershipRequests:
                    type: array
                    items:
                      type: integer
                example:
                  id: 2
                  name: Vegetarianos do Porto
                  description: Este é o melhor grupo de vegetarianos do
Porto.
                  visibility: true
                  numberOfRecipes: 14
                  numberOfMembers: 56
                  requests:
                    - 1
                    - 5
    put:
      operationId: R2203
      summary: 'R2203: Edit group'
```

```yaml
      description: 'Alters the groups information. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                name:
                  type: string
                description:
                  type: string
                visibility:
                  type: boolean
                coverImage:
                  type: string
                  format: binary
                profileImage:
                  type: string
                  format: binary
      responses:
        '200':
          description: 'OK'
    delete:
      operationId: R2204
      summary: 'R2204: Delete group'
      description: 'Deletes the group. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'OK'

  /api/group/{groupId}/request:
    post:
      operationId: R2205
      summary: 'R2205: Create membership request'
      description: 'Creates a membership request (if group is public
becomes a member instantly). Access: MBR'
      tags:
```

```yaml
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Success'

  /api/group/{groupId}/request/{memberId}:
    post:
      operationId: R2206
      summary: 'R2206: Accept membership request'
      description: 'Accepts a membership request, adding the member to the
group. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
        - in: path
          name: memberId
          schema:
            type: integer
          required: true

      responses:
        '200':
          description: 'Accepted'

    delete:
      operationId: R2207
      summary: 'R2207: Refuse membership request'
      description: 'Refuses a membership request. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
        - in: path
          name: memberId
          schema:
            type: integer
          required: true
```

```yaml
      responses:
        '200':
          description: 'Deleted'

  /api/group/{groupId}/moderator/{memberId}:
    post:
      operationId: R2208
      summary: 'R2208: Turn group member into moderator'
      description: 'Turn group member into moderator, adding it to the
moderators group. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
        - in: path
          name: memberId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Member turned into moderator'

  /api/group/{groupId}/member/{memberId}:
    delete:
      operationId: R2209
      summary: 'R2209: Removes member from the group'
      description: 'Removes member from the group. Access: MOD'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: groupId
          schema:
            type: integer
          required: true
        - in: path
          name: memberId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Member removed from group'

  /api/group/{groupId}/members:
    get:
      operationId: R2210
      summary: 'R2210: Gets a list of the members of a group'
```

```yaml
        description: 'Returns a list of the members of the group in JSON
Access: MOD'
        tags:
          - 'M02: Recipes, categories, groups and members'
        parameters:
          - in: path
            name: groupId
            schema:
              type: integer
            required: true
        responses:
          '200':
            description: "Success"
            content:
              application/json:
                schema:
                  type: array
                  items:
                    type: object
                    properties:
                      id:
                        type: integer
                      name:
                        type: string
                      username:
                        type: string
                  example:
                    - id: 2
                      name: Mark Hasmunsen
                      username: mark_h
                    - id: 3
                      name: Kyren Wilson
                      username: kyren77

  /api/chat/{recipientId}:
    get:
      operationId: R2301
      summary: 'R2301: Get chat'
      description: 'Gets a chat between two members in JSON Access: MBR'
      tags:
        - 'M03: Chat'

      parameters:
        - in: path
          name: recipientId
          schema:
            type: integer
          required: true

      responses:
        '200':
          description: "Success"
          content:
            application/json:
```

```yaml
              schema:
                type: array
                items:
                  type: object
                  properties:
                    text:
                      type: string
                    creationDate:
                      type: string
                      format: datetime
                  example:
                    - text: That's nice!
                      creationDate: 2019-05-09 16:19
                    - text: Hello :)
                      creationDate: 2019-05-12 13:09
    post:
      operationId: R2302
      summary: 'R2302: Add message'
      description: 'Adds a message to a chat between two users. Access:
MBR'
      tags:
        - 'M03: Chat'

      parameters:
        - in: path
          name: recipientId
          schema:
            type: integer
          required: true

      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                message:
                  type: string
              required:
                - message

      responses:
        '200':
          description: 'Success'

