

3. EAP: Architecture Specification and Prototype

EAP: Architecture Specification and Prototype

A7: Web Resources Specification

Indicating the resource catalog, individual resource characteristics, and the JSON response format, this item describes the architecture of the web application that will be created. Using YAML, this specification complies with the OpenAPI standard.

The documentation for WeBid, including the CRUD (create, read, update, delete) methods for each resource, is included in this item.

1. Overview

The modules are listed and briefly discussed in this part, which also provides an overview of the web application that has to be implemented. The particular documentation of each module under the OpenAPI specification includes a list of the web resources connected to it.

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: Auctions	Web resources associated with auctions. Includes the following system features: auctions searching and listing, viewing and editing details and deleting auctions
M03: Bidding	Web resources associated with bids. Includes the following system features: view bids, add bids and remove bids.
M04: Search Api And Search Pages	Web resources associated with searching. Includes the following system features: auction searching, user searching.
M05: User Administration and Static pages	Web resources associated with user management, specifically: view and search users, delete or block user accounts, view and change user information, and view system access details for each user. Web resources with static content that are associated with this module: admin dashboard, about, contact, services and FAQ.
M06: User To User Interactions and Notifications	Web resources associated with reviews and favourites. Includes the following system features: add review, list reviews and delete reviews; add auctions/users to favourites list and remove auctions/users from the favourites list.

2. Permissions

This section describes the permissions that are used in the modules to set the terms of resource access.

PUB	Public	Users without privileges.
USR	User	Authenticated users
OWN	Owner	Users that are owners of the information (e.g. own profile, own auctions, own bids)
ADM	Administrator	System Managers

3. OpenAPI Specification

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

Link to the `a7_openapi.yaml` file in the group's repository. [a7_openapi.yaml](#)

```
openapi: 3.0.0

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

servers:
- url: https://lbaw2225.lbaw.fe.up.pt/
  description: Production server

externalDocs:
  description: Find more info here.
```

url: <https://git.fe.up.pt/lbaw/lbaw2223/lbaw2225/-/wikis/3.-EAP:-Architecture-Specification-and-Prototype#a7-web-resources-specification>

tags:

- name: 'M01: Authentication and Individual Profile'
- name: 'M02: Auctions'
- name: 'M03: Bidding'
- name: 'M04: Search Api And Search Pages'
- name: 'M05: User Administration and Static pages'
- name: 'M06: User To User Interactions and Notifications'

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 Login form UI'

post:

 operationId: 'R102'

 summary: 'R102: Login Action'

 description: 'Process login form. Access: PUB'

 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 Home page.'

 value: '/'

 302Error:

 description: 'Failed authentication. Redirect to login form.'

 value: '/login'

/logout:

post:

 operationId: 'R103'

 summary: 'R103: Logout Action'

 description: 'Process logout action of 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 Home Page.'
    value: '/login'

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

post:
  operationId: 'R105'
  summary: 'R105: Register Action'
  description: 'Process new user register form. Access: PUB'
  tags:
    - 'M01: Authentication and Individual Profile'
  requestBody:
    required: true
    content:
      application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            username:
              type: string
            email:
              type: string
            password:
              type: string
            firstname:
              type: string
            lastname:
              type: string
        required:
          - username
          - email
          - password
          - firstname
          - lastname
  responses:
    '302':
      description: 'Redirect after processing new user information.'
      headers:
        Location:
          schema:
            type: string
examples:
  302Success:
    description: 'Successful registration. Redirect to Home page.'
    value: '/'
  302Error:
    description: 'Failed registration. Redirect to register form.'
    value: '/register'

/profile/{username}:
get:
  operationId: 'R106'
  summary: 'R106: View User Profile Page'
  description: 'Show the User profile. Access: PUB'
  tags:

```

