PA: Product and Presentation

A9: Product

UniLinks is a project developed as a product targeted at college students as a way of helping them integrate easier. The main goal of the project is the development of a web-based social network for enabling students to interact with each other in an academic context. This is a tool that can be used by students and other members of the academic environment.

1. Installation

Release: https://git.fe.up.pt/lbaw/lbaw2223/lbaw2222/-/releases/PA

To run the docker container write:

docker run git.fe.up.pt:5050/lbaw/lbaw2223/lbaw2222

2. Usage

URL: http://lbaw2222.lbaw.fe.up.pt

2.1. Administration Credentials

Administration URL: http://localhost:8000/users

Username	Password
conta@admin.pt	apple1234

2.2. User Credentials

Туре	Username	Password
basic account	up202006767@g.uporto.pt	palavrapasse2
basic account	jorge@mail.pt	broademilho

3. Application Help

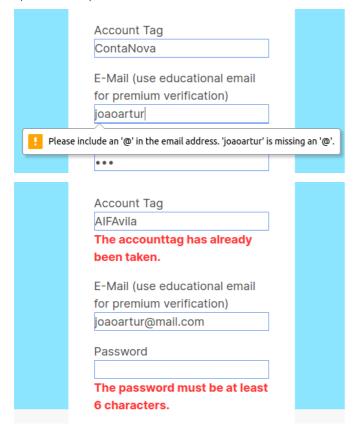
There are no contextual hints present. However, the input validation acts as a guide for user input and the product is, overral, self-explanatory, with most of the hyperlinks containing text explaining what resource the user is accessing.

For more information about input validation see the next section.

4. Input Validation

Input Validation is handled using Laravel's validator as shown below.

Input Validation Examples:



The code for this specific case (user register):

5. Check Accessibility and Usability

Accessibility: Sapo Accessebility
Usability: Sapo Usability

6. HTML & CSS Validation

HTML: https://validator.w3.org/nu/\ CSS: https://jigsaw.w3.org/css-validator/

Unfortunately, as we weren't able do deploy the project to feup's servers, we weren't able to validate the HTML and CCS code yet.

7. Revisions to the Project

Updated the openapi.yaml file because of how the implementation of the routes mentioned required them to be in order to become more organized. Changed the credentials used for the admin and regular user accounts to match the rules defined by us previously.