  /api/chats:
    get:
      operationId: R2303
      summary: 'R2303: Get the user conversations'
      description: 'Gets a user''s chat in JSON. Access: OWN'
      tags:
        - 'M03: Chat'
```

```yaml
      responses:
        '200':
          description: 'Success'
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    userId:
                      type: integer
                    name:
                      type: string
                    username:
                      type: string
                    lastMessage:
                      type: string
                    read:
                      type: boolean
                    lastSenderName:
                      type: string
                example:
                  - userId: 1
                    name: Sarah Colbert
                    username: sarahc
                    lastMessage: That's nice!
                    read: false
                    lastSenderName: Sarah
                  - userId: 2
                    name: Biggus Dickus
                    username: biggus_dickus
                    lastMessage: Okay bro.
                    read: true
                    lastSenderName: You

  /api/comment:
    post:
      operationId: R2401
      summary: 'R2401: Create comment'
      description: 'Adds a comment / review to a recipe. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                recipeId:
                  type: integer
                content:
                  type: string
```

```yaml
                rating:
                  type: integer
              required:
                - recipeId
                - content
      responses:
        '200':
          description: 'Success'

  /api/comment/{commentId}:
    put:
      operationId: R2402
      summary: 'R2402: Edit comment'
      description: 'Edits a comment. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: commentId
          schema:
            type: integer
          required: true

      requestBody:
        required: false
        content:
          application/x-www-form-urlencoded:
            schema:
              type: object
              properties:
                text:
                  type: string
                rating:
                  type: integer

      responses:
        '200':
          description: 'Updated Comment'

    delete:
      operationId: R2403
      summary: 'R2403: Delete comment'
      description: 'Deletes a comment. Access: OWN'
      tags:
        - 'M02: Recipes, categories, groups and members'
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: commentId
          schema:
            type: integer
          required: true
      responses:
        '200':
```

```yaml
          description: 'Deleted Comment'

  /api/comment/{commentId}/report:
    post:
      operationId: R2404
      summary: 'R2404: Creates a report of a comment'
      description: 'Creates a report of a comment. Access: MBR'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: commentId
          schema:
            type: integer
          required: true
      requestBody:
        required: true
        content:
          application/x-www-form-urlencoded:
            schema:
              type: string        # Reason
      responses:
        '200':
          description: 'Reported Comment'

  /api/feed:
    get:
      operationId: R2501
      summary: "R2501: Get member's feed"
      description: 'Gets the feed of a given member in JSON. Access: MBR'
      tags:
        - 'M02: Recipes, categories, groups and members'

      parameters:
        - in: query
          name: sort
          schema:
            type: string
          required: false
        - in: query
          name: sortparam
          schema:
            type: string
          required: false
        - in: query
          name: category
          schema:
            type: string
          required: false
        - in: query
          name: tag
          schema:
            type: string
          required: false
```

```yaml
      - in: query
        name: rating
        schema:
          type: string
        required: false
      - in: query
        name: ingredient
        schema:
          type: string
        required: false
      - in: query
        name: datetime
        schema:
          type: string
        required: false
      - in: query
        name: duration
        schema:
          type: string
        required: false
      - in: query
        name: difficulty
        schema:
          type: string
        required: false


    responses:
      '200':
        description: "Success"
        content:
          application/json:
            schema:
              type: object
              properties:
                recipes:
                  type: array
                  items:
                    type: object
                    properties:
                      id:
                        type: string
                      title:
                        type: string
                      description:
                        type: string
                      creationDate:
                        type: string
                        format: datetime
                      rating:
                        type: number
                      numberOfReviews:
                        type: integer
                      category:
```

```yaml
                          type: string
                      author:
                        type: object
                        properties:
                          id:
                            type: integer
                          name:
                            type: string
                      tags:
                        type: array
                        items:
                          type: object
                          properties:
                            id:
                              type: integer
                            name:
                              type: string
          trendingTags:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
          trendingRecipes:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                title:
                  type: string
        example:
          recipes:
            - id: 1
              title: Classic Tiramisu
              description: Classic Italian dessert made with
ladyfingers and mascarpone cheese.
              creationDate: 22-01-2021
              rating: 4.5
              numberOfReviews: 5
              category: Dessert
              author:
                id: 2
                name: Jessica Worfield
              tags:
                - id: 45
                  name: "Vegetarian"
                - id: 32
                  name: "Zero sugar"
            - id: 2
```