```

- 'M01: Authentication and Individual Profile'
parameters:
- in: path
  name: username
  description: 'Username of the user to show the profile.'
  required: true
  schema:
    type: string
responses:
'200':
  description: 'OK. Show Profile page UI'
  headers:
    Location:
      schema:
        type: string
      examples:
        200Authenticated:
          description: 'If user the user that is being viewed is Authenticated. View full User Profile.'
          value: '/users/{username}'
        302Unauthenticated:
          description: 'If user the user that is being viewed is not Authenticated. View partial User Profile.'
          value: '/users/{username}'

/profile/{username}/mydetails:
get:
  operationId: 'R107'
  summary: 'R107: Edit User Profile Form'
  description: 'Provide edit user profile form. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
parameters:
- in: path
  name: username
  description: 'Username of the user to show the profile.'
  required: true
  schema:
    type: string
responses:
'200':
  description: 'OK. Show Edit Profile form UI'

put:
  operationId: 'R108'
  summary: 'R108: Edit User Profile Action'
  description: 'Process edit user profile form. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
parameters:
- in: path
  name: username
  description: 'Username of the user to show the profile.'
  required: true
  schema:
    type: string
requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          username:
            type: string
          email:
            type: string
          firstname:
            type: string
          lastname:
            type: string

```

```

phonenumerber:
  type: string
required:
  - username
  - email
  - password
  - firstname
  - lastname
  - phonenumerber
responses:
'302':
  description: 'Redirect after processing edit user profile information.'
  headers:
    Location:
      schema:
        type: string
  examples:
    302Success:
      description: 'Successful edit. Redirect to User Profile page.'
      value: '/profile/{username}'
    302Error:
      description: 'Failed edit. Redirect to Edit Profile form.'
      value: '/profile/{username}/mydetails'

/profile/{username}/mypassword:
put:
  operationId: 'R109'
  summary: 'R109: Edit User Password Action'
  description: 'Process edit user password form. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
parameters:
  - in: path
    name: username
    description: 'Username of the user to show the profile.'
    required: true
    schema:
      type: string
requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          password:
            type: string
          newpassword:
            type: string
          newpasswordconfirmation:
            type: string
        required:
          - password
          - newpassword
          - newpasswordconfirmation
responses:
'302':
  description: 'Redirect after processing edit user password information.'
  headers:
    Location:
      schema:
        type: string
  examples:
    302Success:
      description: 'Successful edit. Redirect to User Profile page.'
      value: '/profile/{username}'
    302Error:

```

```

description: 'Failed edit. Redirect to Edit Profile form.'
value: '/profile/{username}/mydetails'

/profile/{username}/balance:
get:
  operationId: 'R110'
  summary: 'R110: View User Balance'
  description: 'Show the User balance. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
  parameters:
    - in: path
      name: username
      description: 'Username of the user to show the profile.'
      required: true
      schema:
        type: string
  responses:
    '200':
      description: 'OK. Show Balance page UI'
post:
  operationId: 'R111'
  summary: 'R111: Add User Balance'
  description: 'Add balance to the User. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
  parameters:
    - in: path
      name: username
      description: 'Username of the user to show the profile.'
      required: true
      schema:
        type: string
  requestBody:
    required: true
    content:
      application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            amount:
              type: number
              required:
                - amount
  responses:
    '302':
      description: 'Redirect after processing add balance.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful add balance. Redirect to Balance page.'
              value: '/profile/{username}/balance'
            302Error:
              description: 'Failed add balance. Redirect to Balance page.'
              value: '/profile/{username}/balance'

/profile/{username}/myauctions:
get:
  operationId: 'R112'
  summary: 'R112: View User Auctions'
  description: 'Show the User auctions. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
  parameters:

```

