

EAP: Architecture Specification and Prototype

An online bidding platform destined for car model lovers, allowing them to sell or complete their private collections, by participating in real-time traditional auctions and interacting with other worldwide collectors.

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

This artefact presents an overview of the web resources to implement, organized into modules. The permissions used in the modules to establish the conditions of access to resources are also included in this artefact.

This specification adheres to the OpenAPI standard using YAML.

1. Overview

Module	Description
M01: Static pages	Web resources with static content are associated with this module: Home Page, About Us, and FAQ.
M02: Authentication	Web resources associated with user authentication includes: login/logout, registration, password recovery.
M03: Auctions	Web resources associated with auctions, includes: auctions list and search, viewing details and creating new auctions, comments and bids.
M04: Users	Web resources associated with user profile and individual profile management. It features auctions like view user profile, user bids, auctions created, favourite auctions, favourite sellers, users ratings, users rated and view and edit personal information.
M05: Help Messages	Web resources associated with help messages. It features actions like requesting admin help and listing all the help messages.
M06: Reports	Web resources associated with user reports. It features actions like reporting a given user.
M07: Administration	Web resources related to the website administration. It features actions like managing auctions and users, view and answer help messages, list and act on user reports.

2. Permissions

Type	Permission	Description
PUB	Public	Users without privileges
USR	User	Registered users
OWN	Owner	User that are owners of the information
ADM	Administrator	Administrators
SEL	Seller	User that creates an auction

Type	Permission	Description
BUY	Bidder	User that bids in an auction

3. OpenAPI Specification

[OpenAPI YAML file](#)

[Swagger generated documentation](#)

```
openapi: 3.0.0

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

servers:
- url: http://lbaw2155.lbaw-prod.fe.up.pt/
  description: Production server

externalDocs:
  description: Find more info here.
  url: https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/eap

tags:
- name: 'M01: Static Pages'
- name: 'M02: Authentication'
- name: 'M03: Auctions'
- name: 'M04: Users'
- name: 'M05: Help Messages'
- name: 'M06: Reports'
- name: 'M07: Administration'

paths:
  /:
    get:
      operationId: R101
      summary: 'R101: View home page'
      description: 'Show homepage and featured auctions. Access: PUB'
      tags:
        - 'M01: Static Pages'

      responses:
        '200':
          description: 'Ok. Show [UI01]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui01-homepage)'

  /about:
    get:
      operationId: R102
```

```
summary: 'R102: About Us Page'
description: 'Show About Us page. Access: PUB'
tags:
  - 'M01: Static Pages'
responses:
  '200':
    description: 'Ok. Show [UI02]'
    (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui02-about-us)'

/faq:
  get:
    operationId: R103
    summary: 'R103: FAQs Page'
    description: 'Show FAQs page. Access: PUB'
    tags:
      - 'M01: Static Pages'
    responses:
      '200':
        description: 'Ok. Show [UI03]'
        (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui03-faq)'

/login:
  get:
    operationId: R201
    summary: 'R201: Login Form'
    description: 'Provide login form. Access: PUB'
    tags:
      - 'M02: Authentication'
    responses:
      '200':
        description: 'Ok. Show [UI05]'
        (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui05-log-in)'

  post:
    operationId: R202
    summary: 'R202: Login Action'
    description: 'Processes the login form submission. Access: PUB'
    tags:
      - 'M02: Authentication'
    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
search page.'
                value: '/auctions/search'
              302Failure:
                description: 'Failed authentication. Redirect to login
form.'
                value: '/login'

/logout:
  post:
    operationId: R203
    summary: 'R203: Logout Action'
    description: 'Logout the current authenticated user. Access: USR,
ADM'
    tags:
      - 'M02: Authentication'
    responses:
      '302':
        description: 'Redirect after processing logout.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'Successful logout. Redirect to login
form.'
                value: '/homepage'

/signup:
  get:
    operationId: R204
    summary: 'R204: Signup Form'
    description: 'Provide new user signup form. Access: PUB'
    tags:
      - 'M02: Authentication'
    responses:
      '200':
        description: 'Ok. Show [UI06]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui06-sign-up)'

  post:
    operationId: R205
    summary: 'R205: Signup Action'
    description: 'Processes the new user signup form submission. Access:

```

```

PUB'
  tags:
    - 'M02: Authentication'

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

  responses:
    '302':
      description: 'Redirect after processing the new user
information.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful authentication. Redirect to
search page.'
              value: '/auctions/search'
            302Failure:
              description: 'Failed authentication. Redirect to signup
form.'
              value: '/signup'

/auctions/search:
  get:
    operationId: R301
    summary: 'R301: View search page'
    description: 'Show the search page with all the auctions. Access:
PUB'
    tags:
      - 'M03: Auctions'

    responses:
      '200':