```yaml
                       title: Francesinha
                       description: Portuguese delicious meal.
                       creationDate: 20-03-2020
                       rating: 4.8
                       numberOfReviews: 3
                       category: Lunch
                       author:
                         id: 6
                         name: Johnson Wassum
                       tags:
                         - id: 45
                           name: "Vegetarian"
                         - id: 32
                           name: "Zero sugar"
                  trendingTags:
                    - id: 1
                      name: Vegetarian
                    - id: 2
                      name: Low carb
                  trendingRecipes:
                    - id: 3
                      title: Cozido à portuguesa

  /api/search/{searchQuery}:
    get:
      operationId: R2601
      summary: 'R2601: Search for a term'
      description: "Searches for a search term, accepting sort and filter
parameters, returning the result as JSON. Access: PUB"
      tags:
        - 'M02: Recipes, categories, groups and members'
      parameters:
        - in: path
          name: searchQuery
          schema:
            type: string
          required: true
        - in: query
          name: sort
          schema:
            type: string
          required: false
        - in: query
          name: sortparam
          schema:
            type: string
          required: false
        - in: query
          name: category
          schema:
            type: string
          required: false
        - in: query
          name: tag
```

```yaml
          schema:
            type: string
          required: false
        - in: query
          name: rating
          schema:
            type: string
          required: false
        - in: query
          name: ingredient
          schema:
            type: string
          required: false
        - in: query
          name: date
          schema:
            type: string
          required: false
        - in: query
          name: duration
          schema:
            type: string
          required: false
        - in: query
          name: difficulty
          schema:
            type: string
          required: false
      responses:
        '200':
          description: 'OK'
          content:
            application/json:
              schema:
                type: object
                properties:
                  recipes:
                    type: array
                    items:
                      type: object
                      properties:
                        id:
                          type: integer
                        title:
                          type: string
                        authorName:
                          type: string
                        rating:
                          type: number
                        numberOfReviews:
                          type: integer
                  users:
                    type: array
                    items:
```

```yaml
              type: object
              properties:
                id:
                  type: integer
                username:
                  type: string
                name:
                  type: string
                rating:
                  type: number
                numberOfRecipes:
                  type: integer
          groups:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
                numberOfRecipes:
                  type: integer
                numberOfMembers:
                  type: integer
          categories:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string
          tags:
            type: array
            items:
              type: object
              properties:
                id:
                  type: integer
                name:
                  type: string

      example:
        recipes:
          - id: 1
            title: Classic Tiramisu
            description: Classic Italian dessert made with
ladyfingers and mascarpone cheese.
            authorName: John Trousseau
            rating: 4.5
            numberOfReviews: 5
          - id: 2
```

```yaml
                          title: Francesinha
                          description: Portuguese delicious meal.
                          authorName: Jean Meileur
                          rating: 4.8
                          numberOfReviews: 3
                      users:
                        - id: 1
                          username: sarahxcolbert
                          name: Sarah Colbert
                          rating: 4.5
                          numberOfRecipes: 10
                        - id: 2
                          username: johnlul
                          name: John Lul
                          rating: 3.8
                          numberOfRecipes: 2
                      groups:
                        - id: 1
                          name: Vegetarianos do Porto
                          numberOfRecipes: 7
                          numberOfMembers: 50
                        - id: 1
                          name: Amantes de vegetais
                          numberOfRecipes: 15
                          numberOfMembers: 130
                      tags:
                        - id: 1
                          name: Vegetarian
                        - id: 2
                          name: Fresh
                      categories:
                        - id: 1
                          name: Main Dish
                        - id: 2
                          name: Dessert