```

- in: path
  name: username
  description: 'Username of the user to show the profile.'
  required: true
  schema:
    type: string
responses:
  '200':
    description: 'OK. Show Auctions page UI'
/profile/{username}/mybids:
get:
  operationId: 'R113'
  summary: 'R113: View User Bids'
  description: 'Show the User bids. Access: USR, ADM'
  tags:
    - 'M01: Authentication and Individual Profile'
parameters:
  - in: path
    name: username
    description: 'Username of the user to show the profile.'
    required: true
    schema:
      type: string
responses:
  '200':
    description: 'OK. Show Bids page UI'
/auction/{id}:
get:
  operationId: 'R201'
  summary: 'R201: View Auction'
  description: 'Show the Auction details. Access: PUB'
  tags:
    - 'M02: Auctions'
parameters:
  - in: path
    name: id
    description: 'ID of the auction to show.'
    required: true
    schema:
      type: string
responses:
  '200':
    description: 'OK. Show Auction page UI'
post:
  operationId: 'R301'
  summary: 'R301: Add a Bid'
  description: 'Bid on a certain Auction as a authenticated user'
  tags:
    - 'M03: Bidding'
parameters:
  - in: path
    name: id
    description: 'ID of the auction to show.'
    required: true
    schema:
      type: string
requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          amount:
            type: number
          id:
            type: number

```

```
required:
  - amount
  - id
responses:
  '302':
    description: 'Redirect after processing Bid on Auction.'
    headers:
      Location:
        schema:
          type: string
    examples:
      302Success:
        description: 'Successful bid. Redirect to Auction details.'
        value: '/auction/{id}'
      302Error:
        description: 'Failed edit. Redirect to Auction details.'
        value: '/auction/{id}'

delete:
  operationId: 'R202'
  summary: 'R202: Delete Auction Action'
  description: 'Process delete Auction form. Access: USR, ADM'
  tags:
    - 'M02: Auctions'
  parameters:
    - in: path
      name: id
      description: 'ID of the auction to show.'
      required: true
      schema:
        type: string
  responses:
    '302':
      description: 'Redirect after processing Auction Delete.'
      headers:
        Location:
          schema:
            type: string
      examples:
        302Success:
          description: 'Successful Delete. Redirect to Home page.'
          value: '/'
    '403':
      description: 'Forbidden. Redirect to Home page.'
      headers:
        Location:
          schema:
            type: string
      examples:
        403Error:
          description: 'Forbidden. Redirect to Home page.'
          value: '/'

/auction/{id}/edit:
  put:
    operationId: 'R203'
    summary: 'R203: Update Auction Action'
    description: 'Process edit Auction form. Access: USR, ADM'
    tags:
      - 'M02: Auctions'
    parameters:
      - in: path
        name: id
        description: 'ID of the auction to show.'
        required: true
        schema:
          type: string
```

```

requestBody:
  required: true
content:
  application/x-www-form-urlencoded:
    schema:
      type: object
      properties:
        name:
          type: string
        idcategory:
          type: number
        description:
          type: string
        startingprice:
          type: number
        currentprice:
          type: number
        enddate:
          type: string
    required:
      - name
      - idcategory
      - description
      - startingprice
      - currentprice
      - enddate
responses:
  '302':
    description: 'Redirect after processing Auction Form.'
    headers:
      Location:
        schema:
          type: string
    examples:
      302Success:
        description: 'Successful Update. Redirect to Auction details.'
        value: '/auction/{id}'
      302Error:
        description: 'Failed Update. Redirect to Auction details.'
        value: '/auction/{id}'
  '403':
    description: 'Forbidden. Redirect to Home page.'
    headers:
      Location:
        schema:
          type: string
    examples:
      403Error:
        description: 'Forbidden. Redirect to Home page.'
        value: '/'
get:
  operationId: 'R204'
  summary: 'R204: Edit Auction Form'
  description: 'Show the Auction edit form. Access: USR, ADM'
  tags:
    - 'M02: Auctions'
  parameters:
    - in: path
      name: id
      description: 'ID of the auction to show.'
      required: true
      schema:
        type: string
  responses:
    '200':
      description: 'OK. Show Auction Edit page UI'

```

```

/auction/create:
get:
  operationId: 'R205'
  summary: 'R205: Create Auction Form'
  description: 'Show the Auction create form. Access: USR, ADM'
  tags:
    - 'M02: Auctions'
  responses:
    '200':
      description: 'OK. Show Auction Create page UI'