```

```
    description: 'Ok. Show [UI07]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui07-search)'

/auctions/{id}:
  get:
    operationId: R302
    summary: 'R302: View auction page'
    description: 'Show the auction details. If the user is SEL, also show
the bid authors, and the bid and buy now options are not available. If the
user is ADM, these options are also not available, and besides seeing the
bid authors, an extra scheduling/cancelling option is shown. Access: PUB'
    tags:
      - 'M03: Auctions'

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

    responses:
      '200':
        description: 'Ok. Show [UI08]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui08-auction-page-
chat)'

/auctions/{id}/bids:
  get:
    operationId: R303
    summary: 'R303: View auction bid history'
    description: 'View all bids made in the auction. If the user is SEL
or ADM, also show the bid authors. Access: PUB'
    tags:
      - 'M03: Auctions'

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

    responses:
      '200':
        description: 'Ok. Show [UI09]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui09-auction-page-
bid-history)'

  post:
    operationId: R304
    summary: 'R304: Bid in auction'
    description: 'Processes the new bid in the auction. Access: BUY'
    tags:
```

```
    - 'M03: Auctions'

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

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

responses:
  '302':
    description: 'Redirect after processing the new bid information.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful bid. Redirect to auction page.'
            value: '/auctions/{id}'
          302Failure:
            description: 'Failed bid. Redirect to auction page.'
            value: '/auctions/{id}'

/auctions/{id}/comments:
  get:
    operationId: R305
    summary: 'R305: View all comments in auction'
    description: 'View all comments made in the auction chat. Access:
PUB'
    tags:
      - 'M03: Auctions'

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

responses:
  '200':
```

```

      description: 'Ok. Show [UI08]
      (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui08-auction-page-
      chat)'
```

post:

```

  operationId: R306
  summary: 'R306: Comment in auction'
  description: 'Processes the new comment in the auction. Access: USR'
  tags:
    - 'M03: Auctions'
```

parameters:

```

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

requestBody:

```

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

responses:

```

  '302':
    description: 'Redirect after processing the new comment.'
```

headers:

```

  Location:
    schema:
      type: string
    examples:
      302Success:
        description: 'Successful comment. Redirect to auction
page.'
```

```

        value: '/auctions/{id}'
      302Failure:
        description: 'Failed comment. Redirect to auction page.'
        value: '/auctions/{id}'
```

/auctions/{id}/buy_now:

```

  post:
    operationId: R307
    summary: 'R307: Buy Now in the auction'
    description: 'Processes the use of the Buy Now option in the auction.
Access: BUY'
    tags:
      - 'M03: Auctions'
```



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

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

responses:
  '302':
    description: 'Redirect after processing buy now action.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful buy now. Redirect to auction
page.'
            value: '/auctions/{id}'
          302Failure:
            description: 'Failed buy now. Redirect to auction page.'
            value: '/auctions/{id}'

/auctions/{id}/rate:
  post:
    operationId: R308
    summary: 'R308: Submit rating'
    description: 'Rate a given auction. Access: BUY'
    tags:
      - 'M03: Auctions'

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

requestBody:
  required: true
  content:
```

```

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

  responses:
    '302':
      description: 'Redirect after processing rating to auction.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful rating to auction request.
Redirect to auction page.'
              value: '/auctions/{auction}'
            302Failure:
              description: 'Failed rating to auction request. Redirect
to auction page.'
              value: '/auctions/{auction}'

/auctions/create:
  get:
    operationId: R309
    summary: 'R309: Create new auction'
    description: 'Provide new auction information form. Access: SEL'
    tags:
      - 'M03: Auctions'
    responses:
      '200':
        description: 'Ok. Show [UI10]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui10-create-auction-general-info)'

  post:
    operationId: R310
    summary: 'R310: Create new auction Action'
    description: 'Processes the new auction information form submission.
Access: SEL'
    tags:
      - 'M03: Auctions'

  requestBody:
    required: true
    content:
      application/x-www-form-urlencoded:
        schema:

```

```

    type: object
    properties:
      title:
        type: string
      starting_bid:
        type: number
      start_date:
        type: string
      buy_now:
        type: number
      duration:
        type: integer
      color:
        type: string
      brand:
        type: string
      scale:
        type: string
      photos:
        type: array
        items:
          type: string
      description:
        type: string
    required:
      - title
      - starting_bid
      - start_date
      - duration
      - color
      - brand
      - scale
      - photos
      - description
  responses:
    '302':
      description: 'Redirect after processing the new auction
information.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful creation. Redirect to auction
page.'
              value: '/auctions/{id}'
            302Failure:
              description: 'Failed auction creation. Redirect to create
auction page.'
              value: '/auctions/create'

/auctions/{id}/manage:
  put:

```

```

operationId: R701
summary: 'R701: Reschedule/Suspend the auction'
description: 'Processes the admin action in the auction. Access: ADM'
tags:
  - 'M07: Administration'

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

requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          suspend:
            type: boolean
          start_date:
            type: string
          final_date:
            type: string

responses:
  '302':
    description: 'Redirect after processing auction management.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful auction management request.
Redirect to auction page.'
            value: '/auctions/{id}'
          302Failure:
            description: 'Failed auction management request. Redirect
to auction page.'
            value: '/auctions/{id}'

/users/{username}:
  get:
    operationId: R401
    summary: 'R401: View user profile'
    description: 'Show the individual user profile. If the user is OWN,
also show the personal statistics, bid history and favourite lists. If user
is ADM, besides all the user private information, also show a ban option.
Access: PUB'
    tags:
      - 'M04: Users'

```

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

responses:
  '200':
    description: 'Ok. Show [UI12]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui12-profile)'

/users/{username}/edit:
  get:
    operationId: R402
    summary: 'R402: Edit user profile'
    description: 'Edit the user profile information. Access: OWN'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show [UI13]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui13-edit-profile)'

  put:
    operationId: R403
    summary: 'R403: Edit Profile Action'
    description: 'Processes the new user profile form submission. Access:
OWN'
    tags:
      - 'M04: Users'

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

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