  /api/report/{reportId}:
    delete:
      operationId: R2701
      summary: 'R2701: Dismiss report'
      description: "Deletes a report from the list. Access: ADM"
      tags:
        - 'M05: Web resources associated with the administrator pages'
      parameters:
        - in: path
          name: reportId
          schema:
            type: integer
          required: true
      responses:
        '200':
          description: 'Deleted Report'

  /api/reports:
```

```yaml
    get:
      operationId: R2702
      summary: 'R2702: Get all reports'
      description: 'Gets all the reports in JSON. Access: ADM'
      tags:
        - 'M05: Web resources associated with the administrator pages'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    type:
                      type: string
                    id_reporter:
                      type: integer
                    reason:
                      type: string
                    active:
                      type: boolean
                    id_comment:
                      type: integer
                    id_recipe:
                      type: integer
                example:
                  - type: comment_report
                    id_reporter: 1
                    reason: Disrespectful
                    active: true
                    id_comment: 2
                    id_recipe: null
                  - type: recipe_report
                    id_reporter: 54
                    reason: Disrespectful
                    active: true
                    id_comment: null
                    id_recipe: 4

  /api/notifications:
    get:
      operationId: R2801
      summary: 'R2801: Get notifications'
      description: "Gets the logged in user's notifications in JSON.
Access: MBR"
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '200':
          description: "Success"
          content:
```

```yaml
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    type:
                      type: string
                    read:
                      type: boolean
                    commentId:
                      type: integer
                    recipeName:
                      type: string
                    recipeId:
                      type: integer
                    userId:
                      type: integer
                    name:
                      type: string
                    username:
                      type: string
                  required:
                    - type
                    - read
                    - userId
                    - name
                    - username
                example:
                  - type: followRequest
                    read: false
                    userId: 1
                    name: Sarah Colbert
                    username: sarahc
                  - id: 1
                    type: review
                    read: true
                    userId: 2
                    name: Biggus Dickus
                    username: biggus_dickus
                  - type: follow
                    read: true
                    userId: 2
                    name: Biggus Dickus
                    username: biggus_dickus
                  - id: 1
                    type: comment
                    read: true
                    commentId: 3
                    userId: 2
                    name: Biggus Dickus
                    username: biggus_dickus
```

```yaml
                      - id: 1
                        type: delete
                        read: false
                        recipeName: Scones
                        userId: 1
                        name: Sarah Colbert
                        username: sarahc
                      - id: 1
                        type: favourite
                        read: false
                        recipeId: 3
                        userId: 1
                        name: Sarah Colbert
                        username: sarahc

    put:
      operationId: R2802
      summary: 'R2802: Change notification state'
      description: 'Change notification read state. Access: OWN'
      tags:
        - 'M01: Authentication and Individual Profile'

      requestBody:
        required: false
        content:
          application/x-www-form-urlencoded:
            schema:
              type: array
              items:
                type: object
                properties:
                  id:
                    type: integer # Not required in follow and
followRequest
                  type:
                    type: string
                  read:
                    type: boolean
                  userId:
                    type: integer # Only required in follow and
followRequest
                  required:
                    - type
                    - read
      responses:
        '200':
          description: 'Updated User'

  /api/countries:
    get:
      operationId: R2901
      summary: 'R2901: Get list of countries'
      description: "Gets the list of existing countries in JSON. Access:
PUB"
```

```yaml
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    abbreviation:
                      type: string
                    name:
                      type: string
                  example:
                    - id: 1
                      abbreviation: PT
                      name: Portugal
                    - id: 2
                      abbreviation: ES
                      name: Spain
                    - id: 3
                      abbreviation: FR
                      name: France
                    - id: 4
                      abbreviation: USA
                      name: United States of America

  /api/categories:
    get:
      operationId: R2902
      summary: 'R2902: Get list of categories'
      description: "Gets the list of existing categories in JSON. Access:
PUB"
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
```

```yaml
          example:
            - id: 1
              name: "Dessert"
            - id: 2
              name: "Appetizer"

  /api/tags:
    get:
      operationId: R2903
      summary: 'R2903: Get list of tags'
      description: "Gets the list of existing tags in JSON. Access: PUB"
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
                  example:
                    - id: 1
                      name: "Vegetarian"
                    - id: 2
                      name: "Low-carb"