/auction:
post:
  operationId: 'R206'
  summary: 'R206: Create Auction Action'
  description: 'Process create Auction form. Access: USR, ADM'
  tags:
    - 'M02: Auctions'
  requestBody:
    required: true
    content:
      application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            name:
              type: string
            idcategory:
              type: number
            description:
              type: string
            startingprice:
              type: number
            currentprice:
              type: number
            enddate:
              type: string
          required:
            - name
            - idcategory
            - description
            - startingprice
            - currentprice
            - enddate
  responses:
    '302':
      description: 'Redirect after processing Auction Form.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful Create. Redirect to Auction details.'
              value: '/auction/{id}'
            302Error:
              description: 'Failed Create. Redirect to Auction details.'
              value: '/auction/{id}'
    '403':
      description: 'Forbidden. Redirect to Home page.'
      headers:
        Location:
          schema:
            type: string
          examples:
            403Error:
              description: 'Forbidden. Redirect to Home page.'

```

```
    value: '/'  
/search:  
get:  
  operationId: 'R401'  
  summary: 'R401: Search Page'  
  description: 'Show the Search page. Access: PUB'  
  tags:  
    - 'M04: Search Api And Search Pages'  
parameters:  
  - in: query  
    name: query_search  
    description: 'Search query.'  
    required: false  
    schema:  
      type: string  
  - in: query  
    name: category  
    description: 'Auction Category.'  
    required: false  
    schema:  
      type: number  
responses:  
  '200':  
    description: 'OK. Show Search page UI'  
/search/api:  
get:  
  operationId: 'R402'  
  summary: 'R402: Search Auctions Api'  
  description: 'Search Auctions and returns result as JSON. Access: PUB'  
  tags:  
    - 'M04: Search Api And Search Pages'  
parameters:  
  - in: query  
    name: query_search  
    description: 'Search query.'  
    required: false  
    schema:  
      type: string  
  - in: query  
    name: category  
    description: 'Auction Category.'  
    required: false  
    schema:  
      type: number  
responses:  
  '200':  
    description: 'Success'  
    content:  
      application/json:  
        schema:  
          type: array  
          items:  
            type: object  
            properties:  
              idauction:  
                type: number  
              name:  
                type: string  
              startdate:  
                type: string  
              enddate:  
                type: string  
              startingprice:  
                type: number  
              currentprice:  
                type: number  
              description:
```

```

        type: string
    isover:
        type: boolean
    idcategory:
        type: number
    idowner:
        type: number
    tsvectors:
        type: string
example:
- idauction: 11
- name: 'Camera'
- startdate: '2022-10-02T10:18:06.000000Z'
- enddate: '2022-11-21T13:35:09.000000Z'
- startingprice: 50
- currentprice: 50
- description: 'Polaroid i20X29 20.0MP Digital Camera'
- isover: false
- idcategory: 7
- idowner: 10
- tsvectors: "20.0':4B 'camera':1A,7B 'digit':6B 'i20x29':3B 'mp':5B 'polaroid':2B"
/search/auction/api:
get:
operationId: 'R403'
summary: 'R403: Search Auctions Api'
description: 'Search Auctions and returns result as JSON. Access: PUB'
tags:
- 'M04: Search Api And Search Pages'
parameters:
- in: query
  name: query_search
  description: 'Search query.'
  required: false
  schema:
    type: string
responses:
'200':
  description: 'Success'
  content:
    application/json:
      schema:
        type: array
        items:
          type: object
          properties:
            idauction:
              type: number
            name:
              type: string
            startdate:
              type: string
            enddate:
              type: string
            startingprice:
              type: number
            currentprice:
              type: number
            description:
              type: string
            isover:
              type: boolean
            idcategory:
              type: number
            idowner:
              type: number
            tsvectors:
              type: string

```

```

example:
  - idauction: 11
  - name: 'Camera'
  - startdate: '2022-10-02T10:18:06.000000Z'
  - enddate: '2022-11-21T13:35:09.000000Z'
  - startingprice: 50
  - currentprice: 50
  - description: 'Polaroid i20X29 20.0MP Digital Camera'
  - isover: false
  - idcategory: 7
  - idowner: 10
  - tsvectors: "20.0':4B 'camera':1A,7B 'digit':6B 'i20x29':3B 'mp':5B 'polaroid':2B"