```

        name:
          type: string
        email:
          type: string
        old_password:
          type: string
        new_password:
          type: string
        photo:
          type: string
        required:
          - old_password
      responses:
        '302':
          description: 'Redirect after processing the updated user
information.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful update. Redirect to profile
page.'
                  value: '/users/{username}'
                302Failure:
                  description: 'Failed update. Redirect to edit profile
form.'
                  value: '/users/edit'

/users/{username}/bids:
  get:
    operationId: R404
    summary: 'R404: User bid history'
    description: 'List all the bids created by the user. Access: OWN,
ADM'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show [UI14]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui14-profile-bid-history)'

/users/{username}/auctions:
  get:

```

```
operationId: R405
summary: 'R405: Auctions created by the user'
description: 'List all the auctions created by the user. Access: PUB'
tags:
  - 'M04: Users'

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

responses:
  '200':
    description: 'Ok. Show [UI15]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui15-profile-auctions-created)'

/users/{username}/fav_auctions:
get:
  operationId: R406
  summary: 'R406: User favourite auctions'
  description: 'List all the favourite auctions of the user. Access:
OWN'
  tags:
    - 'M04: Users'

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

  responses:
    '200':
      description: 'Ok. Show [UI16]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui16-profile-favourite-auctions)'

/users/{username}/fav_auctions/add:
post:
  operationId: R407
  summary: 'R407: Add favourite auction'
  description: 'Add auction to favourite list. Access: OWN'
  tags:
    - 'M04: Users'

  parameters:
    - in: path
      name: username
      schema:
        type: string
```

```
      required: true

requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          id:
            type: integer
            required:
              - id
responses:
  '302':
    description: 'Redirect after processing favourite auction.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful add favourite auction request.
Redirect to auction page.'
            value: '/auctions/{id}'
          302Failure:
            description: 'Failed add favourite auction request.
Redirect to auction page.'
            value: '/auctions/{id}'

/users/{username}/fav_auctions/remove:
  post:
    operationId: R408
    summary: 'R408: Remove favourite auction'
    description: 'Remove auction from favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

    requestBody:
      required: true
      content:
        application/x-www-form-urlencoded:
          schema:
            type: object
            properties:
              id:
                type: integer
```



```

        required:
          - id
      responses:
        '302':
          description: 'Redirect after processing favourite auction.'
          headers:
            Location:
              schema:
                type: string
              examples:
                302Success:
                  description: 'Successful remove favourite auction
request. Redirect to auction page.'
                  value: '/auctions/{id}'
                302Failure:
                  description: 'Failed remove favourite auction request.
Redirect to auction page.'
                  value: '/auctions/{id}'

/users/{username}/fav_sellers:
  get:
    operationId: R409
    summary: 'R409: User favourite sellers'
    description: 'List all the favourite sellers of the user. Access:
OWN'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show [UI17]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui17-profile-favourite-sellers)'

/users/{username}/fav_sellers/add:
  post:
    operationId: R410
    summary: 'R410: Add favourite seller'
    description: 'Add seller to favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

```

```
      required: true

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

responses:
  '302':
    description: 'Redirect after processing favourite seller.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful add favourite seller request.
Redirect to profile page.'
            value: '/users/{seller}'
          302Failure:
            description: 'Failed add favourite seller request.
Redirect to profile page.'
            value: '/users/{seller}'

/users/{username}/fav_sellers/remove:
  post:
    operationId: R411
    summary: 'R411: Remove favourite seller'
    description: 'Remove seller from favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

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

```
        type: string
      required:
        - seller

    responses:
      '302':
        description: 'Redirect after processing favourite seller.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'Successful remove favourite seller request.
Redirect to profile page.'
                value: '/users/{seller}'
              302Failure:
                description: 'Failed remove favourite seller request.
Redirect to profile page.'
                value: '/users/{seller}'

/users/{username}/ratings:
  get:
    operationId: R412
    summary: 'R412: Ratings given to the user'
    description: 'List all the ratings given to the user. Access: PUB'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show [UI18]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui18-profile-users-ratings)'

/users/{username}/rated:
  get:
    operationId: R413
    summary: 'R413: Ratings given by the user'
    description: 'List all the ratings given by the user. Access: PUB'
    tags:
      - 'M04: Users'

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

```
    type: string
    required: true

  responses:
    '200':
      description: 'Ok. Show [UI19]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui19-profile-users-rated)'

/users/{username}/help:
  get:
    operationId: R501
    summary: 'R501: View Help Messages'
    description: 'View the Help Message chat. Access: OWN, ADM'
    tags:
      - 'M05: Help Messages'

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

    responses:
      '200':
        description: 'Ok. Show [UI04]
(https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui04-help)'

  post:
    operationId: R502
    summary: 'R502: Send Help Message'
    description: 'Send a new Help Message in the Help chat. Access: OWN'
    tags:
      - 'M05: Help Messages'

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

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

```

responses:
  '302':
    description: 'Redirect after processing help message.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful help message request. Redirect
to help page.'
            value: '/users/{username}/help'
          302Failure:
            description: 'Failed help message request. Redirect to
help page.'
            value: '/users/{username}/help'

/users/{username}/report:
  post:
    operationId: R601
    summary: 'R601: Submit a Report'
    description: 'Submit a Report to be reviewed by the administrators.
Access: USR'
    tags:
      - 'M06: Reports'

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

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

    responses:
      '200':
        description: 'OK, after processing the report.'

/users/{username}/manage:

```

```
put:
  operationId: R702
  summary: 'R702: Suspend the user'
  description: 'Processes the admin action in the user. Access: ADM'
  tags:
    - 'M07: Administration'

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

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

  responses:
    '302':
      description: 'Redirect after processing user management.'
      headers:
        Location:
          schema:
            type: string
          examples:
            302Success:
              description: 'Successful user management request.
Redirect to user profile.'
              value: '/users/{username}'
            302Failure:
              description: 'Failed user management request. Redirect to
user profile.'
              value: '/users/{username}'

/admin/{username}/users:
  get:
    operationId: R703
    summary: 'R703: View Users Admin Panel'
    description: 'View Users Admin Panel. Access: ADM'
    tags:
      - 'M07: Administration'

    parameters:
      - in: path
        name: username
        schema:
          type: string
```

```
      required: true

    responses:
      '200':
        description: 'Ok. Show [UI20]
        (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui20-admin-panel-
        users-management)'
```

`/admin/{username}/auctions:`

```
  get:
    operationId: R704
    summary: 'R704: View Auctions Admin Panel'
    description: 'View Auctions Admin Panel. Access: ADM'
    tags:
      - 'M07: Administration'

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

    responses:
      '200':
        description: 'Ok. Show [UI21]
        (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui21-admin-panel-
        auctions-management)'
```

`/admin/{username}/help:`

```
  get:
    operationId: R705
    summary: 'R705: View Pending Help Messages'
    description: 'View Pending Help Messages from users. Access: ADM'
    tags:
      - 'M07: Administration'

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

    responses:
      '200':
        description: 'Ok. Show [UI23]
        (https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui23-admin-panel-
        help)'
```

`post:`

```
  operationId: R503
  summary: 'R503: Send Help Message'
  description: 'Send a new Help Message in the Help chat. Access: ADM'
```

```
tags:
  - 'M05: Help Messages'

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

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

responses:
  '302':
    description: 'Redirect after processing help message.'
    headers:
      Location:
        schema:
          type: string
        examples:
          302Success:
            description: 'Successful help message request. Redirect
to help page.'
            value: '/admin/{username}/help'
          302Failure:
            description: 'Failed help message request. Redirect to
help page.'
            value: '/admin/{username}/help'

/admin/{username}/reports:
  get:
    operationId: R706
    summary: 'R706: View Pending Reports'
    description: 'View Pending Reports from users. Access: ADM'
    tags:
      - 'M07: Administration'

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



```

    type: string
    required: true

responses:
  '200':
    description: 'Ok. Show [UI22]
(http://git.fe.up.pt/lbaw/lbaw2021/lbaw2155/-/wikis/er#ui22-admin-panel-
reports)')

#####

#####

/api/auctions/featured:
  get:
    operationId: R311
    summary: 'R311: Get all featured auctions'
    description: 'Search through all the featured auctions shown in the
homepage. Access: PUB'
    tags:
      - 'M03: Auctions'

responses:
  '200':
    description: 'Ok. Show featured auctions'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              id:
                type: integer
              title:
                type: string
              final_date:
                type: string
              highest_bid:
                type: number
              buy_now:
                type: number
            example:
              - id: 1
                title: 'Ferrari Portofino'
                final_date: '2021-04-25 12:00:00'
                highest_bid: 500
                buy_now: 2000
              - id: 4
                title: 'Bentley Continental'
                final_date: '2021-04-26 14:50:00'
                highest_bid: 650
                buy_now: 1950

/api/auctions/search:

```

```
get:
  operationId: R312
  summary: 'R312: Get search results'
  description: 'Search through all the auctions. Access: PUB'
  tags:
    - 'M03: Auctions'

  parameters:
    - in: query
      name: query
      description: 'String to use for full-text search'
      schema:
        type: string
      required: false
    - in: query
      name: sort_by
      description: 'Sort by Time Remaining, Last Bid, or Buy Now'
      schema:
        type: string
      required: false
    - in: query
      name: buy_now
      description: 'Boolean to search only auctions with buy now
option'
      schema:
        type: boolean
      required: false
    - in: query
      name: ended_auctions
      description: 'Boolean to only show ended auctions'
      schema:
        type: boolean
      required: false
    - in: query
      name: color
      description: 'Filter by color name'
      schema:
        type: string
      required: false
    - in: query
      name: brand
      description: 'Filter by brand name'
      schema:
        type: string
      required: false
    - in: query
      name: scale
      description: 'Filter by scale of the model'
      schema:
        type: string
      required: false
    - in: query
      name: seller
      description: 'Filter by seller name'
```

```
    schema:
      type: string
      required: false
  - in: query
    name: min_bid
    description: 'Only show auctions with last bids whose value is
above the minimum'
    schema:
      type: number
      required: false
  - in: query
    name: max_bid
    description: 'Only show auctions with last bids whose value is
below the maximum'
    schema:
      type: number
      required: false
  - in: query
    name: min_buy_now
    description: 'Only show auctions with buy now value above the
minimum'
    schema:
      type: number
      required: false
  - in: query
    name: max_buy_now
    description: 'Only show auctions with buy now value below the
maximum'
    schema:
      type: number
      required: false

responses:
  '200':
    description: 'Ok. Show auctions'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              id:
                type: integer
              image_url:
                type: string
              title:
                type: string
              final_date:
                type: string
              highest_bid:
                type: number
              buy_now:
                type: number
```

