

A7: Web Resources Specification

In this artifact we present an overview of the web resources that will be implemented in our application. It also describes the different permissions that condition the access to resources. The web resources are specified using the OpenAPI standard, each one having their expected URL, HTTP methods and parameters supported, as well as possible responses documented.

1. Overview

In the next table, we have an overview of the different modules of our web application and a description of each one.

M01: Authentication and Individual Profile	Web resources associated with user authentication and user profile management. Includes the following system features: login, logout, registration, credentials recovery, view and edit personal information.
M02: Posts and comments	Web resources associated with posts and its comments. Includes the following system features: posts search list, view and publish posts, comment, view other comments, upvote/downvote posts and comments.
M03: User Administration and Static pages	Web resources with user administration and static pages. Includes the following system features: User Administration - view users and their personal information, view moderator's flags, ban and delete users accounts. Static Pages - view static pages like Home, About Us, FAQ, Contact Us, Jobs.

2. Permissions

In the next table, we have the different types of permissions that will define the access to resources.

VIS	Visitor	Users without privileges
USR	User	Authenticated users
OWN	Owner	Owners of the information
MOD	Moderator	System moderators
ADM	Administrator	System administrators

3. OpenAPI Specification

You can access the file here:

https://git.fe.up.pt/lbaw/lbaw2122/lbaw2171/-/blob/main/a7_openapi.yml

```
openapi: 3.0.0

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

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

externalDocs:
  description: Find more info here.
  url: https://web.fe.up.pt/~ssn/wiki/teach/lbaw/sportium/a07

tags:
- name: 'M01: Authentication and Individual Profile'
- name: 'M02: Posts'
- name: 'M03: Comments'
- name: 'M04: Follows'
- name: 'M05: User Administration and Static pages'

paths:
  /login:
    get:
      operationId: R101
      summary: 'R101: Login Form'
      description: 'Provide login form. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '200':
          description: 'Ok. Show Log-in UI'
    post:
      operationId: R102
      summary: 'R102: Login Action'
      description: 'Processes the login form submission. Access: PUB'
      tags:
        - 'M01: Authentication and Individual Profile'
```

```

requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          email:      # <!-- form field name
            type: string
          password:   # <!-- form field name
            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
user profile.'
            value: '/users/{id}'
          302Error:
            description: 'Failed authentication. Redirect to login
form.'
            value: '/login'

/logout:

  post:
    operationId: R103
    summary: 'R103: Logout Action'
    description: 'Logout the current authenticated user. Access: USR,
ADM'
    tags:
      - 'M01: Authentication and Individual Profile'
    responses:
      '302':
        description: 'Redirect after processing logout.'
        headers:
          Location:

```

```

        schema:
          type: string
        examples:
          302Success:
            description: 'Successful logout. Redirect to login
form.'
            value: '/login'

/register:
  get:
    operationId: R104
    summary: 'R104: Register Form'
    description: 'Provide new user registration form. Access: PUB'
    tags:
      - 'M01: Authentication and Individual Profile'
    responses:
      '200':
        description: 'Ok. Show Sign-Up UI'

  post:
    operationId: R105
    summary: 'R105: Register Action'
    description: 'Processes the new user registration form submission.
Access: PUB'
    tags:
      - 'M01: Authentication and Individual Profile'

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

    responses:

```

```

    '302':
      description: 'Redirect after processing the new user
information.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful authentication. Redirect to
user profile.'
              value: '/users/{id}'
            302Failure:
              description: 'Failed authentication. Redirect to login
form.'
              value: '/login'

/users/{id}:
  get:
    operationId: R106
    summary: 'R106: View user profile'
    description: 'Show the individual user profile. Access: USR'
    tags:
      - 'M01: Authentication and Individual Profile'

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

    responses:
      '200':
        description: 'Ok. Show User Profile UI'

/api/posts:
  get:
    operationId: R202
    summary: 'R202: Search Posts API'
    description: 'Searches for posts and returns the results as JSON.
Access: PUB.'

    tags:
      - 'M02: Posts'

```

```
parameters:
  - in: query
    name: query
    description: String to use for full-text search
    schema:
      type: string
    required: false
  - in: query
    name: title
    description: Category of the posts
    schema:
      type: string
    required: false
  - in: query
    name: description
    description: Description of the post
    schema:
      type: string
    required: false
  - in: query
    name: owner_id
    description: Integer with the post's owner_id
    schema:
      type: integer
    required: false
```

```
responses:
  '200':
    description: Success
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              post_id:
                type: integer
              title:
                type: string
              date:
                type: integer
              votes:
                type: integer
              description:
```

```
        type: string
      type:
        type: string
      tag_id:
        type: integer
      author_id:
        type: integer
    example:
      - post_id: 1
        title: Some player scores a goal
        date: 1638524417
        votes: 108
        description: This player scored a goal against this
team in this game
        type: Video
        tag_id: 2
        author_id: 1092
      - post_id: 2011
        title: Team wins the tournament
        date: 1626522319
        votes: 89
        description: Team wins a close tournament against
Team 2
        type: News Article
        tag_id: 7
        author_id: 347
```

A8: Vertical Prototype

This artifact demonstrates the implemented features, like user stories and web resources, of our vertical prototype. It also provides access to the prototype.

1. Implemented Features

1.1. Implemented User Stories

The User Stories that are implemented in the prototype are described in the following table.

User Story	Name	Priority	Description
US01	See Home	High	As a user, I want to see the home page, new or popular articles, and the current popular topics.
US02	See About Us	High	As a user, I should be able to access the “about” page to see what the site is all about.
US03	See FAQ	High	As a user, I should be able to see the most asked questions and its answers.
US04	See Contact Us	High	As a User, it should be easy to access the administrators contacts.
US05	See Search	High	As a user, I want to search for articles about a certain sport, or search for a certain user.
US07	Sign-in	High	As a Visitor, I want to authenticate into the system, so that I can like, comment, post and report.
US08	Sign-up	High	As a Visitor, I want

			to register myself into the system, so that I can authenticate myself into the system.
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1.2. Implemented Web Resources

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

Module M01: Authentication and Individual Profile

Web Resource Reference	URL
R101: Login Form	GET /login
R102: Login Action	POST /login
R103: Logout Action	POST /logout
R104: Register Form	GET /register
R105: Register Action	POST /register

Module M03: User Administration and Static pages

Web Resource Reference	URL
R301: About Us	GET /about
R302: Contact Us	GET /contact
R303: FAQ	GET /faq
R304: 404	GET /404

2. Prototype

The prototype is available at <http://lbaw2171.lbaw.fe.up.pt/> .

Credentials:

- admin user: cchaudretd@va.gov / fpaCLk7bnz
- regular user: gharkess0@hc360.com / YRGC95

The code is available at <https://git.fe.up.pt/lbaw/lbaw2122/lbaw2171/-/tree/master> .

Revision history

- [06-01-22] Added A7, A8 to the EAP
- [06-01-22] Added revision history to the EAP
- [06-01-22] Added authors to the EAP

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