/search/{category}:
get:
  operationId: 'R404'
  summary: 'R404: Search Page with filter'
  description: 'Show the Search page for a specific Category. Access: PUB'
  tags:
    - 'M04: Search Api And Search Pages'
parameters:
  - in: query
    name: query_search
    description: 'Search query.'
    required: false
    schema:
      type: string
  - in: path
    name: category
    description: 'Auction Category.'
    required: true
    schema:
      type: number
responses:
  '200':
    description: 'OK. Show Search page UI'

/search/user/api:
get:
  operationId: 'R405'
  summary: 'R405: Search Users Api'
  description: 'Search Users and returns result as JSON. Access: PUB'
  tags:
    - 'M04: Search Api And Search Pages'
parameters:
  - in: query
    name: query_search
    description: 'Search query.'
    required: false
    schema:
      type: string
responses:
  '200':
    description: 'Success'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              idclient:
                type: number
              username:
                type: string
              email:
                type: string

```

```

        firstname:
          type: string
        lastname:
          type: string
        address:
          type: string
        phonenumbers:
          type: string
        isbanned:
          type: boolean
        balance:
          type: number
      example:
        - idclient: 1
        - username: 'cminister0'
        - email: 'cminister0'
        - firstname: 'Constantina'
        - lastname: 'Minister'
        - address: '42749 Holmberg Trail'
        - phonenumbers: '2516074366'
        - isbanned: false
        - balance: 0
/admin:
get:
  operationId: 'R501'
  summary: 'R501: Admin Page'
  description: 'Show the Admin page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
  responses:
    '200':
      description: 'OK. Show Admin page UI'
    '403':
      description: 'Forbidden. User is not an Admin.'
/admin/users:
get:
  operationId: 'R502'
  summary: 'R502: Admin Users Page'
  description: 'Show the Admin Users page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
  responses:
    '200':
      description: 'OK. Show Admin Users page UI'
    '403':
      description: 'Forbidden. User is not an Admin.'
/admin/createuser:
get:
  operationId: 'R503'
  summary: 'R503: Admin Create User Page'
  description: 'Show the Admin Create User page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
  responses:
    '200':
      description: 'OK. Show Admin Create User page UI'
    '403':
      description: 'Forbidden. User is not an Admin.'
/admin/auctions:
get:
  operationId: 'R504'
  summary: 'R504: Admin Auctions Page'
  description: 'Show the Admin Auctions page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
  responses:
    '200':

```

```

description: 'OK. Show Admin Auctions page UI'
'403':
  description: 'Forbidden. User is not an Admin.'
/admin/bids:
get:
  operationId: 'R505'
  summary: 'R505: Admin Bids Page'
  description: 'Show the Admin Bids page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
responses:
  '200':
    description: 'OK. Show Admin Bids page UI'
  '403':
    description: 'Forbidden. User is not an Admin.'
/profile/{username}/edit:
get:
  operationId: 'R506'
  summary: 'R601: Edit User Profile Page'
  description: 'Show the Admin Edit User Profile page. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
parameters:
  - in: path
    name: username
    description: 'Username of the user.'
    required: true
    schema:
      type: string
responses:
  '200':
    description: 'OK. Show Edit Profile page UI'
  '403':
    description: 'Forbidden. User is not an admin.'
/admin/users/{id}:
delete:
  operationId: 'R507'
  summary: 'R507: Delete User Action'
  description: 'Delete a User. Access: ADM'
  tags:
    - 'M05: User Administration and Static pages'
parameters:
  - in: path
    name: id
    description: 'ID of the user.'
    required: true
    schema:
      type: number
responses:
  '302':
    description: 'Redirect after processing Auction Form.'
    headers:
      Location:
        schema:
          type: string
    examples:
      302Success:
        description: 'Successful Delete. Redirect to Admin user Page.'
        value: '/admin/users'
      302Error:
        description: 'Failed Delete. Redirect to admin user details.'
        value: '/admin/users'
  '403':
    description: 'Forbidden. User is not an admin.'
/about:
get:
  operationId: 'R508'

```