```
        seller:
          type: string
        seller_rating:
          type: number
      example:
        - id: 1
          image_url: 'https://lbaw2155-
piu/static/images/qkewndms-qqnw-213-skmsmsak.jpg'
          title: 'Ferrari Portofino'
          final_date: '2021-04-25 12:00:00'
          highest_bid: 500
          buy_now: 2000
          seller: 'johndoe'
          seller_rating: 4.8
        - id: 4
          image_url: 'https://lbaw2155-
piu/static/images/otituvnc-qogo-345-mekwkwkw.jpg'
          title: 'Bentley Continental'
          final_date: '2021-04-26 14:50:00'
          highest_bid: 650
          buy_now: 1950
          seller: 'rickwheels'
          seller_rating: 4.2

/api/auctions/{id}:
  get:
    operationId: R313
    summary: 'R313: View auction details'
    description: 'Show the auction details. Access: PUB'
    tags:
      - 'M03: Auctions'

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

    responses:
      '200':
        description: 'Ok. Show auction details'
        content:
          application/json:
            schema:
              type: array
            items:
              type: object
            properties:
              title:
                type: string
              seller:
                type: string
              colour:
```

```

        type: string
      brand:
        type: string
      scale:
        type: string
      description:
        type: string
      final_date:
        type: string
      highest_bid:
        type: number
      buy_now:
        type: number
    example:
      - title: "Ferrari Portofino"
        seller: "johndoe"
        colour: "Yellow"
        brand: "Ferrari"
        scale: "18:1"
        description: "lorem ipsum description dusty rusty
busty"

        final_date: "2021-04-23 12:39:41"
        highest_bid: 1345.12
        buy_now: 2000

/api/auctions/{id}/bids:
  get:
    operationId: R314
    summary: 'R314: View auction bid history'
    description: 'View all bids made in the auction. Access: PUB'
    tags:
      - 'M03: Auctions'

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

    responses:
      '200':
        description: 'Ok. Show auction bid history'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  date:
                    type: string
                  value:
                    type: number

```

example:

- date: "2021-04-23 12:39:41"
value: 1345.12
- date: "2021-04-23 12:39:55"
value: 1369.12

post:

operationId: R315
summary: 'R315: Bid in auction'
description: 'Processes the new bid in the auction. Access: BUY'
tags:
- 'M03: Auctions'

parameters:

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

requestBody:

required: true
content:
application/x-www-form-urlencoded:
schema:
type: object
properties:
value:
type: number
required:
- value

responses:

'200':
description: 'OK, after processing the new bid.'
content:
application/json:
schema:
type: object
properties:
result:
type: string
example:
- result: 'success'

/api/auctions/{id}/comments:

get:

operationId: R316
summary: 'R316: View all comments in auction'
description: 'View all comments made in the auction chat. Access:

PUB'

tags:
- 'M03: Auctions'

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

responses:
  '200':
    description: 'Ok. Show all comments'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              username:
                type: string
              text:
                type: string
              date:
                type: string
          example:
            - username: 'johndoe'
              text: 'Bulish'
              date: '2021-04-12 12:39:41'
            - username: 'sophydoors'
              text: 'Not Interest anymore in this piece of rubbish'
              date: '2021-04-12 12:39:41'

post:
  operationId: R317
  summary: 'R317: Comment in auction'
  description: 'Processes the new comment in the auction. Access: USR'
  tags:
    - 'M03: Auctions'

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

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

```
        required:
          - text

responses:
  '200':
    description: 'OK, after processing the new comment.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

/api/auctions/{id}/buy_now:
  post:
    operationId: R318
    summary: 'R318: Buy Now in the auction'
    description: 'Processes the use of the Buy Now option in the auction.
Access: BUY'
    tags:
      - 'M03: Auctions'

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

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

    responses:
      '200':
        description: 'OK, after processing the buy now option.'
        content:
          application/json:
            schema:
              type: object
              properties:
                result:
                  type: string
```



```
        example:
          - result: 'success'

/api/auctions/{id}/rate:
  post:
    operationId: R319
    summary: 'R319: Submit rating'
    description: 'Rate a given auction. Access: BUY'
    tags:
      - 'M03: Auctions'

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

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

    responses:
      '200':
        description: 'OK, after processing the rating.'
        content:
          application/json:
            schema:
              type: object
              properties:
                result:
                  type: string
              example:
                - result: 'success'

/api/auctions/create:
  post:
    operationId: R320
    summary: 'R320: Create new auction Action'
    description: 'Processes the new auction information. Access: SEL'
    tags:
      - 'M03: Auctions'

    requestBody:
```

```
    required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          title:
            type: string
          starting_bid:
            type: number
          start_date:
            type: string
          buy_now:
            type: number
          duration:
            type: integer
          color:
            type: string
          brand:
            type: string
          scale:
            type: string
          photos:
            type: array
            items:
              type: string
          description:
            type: string
        required:
          - title
          - starting_bid
          - start_date
          - duration
          - color
          - brand
          - scale
          - photos
          - description

  responses:
    '200':
      description: 'OK, after processing the auction creation.'
      content:
        application/json:
          schema:
            type: object
            properties:
              result:
                type: string
            example:
              - result: 'success'