  /api/ingredients:
    get:
      operationId: R2904
      summary: 'R2904: Get list of ingredients'
      description: "Gets the list of existing ingredients in JSON. Access:
PUB"
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
```

```yaml
                type: string
            example:
              - id: 1
                name: "Potato"
              - id: 2
                name: "Apple"

  /api/units:
    get:
      operationId: R2905
      summary: 'R2905: Get list of units'
      description: "Gets the list of existing units in JSON. Access: PUB"
      tags:
        - 'M04: Information'
      responses:
        '200':
          description: "Success"
          content:
            application/json:
              schema:
                type: array
                items:
                  type: object
                  properties:
                    id:
                      type: integer
                    name:
                      type: string
                example:
                  - id: 1
                    name: "kg"
                  - id: 2
                    name: "L"
```

A8: Vertical prototype

In this iteration, we developed a Vertical Prototype that aims the implementation of several user stories to validate the presented architecture. In this early stage of the project, the main goal is to gain some familiarity with Laravel. This prototype includes page visualization, insertion, edition, removal, permission control and success/error message display.

1. Implemented Features

1.1. Implemented User Stories

The user stories that were implemented in the prototype are described in the following table.

Reference	Name	Priority	Description
US11	See home	high	As a *User*, I want to access the homepage, so that I can see the website's presentation.

Reference	Name	Priority	Description
US16	Read reviews	high	As a *User*, I want to read all reviews of a post, so that I know what other people think about it.
US17	View a recipe	high	As a *User*, I want to view all information of a specific public recipe, so that I can get all the information about it.
US21	Sign-in	high	As a *Visitor*, I want to authenticate into the system, so that I can access privileged information.
US22	Sign-up	high	As a *Visitor*, I want to register myself into the system, so that I can then authenticate myself.
US39	Post a recipe	high	As a *Member*, I want to post recipes, so that I can share them with other users.
US310	Sign out	high	As a *Member*, I want to sign out of the system, so that I can close the session.
US315	Save recipe	medium	As a *Member*, I want to add a recipe to my favourites list, so that I can view it in the future more easily.
US41	Update a recipe	high	As a *Post Author*, I want to update a recipe, so that I can change its information.
US42	Delete a recipe	high	As a *Post Author*, I want to delete a recipe so that it's no longer in the website's database and no one can see it.

1.2. Implemented Web Resources

The web resources that were implemented in the prototype are described in the next section.

Module M01: Authentication and Individual Profile

Web Resource Reference	URL
R1002: Login form	/login
R1003: Login Action	POST /login
R1004: Register form	/register
R1005: Register Action	POST /register
R1006: Logout Action	POST /logout

Module M02: Recipes, categories, groups and members

Web Resource Reference	URL
R1014: View recipe	/recipe/{recipeId}
R1015: Edit recipe page	/recipe/{recipeId}/edit

Web Resource Reference	URL
R1016: Edit recipe action	POST /recipe/{recipeId}/edit
R1017: Delete recipe action	POST /recipe/{recipeId}/delete
R1018: Create recipe page	/recipe
R1019: Create recipe action	POST /recipe
R2101: Create recipe	POST /api/recipe
R2102: Get recipe	/api/recipe/{recipeId}
R2103: Edit recipe)	PUT /api/recipe/{recipeId}
R2104: Delete recipe	DELETE /api/recipe/{recipeId}
R2105: Add a favourite recipe	POST /api/recipe/{recipeId}/favourite
R2106: Remove a favourite recipe	DELETE /api/recipe/{recipeId}/favourite

2. Prototype

The prototype is available here.

Credentials:

- Email: salma_brown@hotmail.com
- Password: 123456789
- Obs: This user has created the recipes with ids 1 and 65.

The code is available here.

Revision history

No changes made after the first submission.

GROUP2135, 03/05/21

Alexandre Abreu, up201800168@fe.up.pt

Rafael Cristino, up201806680@fe.up.pt

Rui Pinto, up201806441@fe.up.pt

Tiago Gomes, up201806658@fe.up.pt (Editor)