```

summary: 'R508: View About Page'
description: 'View the About Page. Access: PUB'
tags:
- 'M05: User Administration and Static pages'
responses:
'200':
  description: 'Ok. Show'

/contacts:
get:
  operationId: 'R509'
  summary: 'R509: View Contact Page'
  description: 'View the Contact Page. Access: PUB'
  tags:
- 'M05: User Administration and Static pages'
responses:
'200':
  description: 'Ok. Show'

/FAQs:
get:
  operationId: 'R510'
  summary: 'R510: View FAQ Page'
  description: 'View the FAQ Page. Access: PUB'
  tags:
- 'M05: User Administration and Static pages'
responses:
'200':
  description: 'Ok. Show'

/profile/{username}/review:
get:
  operationId: 'R601'
  summary: 'R601: Review User Profile Page'
  description: 'Show the Review User Profile page. Access: PUB'
  tags:
- 'M06: User To User Interactions and Notifications'
parameters:
- in: path
  name: username
  description: 'Username of the user.'
  required: true
  schema:
    type: string
responses:
'200':
  description: 'OK. Show Review Profile page UI'
post:
  operationId: 'R602'
  summary: 'R602: Review User Action'
  description: 'Review a User. Access: USR'
  tags:
- 'M06: User To User Interactions and Notifications'
parameters:
- in: path
  name: username
  description: 'Username of the user.'
  required: true
  schema:
    type: string
requestBody:
  description: 'Review Form'
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object

```

```

properties:
  rating:
    type: number
    description: 'Rating of the user.'
    minimum: 1
    maximum: 5
  review:
    type: string
    description: 'Review of the user.'
  iduserreviewer:
    type: number
    description: 'ID of the user reviewer.'
  iduserreviewed:
    type: number
    description: 'ID of the user reviewed.'
required:
  - rating
  - review
examples:
  ReviewForm:
    value:
      rating: 5
      review: 'Great seller!'
      iduserreviewer: 1
      iduserreviewed: 2
responses:
  '302':
    description: 'Redirect after processing Review Form.'
    headers:
      Location:
        schema:
          type: string
    examples:
      302Success:
        description: 'Successful Review. Redirect to Review Profile Page.'
        value: '/profile/{username}/review'
      302Error:
        description: 'Failed Review. Redirect to Review Profile Page.'
        value: '/profile/{username}/review'
  '403':
    description: 'Forbidden. User is not logged in.'
/profile/{username}/report:
get:
  operationId: 'R603'
  summary: 'R603: Report User Profile Page'
  description: 'Show the Report User Profile page. Access: PUB'
  tags:
    - 'M06: User To User Interactions and Notifications'
parameters:
  - in: path
    name: username
    description: 'Username of the user.'
    required: true
    schema:
      type: string
responses:
  '200':
    description: 'OK. Show Report Profile page UI'
post:
  operationId: 'R604'
  summary: 'R604: Report User Action'
  description: 'Report a User. Access: USR'
  tags:
    - 'M06: User To User Interactions and Notifications'
parameters:
  - in: path
    name: username

```

```

description: 'Username of the user.'
required: true
schema:
  type: string
requestBody:
  description: 'Report Form'
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          review:
            type: string
            description: 'Review of the user.'
          idseller:
            type: number
            description: 'ID of the seller.'
          idreporter:
            type: number
            description: 'ID of the reporter.'
  required:
    - rating
    - review
examples:
  ReviewForm:
    value:
      review: 'Worst seller!'
      idseller: 1
      idreporter: 2
responses:
  '302':
    description: 'Redirect after processing Report Form.'
    headers:
      Location:
        schema:
          type: string
    examples:
      302Success:
        description: 'Successful Report. Redirect to Report Profile Page.'
        value: '/profile/{username}/report'
      302Error:
        description: 'Failed Report. Redirect to Report Profile Page.'
        value: '/profile/{username}/report'
  '403':
    description: 'Forbidden. User is not logged in.'