/api/auctions/{id}/manage:
  put:
```

```
operationId: R707
summary: 'R707: Reschedule/Suspend the auction'
description: 'Processes the admin action in the auction. Access: ADM'
tags:
  - 'M07: Administration'
```

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

```
requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          suspend:
            type: boolean
          start_date:
            type: string
          final_date:
            type: string
```

```
responses:
  '200':
    description: 'OK, after processing the auction management.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'
```

/api/colours:

get:

```
operationId: R321
summary: 'R321: Available Colours'
description: 'View all available colour values. Access: PUB'
tags:
  - 'M03: Auctions'
```

```
responses:
  '200':
    description: 'Ok. Show all colour values'
    content:
      application/json:
        schema:
```

```
    type: array
    items:
      type: object
      properties:
        colour:
          type: string
    example:
      - colour: 'Yellow'
      - colour: 'Red'
```

/api/brands:

```
get:
  operationId: R322
  summary: 'R322: Available Brands'
  description: 'View all available brand values. Access: PUB'
  tags:
    - 'M03: Auctions'

  responses:
    '200':
      description: 'Ok. Show all brand values'
      content:
        application/json:
          schema:
            type: array
            items:
              type: object
              properties:
                brand:
                  type: string
            example:
              - brand: 'Ferrari'
              - brand: 'Toyota'
```

/api/scales:

```
get:
  operationId: R323
  summary: 'R323: Available Scales'
  description: 'View all available scale values. Access: PUB'
  tags:
    - 'M03: Auctions'

  responses:
    '200':
      description: 'Ok. Show all scale values'
      content:
        application/json:
          schema:
            type: array
            items:
              type: object
              properties:
                scale:
                  type: string
```

```
example:
  - scale: '18:1'
  - scale: '24:1'

/api/users/{username}:
  get:
    operationId: R414
    summary: 'R414: View user profile'
    description: 'Show the individual user profile. If the user is OWN,
also show the personal statistics, bid history and favourite lists. If user
is ADM, besides all the user private information, also show a ban option.
Access: PUB'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show user profile information'
        content:
          application/json:
            schema:
              type: object
              properties:
                username:
                  type: string
                name:
                  type: string
                email:
                  type: string
                rating:
                  type: number

/api/users/{username}/edit:
  put:
    operationId: R415
    summary: 'R415: Edit Profile Action'
    description: 'Processes the new user profile form submission. Access:
OWN'
    tags:
      - 'M04: Users'

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

```

requestBody:
  required: true
  content:
    application/x-www-form-urlencoded:
      schema:
        type: object
        properties:
          name:
            type: string
          email:
            type: string
          old_password:
            type: string
          new_password:
            type: string
          photo:
            type: string
          required:
            - old_password
responses:
  '200':
    description: 'OK, after processing the profile edit.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

```

/api/users/{username}/bids:

```

get:
  operationId: R416
  summary: 'R416: User bid history'
  description: 'List all the bids created by the user. Access: OWN,
ADM'
  tags:
    - 'M04: Users'

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

  responses:
    '200':
      description: 'Ok. Show Bids'
      content:
        application/json:

```

```
    schema:
      type: array
      items:
        type: object
        properties:
          auction_id:
            type: number
          value:
            type: number

/api/users/{username}/auctions:
  get:
    operationId: R417
    summary: 'R417: Auctions created by the user'
    description: 'List all the auctions created by the user. Access: PUB'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show Auctions'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  id:
                    type: string
                  title:
                    type: string

/api/users/{username}/fav_auctions:
  get:
    operationId: R418
    summary: 'R418: User favourite auctions'
    description: 'List all the favourite auctions of the user. Access:
OWN'
    tags:
      - 'M04: Users'

    parameters:
      - in: path
        name: username
        schema:
          type: string
```

```
    required: true

responses:
  '200':
    description: 'Ok. Show favourite auctions'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              id:
                type: integer
              title:
                type: string
              photo:
                type: string
            example:
              - id: 1
                title: 'Ferrari Portofino'
                photo: 'https://lbaw2155-piu/static/images/qkewndms-qqnw-213-skmsmsak.jpg'
              - id: 4
                title: 'Bentley Continental'
                photo: 'https://lbaw2155-piu/static/images/otituvnc-qoqo-345-mekwkwkw.jpg'

/api/users/{username}/fav_auctions/add:
  post:
    operationId: R419
    summary: 'R419: Add favourite auction'
    description: 'Add auction to favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

    requestBody:
      required: true
      content:
        application/x-www-form-urlencoded:
          schema:
            type: object
            properties:
              id:
                type: integer
            required:
              - id
```



```
responses:
  '200':
    description: 'OK, after processing the add to favourite action.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

/api/users/{username}/fav_auctions/remove:
  post:
    operationId: R420
    summary: 'R420: Remove favourite auction'
    description: 'Remove auction from favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

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

    responses:
      '200':
        description: 'OK, after processing the remove from favourite
action.'
        content:
          application/json:
            schema:
              type: object
              properties:
                result:
                  type: string
              example:
                - result: 'success'
```

```
/api/users/{username}/fav_sellers:
  get:
    operationId: R421
    summary: 'R421: User favourite sellers'
    description: 'List all the favourite sellers of the user. Access:
OWN'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show favourite sellers'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  username:
                    type: string
                  photo:
                    type: string
                example:
                  - username: 'johndoe'
                    photo: 'https://lbaw2155-piu/static/images/mdkjeam-
skfjhejs.jpg'
                  - username: 'rickwheels'
                    photo: 'https://lbaw2155-piu/static/images/okqiela-
grsusnre.jpg'

/api/users/{username}/fav_sellers/add:
  post:
    operationId: R422
    summary: 'R422: Add favourite seller'
    description: 'Add seller to favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

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

responses:
  '200':
    description: 'OK, after processing the add to favourite action.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

/api/users/{username}/fav_sellers/remove:
  post:
    operationId: R423
    summary: 'R423: Remove favourite seller'
    description: 'Remove seller from favourite list. Access: OWN'
    tags:
      - 'M04: Users'

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

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

    responses:
      '200':
```

```
description: 'OK, after processing the remove from favourite
action.'
content:
  application/json:
    schema:
      type: object
      properties:
        result:
          type: string
      example:
        - result: 'success'

/api/users/{username}/ratings:
  get:
    operationId: R424
    summary: 'R424: Ratings given to the user'
    description: 'List all the ratings given to the user. Access: PUB'
    tags:
      - 'M04: Users'

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

    responses:
      '200':
        description: 'Ok. Show Ratings'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  username:
                    type: string
                  description:
                    type: string
                  value:
                    type: number

/api/users/{username}/rated:
  get:
    operationId: R425
    summary: 'R425: Ratings given by the user'
    description: 'List all the ratings given by the user. Access: PUB'
    tags:
      - 'M04: Users'

    parameters:
      - in: path
```

```
    name: username
    schema:
      type: string
      required: true

responses:
  '200':
    description: 'Ok. Show Ratings'
    content:
      application/json:
        schema:
          type: array
          items:
            type: object
            properties:
              username:
                type: string
              description:
                type: string
              value:
                type: number

/api/users/{username}/notifications:
get:
  operationId: R426
  summary: 'R426: View Pending Notifications'
  description: 'View the Pending Notifications list. Access: OWN'
  tags:
    - 'M04: Users'

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

  responses:
    '200':
      description: 'Ok. Show Pending Notifications'
      content:
        application/json:
          schema:
            type: array
            items:
              type: object
              properties:
                text:
                  type: string
                date:
                  type: string
          example:
            - text: "johndoe created a new auction! Go check it out"
              date: "2021-04-23 12:39:41"
```

```
- text: "Auction #314 is over! View the results"
  date: "2021-04-23 12:59:24"

/api/users/{username}/help:
  get:
    operationId: R504
    summary: 'R504: View Help Messages'
    description: 'View the Help Messages list. Access: OWN, ADM'
    tags:
      - 'M05: Help Messages'

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

    responses:
      '200':
        description: 'Ok. Show Help Messages'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  sender:
                    type: string
                  text:
                    type: string
                  date:
                    type: string
            example:
              - sender: 'johndoe'
                text: "Will I be notified about my favourite seller?"
                date: "2021-04-23 12:39:41"
              - sender: 'rickwheels'
                text: "Yes, you should be notified everytime a
favourite seller of yours creates a new auction."
                date: "2021-04-23 12:59:24"

  post:
    operationId: R505
    summary: 'R505: Send Help Message'
    description: 'Send a new Help Message. Access: OWN'
    tags:
      - 'M05: Help Messages'

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

```
    type: string
    required: true

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

responses:
  '200':
    description: 'OK, after processing the help message.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

/api/users/{username}/report:
  post:
    operationId: R602
    summary: 'R602: Submit a Report'
    description: 'Submit a Report to be reviewed by the administrators.'
    Access: USR
    tags:
      - 'M06: Reports'

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

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

```
      context:
        type: string
      text:
        type: string
    required:
      - context
      - text

  responses:
    '200':
      description: 'OK, after processing the report.'
      content:
        application/json:
          schema:
            type: object
            properties:
              result:
                type: string
            example:
              - result: 'success'

/api/users/{username}/manage:
  put:
    operationId: R708
    summary: 'R708: Suspend the user'
    description: 'Processes the admin action in the user. Access: ADM'
    tags:
      - 'M07: Administration'

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

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

  responses:
    '200':
      description: 'OK, after processing the user management.'
      content:
        application/json:
          schema:
            type: object
            properties:
```



```
        result:
          type: string
      example:
        - result: 'success'

/api/admin/{username}/help:
  get:
    operationId: R709
    summary: 'R709: View Pending Help Messages'
    description: 'View Pending Help Messages from users. Access: ADM'
    tags:
      - 'M07: Administration'

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

    responses:
      '200':
        description: 'Ok. Show Help Messages'
        content:
          application/json:
            schema:
              type: array
              items:
                type: object
                properties:
                  sender:
                    type: string
                  text:
                    type: string
                  date:
                    type: string
            example:
              - sender: 'johndoe'
                text: "Will I be notified about my favourite seller?"
                date: "2021-04-23 12:39:41"
              - sender: 'rickwheels'
                text: "Yes, you should be notified everytime a
favourite seller of yours creates a new auction."
                date: "2021-04-23 12:59:24"

  post:
    operationId: R506
    summary: 'R506: Send Help Message'
    description: 'Send a new Help Message to a given user. Access: ADM'
    tags:
      - 'M05: Help Messages'

    parameters:
      - in: path
```

```
      name: username
      schema:
        type: string
        required: true

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

responses:
  '200':
    description: 'OK, after processing the help message.'
    content:
      application/json:
        schema:
          type: object
          properties:
            result:
              type: string
          example:
            - result: 'success'

/api/admin/{username}/reports:
  get:
    operationId: R710
    summary: 'R710: View Pending Reports'
    description: 'View Pending Reports from users. Access: ADM'
    tags:
      - 'M07: Administration'

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

    responses:
      '200':
        description: 'Ok. Show Reports'
        content:
          application/json:
            schema:
```

```

type: array
items:
  type: object
  properties:
    reporter:
      type: string
    context:
      type: string
    reason:
      type: string
example:
  - reporter: 'rickwheels'
    context: "Auction #993"
    reason: "This guy is trying to sell a fake fiat model!"

```

Stop it!!!"

A8: Vertical Prototype

The prototype developed in this artefact includes the implementation of some user stories to validate the architecture defined and learn the usage of the technologies required by this project. It includes the implementation of pages of visualization and the possibility to interact with some functionalities. Besides this, the access control of the website pages is also implemented, along with a presentation of the error and success messages.

1. Implemented Features

1.1. Implemented User Stories

User Story reference	Name	Priority	Description
US001	See Home	High	As a User, I want to access the website homepage, so that I can have an overview of the ongoing auctions and links for the other pages.
US002	Advanced Search	High	As a User, I want to search for all the public information, so that I can filter the auctions by the highest bids, the creation date, the car model brand, scale, colour, seller, or the remaining time.
US003	Auction Page	High	As a User, I want to be able to see an auction's information, so that I can know more about the car model being sold.
US004	See About Us	Medium	As a User, I want to access the About Us page, so that I can see a complete website's description.
US005	Profile Page	Medium	As a User, I want to see the profile page of another user, so that I can search all the auctions from this chosen user.

User Story reference	Name	Priority	Description
US006	FAQ Page	Low	As a User, I want to access the FAQ, so that I can see Frequently Asked Questions about the website.
US101	Sign-In	High	As a Visitor, I want to log in to the system, so that I can access privileged features.
US102	Sign-Up	High	As a Visitor, I want to register myself into the system, so that I can store all my data in a personal account.
US300	Profile Page	High	As a Registered User, I want to have a profile page, so that I can view and update my personal information, favourites, and statistics.
US301	Logout	High	As a Registered User, I want to logout, so that I can leave the system.
US401	Create an Auction	High	As a Seller, I want to create an auction, so that I can sell a model car.
US403	"Buy Now" Option	Low	As a Seller, I want to have the option to set a "Buy Now" price for the auction, so that I can give the opportunity to sell the car model instantaneously.
US501	Bid in a given auction	High	As a Bidder, I want to bid in a given auction, so that I can try to buy the given model car.
US503	Comment an auction	Low	As a Bidder, I want to write a comment in an ongoing auction, so that the other users can be informed of my interest.

1.2. Implemented Web Resources

Module M01: Static pages

Web Resource Reference	URL
R101: View home page	/
R102: About Us Page	/about
R103: FAQs Page	/faqs

Module M02: Authentication

Web Resource Reference	URL
R201: Login Form	/login
R202: Login Action	POST /login

Web Resource Reference	URL
R203: Logout Action	POST /logout
R204: Signup Form	/signup
R205: Signup Action	POST /signup

Module M03: Auctions

Web Resource Reference	URL
R301: View search page	/auctions/search
R302: View auction page	/auctions/{id}
R304: Bid in auction	POST /auctions/{id}/bids
R309: Create new auction	/auctions/create
R310: Create new auction Action	POST /auctions/create
R311: Get all featured auctions	GET /api/auctions/featured
R312: Get search results	GET /api/auctions/search
R314: View auction bid history	GET /api/auctions/{id}/bids
R316: View all comments in auction	GET /api/auctions/{id}/comments
R317: Comment in auction	POST /api/auctions/{id}/comments
R321: Available Colours	GET /api/colours
R322: Available Brands	GET /api/brands
R323: Available Scales	GET /api/scales
R323: Available Sellers	GET /api/sellers

Module M04: Users

Web Resource Reference	URL
R401: View user profile	/users/{username}
R416: User bid history	GET /api/users/{username}/bids
R417: Auctions created by the user	GET /api/users/{username}/auctions
R418: User Favourite Auctions	GET /api/users/{username}/fav_auctions
R421: User Favourite Sellers	GET /api/users/{username}/fav_sellers
R424: Ratings given to the user	GET /api/users/{username}/ratings
R425: Ratings given by the user	GET /api/users/{username}/rated

2. Prototype

The prototype is available at <http://lbaw2155.lbaw-prod.fe.up.pt/>

Credentials:

- regular user: [aflowerden0@posterous.com/aflowerden0](http://aflowerden0.posterous.com/aflowerden0)
- regular user: [rkemmey1x@homestead.com/rkemmey1x](http://rkemmey1x.homestead.com/rkemmey1x)
- regular user: [fbrauned@cam.ac.uk/fbrauned](http://fbrauned.cam.ac.uk/fbrauned)

The code is available at <https://git.fe.up.pt/lbaw/lbaw2021/lbaw2155>