/profile/{username}/notification:
get:
  operationId: 'R605'
  summary: 'R605: User Notification Json'
  description: 'Get the User Notification Json. Access: USR'
  tags:
    - 'M06: User To User Interactions and Notifications'
  parameters:
    - in: path
      name: username
      description: 'Username of the user.'
      required: true
      schema:
        type: string
  responses:
    '200':
      description: 'Success'
      content:
        application/json:
          schema:

```

```

type: array
items:
  type: object
  properties:
    idnotification:
      type: number
    content:
      type: string
    isread:
      type: boolean
    idclient:
      type: number
  example:
    - idnotification: 1
    - content: 'You have a new review!'
    - isread: false
    - idclient: 1
/profile/{username}/favorites:
get:
  operationId: 'R606'
  summary: 'R606: Favorites User Profile Page'
  description: 'Show the Favorites User Profile page. Access: USR, ADM'
  tags:
    - 'M06: User To User Interactions and Notifications'
parameters:
  - in: path
    name: username
    description: 'Username of the user.'
    required: true
    schema:
      type: string
responses:
  '200':
    description: 'OK. Show Favorites Profile page UI'
  '403':
    description: 'Forbidden. User is not logged in.'

```

A8: Vertical prototype

The features indicated in the common and theme requirements documents as necessary are implemented in the Vertical Prototype. This artifact seeks to verify the proposed architecture, and is based on the [LBAW Framework](#). The implementation entails work on the user interface, business logic, and data access levels of the solution's architecture.

1. Implemented Features

1.1. Implemented User Stories

User Story reference	Name	Priority	Description
US01	View Users Profile	High	As a User, I want to view the other users profile, so that I can see who I am interacting with.
US02	Search Auctions	High	As a User, I want to search auctions, so that I can find the products I'm looking for.
US03	View Active Auctions	High	As a User, I want to view the active auctions, so that I can see if any product interests me.
US04	View Own Profile	High	As a User, I want to view my own profile, so that I know what personal information is being publicly displayed.
US05	View Home Page	High	As a User, I want to access the home page, so that I can see a short exhibition of the website.
US06	View Auction Info	High	As a User, I want to view an auction, so that I can know more information about it.
US07	Browse Auctions by Category	Medium	As a User, I want to browse auctions by category, so that I can find what I am searching for with ease.

User Story reference	Name	Priority	Description
US08	Contextual Errors	Medium	As a User, I want to get contextual error messages, so that I can know what I'm doing wrong at a specific moment
US09	Contextual Help	Medium	As a User, I want to get contextual help messages (aka tooltips), so that I can get the information I'm missing to complete a certain task.
US015	Input Placeholders	Medium	As a User, I want to see input placeholders, so that I understand what's expected of me when filling in forms.
US016	View Seller Rating	Medium	As a User, I want to view the rating of the seller, so that I can know if he is reliable.
US11	Sign In	High	As an Unauthenticated User, I want to sign in, so that I can access privileged information.
US12	Sign Up	High	As an Unauthenticated User, I want to sign up, so that I can authenticate myself into the system.
US21	Sign Out	High	As an Authenticated User, I want to sign out, so that I can close my session.
US22	Edit Profile	High	As an Authenticated User, I want to edit my account, so that I can update my information.
US23	Bid on Auction	High	As an Authenticated User, I want to bid on an auction, so that I acquire the product I desire.
US24	Create Auction	High	As an Authenticated User, I want to create an auction, so that I can sell my product.
US26	Support Profile Picture	Medium	As an Authenticated User, I want to have support for profile pictures, so that I can show others my appearance.
US29	View Bidding History	Medium	As an Authenticated User, I want to view my bidding history, so that I can keep track of the money I'm possibly spending.
US210	Add Credit to Account	Medium	As an Authenticated User, I want to add credit to my account, so that I have to balance to bid on the auctions.
US212	Put a New Bid on Auction	Medium	As an Authenticated User, I want to put a new bid on an auction, so that I have a chance at winning a product I desire.
US213	Confirm Bid Popup	Medium	As an Authenticated User, I want to see a confirmation popup when I try to place a bid, so that I don't make any mistakes.
US31	View Auction Bidding History	High	As a Bidder, I want to view an auction's bidding history, so that I can keep track of the demand of the product.
US41	View My Auctions	High	As an Auction Owner, I want to view my auctions, so that I know which products I sold and which ones I'm selling.
US42	Edit Auction	High	As an Auction Owner, I want to edit an auction, so that I can update its information and status.
US43	Cancel Auction	High	As an Auction Owner, I want to cancel my auction, so that I don't have to sell the product anymore.
US51	Manage Accounts	High	As a System Manager, I want to manage the various user accounts, so that I can search, view, edit, create, etc, them.
US53	Delete User Accounts	Medium	As a System Manager, I want to delete a user account, so that they no longer have access to the website's authenticated features.
US54	Manage Auctions	Medium	As a System Manager, I want to manage an auction, so that I make sure everything is working properly.
US58	User Search	Low	As a System Manager, I want to search for users, so that I can quickly find them.

1.2. Implemented Web Resources

Module M01: Authentication and Individual Profile

Web Resource Reference	URL
R101: Login Form	GET /login

Web Resource Reference	URL
R102: Login Action	POST /login
R103: Register Form	GET /register
R104: Register Action	POST /register
R105: Logout Action	POST /logout
R106: View Profile	GET /profile/{username}
R107: Edit Profile Form	GET /profile/{username}/mydetails
R108: Edit Profile Action	PUT /profile/{username}/mydetails
R109: Edit Password Form	GET /profile/{username}/mydetails
R110: Edit Password Action	PUT /profile/{username}/mypassword
R111: View Own Auctions	GET /profile/{username}/myauctions
R112: View Own Bids	GET /profile/{username}/mybids
R113: Add Balance Form	GET /profile/{username}/balance
R114: Add Balance Action	POST /profile/{username}/balance

Module M02: Auctions

Web Resource Reference	URL
R201: Edit Auction Form	GET /auction/{id}/edit
R202: Edit Auction Action	PUT /auction/{id}/edit
R203: View Auction	GET /auction/{id}
R204: Create Auction Form	GET /auction/create
R205: Create Auction Action	POST /auction
R206: Delete Auction Action	DELETE /auction/{id}

Module M03: Bidding

Web Resource Reference	URL
R301: New Bid Form	GET /auction/{id}
R302: New Bid Action	POST auction/{id}

Module M04: Search Api And Search Pages

Web Resource Reference	URL
R401: User Search API (Admin)	GET /search/user/api
R402: Auction Search API (Admin)	GET /search/auction/api
R403: Auction Search API (User)	GET /search/api
R404: Auction Search Results Page	GET /search
R405: Auction Search by Category Results Page	GET /search/{category}

Web Resource Reference	URL
R501: View Admin Dashboard	GET /admin
R502: View All Registered Users	GET /admin/users
R503: View All Auctions	GET /admin/auctions
R504: View All Bids	GET /admin/bids
R505: Edit User Info Form	GET /profile/{username}/edit
R506: Edit User Info Action	PUT /profile/{username}/mydetails
R507: Create User Form	GET /admin/createuser
R508: Create User Action	POST /admin/createuser
R509: Delete User Action	DELETE /admin/users/{id}
R510: Delete Auction Action	DELETE /auction/{id}

2. Prototype

[Prototype URL](#)

Credentials

- Admin user: admin@gmail.com/1234
- Regular user: cminister1@gmail.com/1234

[Prototype source code](#)

Revision history

Changes made to the first submission:

GROUP2225, 21/11/2022

- Diogo Babo, up202004950@edu.fe.up.pt
- João Oliveira, up202004407@edu.fe.up.pt
- Gustavo Costa, up202004187@edu.fe.up.pt (editor)
- Ricardo Cavalheiro, up202005103@edu.fe.up.pt