8. Web Resources Specification

```
openapi: 3.0.0
 version: "2.0"
 title: "UniLinks Web API"
 description: "Web Resources Specification (A7) for UniLinks"
servers:
 - url: https://lbaw.fe.up.pt
   description: Production server
security: []
 description: Find more info here.
 url: https://git.fe.up.pt/lbaw/lbaw2223/lbaw2222/-/wikis/Home
tags:
 - name: "M01"
   description: "Authentication and Individual Profile"
   description: "User Administration"
  - name: "M03"
   description: "Content"
  - name: "M04"
   description: "Content Review"
  - name: "M05"
   description: "User relationship"
  - name: "M06"
   description: "Static content"
 securitySchemes:
   cookieuser:
     type: apiKey
     name: SESSIONID #cookie used to save session id
paths:
 ######## M1 Authentication and Individual Profile ###########
 /login:
   get:
     operationId: R101
     summary: "R101: Login Form"
    description: "Provide login form. Access: PUB"
```

```
tags:
   responses:
     "200":
      description: "Ok. Show log-in UI"
   operationId: R102
   summary: "R102: Login Action"
   description: "Processeses login credentials (form input) Access: PUB"
     - "M01"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
             email:
              type: string
             password:
              type: string
            _token:
               type: string
           required:
             - email
             - password
             - _token
   responses:
     "302":
       description: "Redirect after processing the login credentials."
       headers:
         Location:
           schema:
            type: string
           examples:
               description: "Successful authentication. Redirect to user profile."
               value: "/feed"
             302Error:
               description: "Failed authentication. Redirect to login form."
               value: "/login"
         Set-cookie:
           schema:
             type: string
             description: sessionID
             example: SESSIONID=abcde12345; Secure; Path=/; HttpOnly; SameSite=Strict
/logout:
 get:
   security:
     - cookieuser: []
   operationId: R103
   summary: "R103: Logout Action"
   description: "Logout the current authenticated used. Access: Authenticated-USR, ADM"
     - "M01"
   responses:
     "302":
       description: "Redirect after processing logout."
       headers:
         Location:
           schema:
            type: string
           examples:
            302Success:
               description: "Successful logout. Redirect to main page"
         Set-cookie:
           schema:
             type: string
             description: Delete sessionID
             example: SESSIONID=""; Max-Age=0; Secure; Path=/; HttpOnly; SameSite=Strict
/register:
 get:
   operationId: R104
   summary: "R104: Register Form"
   description: "Provide new user registration form. Access: PUB"
   tags:
 - "M01"
```

```
responses:
      description: "Ok. Show sign-up UI"
   operationId: R105
   summary: "R105: Register Action"
   description: "Processes the new user registration form submission. Access: PUB"
     - "M01"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
          properties:
             username:
              type: string
             name:
              type: string
             email:
              type: string
             birthday:
              type: string
             privacy:
              type: string
             university:
              type: string
             course:
              type: string
             password:
               type: string
             _token:
              type: string
           required:
             - username
             - name
             - email
            - birthday
             - university
             - course
             - privacy
             - _token
   responses:
     "302":
       description: "Redirect after processing the new user information."
       headers:
         Location:
          schema:
            type: string
           examples:
             302Success:
              description: "Successful authentication. Redirect to user profile."
              value: "/{account_tag}"
              description: "Failed authentication. Redirect to main page."
         Set-cookie:
           schema:
             type: string
             description: sessionID
             example: SESSIONID=abcde12345; Secure; Path=/; HttpOnly; SameSite=Strict
/endregistration:
 get:
   summary: "R114: Extra information register form"
   description: "Provide registration form with fields for extra information (name, privacy, location, description). Access: PUB"
   tags:
     - "M01"
   responses:
     "200":
      description: "Ok. Show extra information form UI"
  post:
   operationId: R113
   summary: "R113: End Registration Action"
   description: "Processes the extra information to complete user registration (name, privacy, location, description). Access: PUB"
   tags:
  - "M01"
```

```
requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
             name:
              type: string
             privacy:
               type: string
             location:
              type: string
             description:
              type: string
            _token:
               type: string
           reauired:
             - _token
   responses:
      "302":
       description: "Redirect after processing the extra information register."
         Location:
          schema:
            type: string
           examples:
            302Success:
               description: "Successful authentication. Redirect to timeline."
               value: "/timeline"
             302Failure:
               description: "Failed authentication. Redirect to main page."
               value: "/"
/recover_password:
 get:
   operationId: R106
   summary: "R106: Recover Password Form"
   description: "Provide un-authenticated user registration form. Access: PUB"
     - "M01"
   responses:
     "200":
      description: "Ok. Show recover-password UI"
   operationId: R107
   summary: "R107: Recover Password Action"
   description: "Processes recover account credentials (email input) Access: PUB"
     - "M01"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
            email:
              type: string
            _token:
               type: string
           required:
             - email
             - _token
   responses:
      "302":
       description: "Redirect after processing the recover account credentials."
       headers:
         Location:
           schema:
            type: string
           examples:
             302Success:
               description: "There is an account with that email. Redirect to security-email-code authentication and password change form."
               value: "/recover_password/change_password"
               description: "There is no account with that email. Redirect to main page."
         Set-cookie:
          schema:
```

```
type: string
             description: Save Recover Email
             example: recoverEmail=up202005454@fe.up.pt; Secure; Path=/; HttpOnly; SameSite=Strict
/recover_password/change_password:
 get:
   operationId: R108
   summary: "R108: Recover Password Part 2 Action"
   description: "Provide user form for account recovery token and new password. Access: PUB"
   tags:
   parameters:
     - in: cookie
      name: recoverEmail
       schema:
        type: string
   responses:
     "200":
       description: "Ok. Show recovery email-token and new-password UI"
 post:
   operationId: R109
   summary: "R109: Recover Password Part 2 Action"
   description: "Check email token and, if authentication is successful, change user password to new password Access: PUB"
     - "M01"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
          type: object
           properties:
             email:
              type: string
             _token: #csrf token
               type: string
             recovery_code: #email token
               type: string
            new_password:
               type: string
           required:
             - email
             - _token
             - recovery_code
             - new_password
   responses:
      "302":
       description: "Redirect after processing the recovery credentials."
       headers:
         Location:
          schema:
            type: string
           examples:
             302Success:
              description: "Email recovery code validation and password change successful. Redirect to main-page."
               value: "/"
               description: "Error changing passwors. Redirect to main-page."
               value: "/"
/user/{id}:
 get:
   security:
     - cookieuser: [] #administrator can see any account
   operationId: R110
   summary: "R110: View user profile"
   description: "Show the individual user profile. Access: Authenticated-USR, ADM"
   tags:
     - "M01'
   parameters:
     - in: path
       name: id
       schema:
        type: integer
       required: true
   responses:
       description: "Redirect to /user/{account_tag}"
        Location:
        schema:
```

```
type: string
            examples:
             302Error:
               description: "Redirect to /user/{account_tag}"
               value: "/user/{account_tag}"
   operationId: R112
   security:
     - cookieuser: []
    summary: "R112: Edit profile"
   description: "Change profile parts. Access: Authenticated-USR, ADM"
   requestBody:
     required: true
     content:
       multipart/form-data: # necessary for photos
         schema:
           properties:
             new username:
              type: string
             new_name:
               type: string
             new_email:
               type: string
             new_birthday:
              type: string
             new_privacy:
              type: string
             new_university:
               type: string
             new_course:
               type: string
             new_password:
               type: string
             new_description:
               type: string
             {\tt new\_location:}
               type: string
             new pronouns:
               type: string
             _token: #csrf
               type: string
             image: #profile_picture
               type: string
               format: binary
            required:
             - _token
   responses:
     "302":
       description: "Redirect after processing the recovery credentials."
       headers:
         Location:
           schema:
             type: string
           examples:
             302Success:
               description: "Profile change successful. Redirect to profile."
               value: "/{account_tag}"
             302Error:
               description: "Error changing profile. Redirect to profile."
               value: "/{account_tag}"
/user/{account_tag}:
 get:
     - cookieuser: [] #administrator can see any account
   operationId: R110
   summary: "R110: View user profile"
   description: "Show the individual user profile. Access: Authenticated-USR, \ensuremath{\mathsf{ADM}}\xspace"
     - "M01"
   parameters:
     - in: path
       name: account_tag
       schema:
        type: string
       required: true
   responses:
```

```
"200":
       description: "Ok. Show view profile UI"
      "302":
       description: "Non-existant/Private profile"
       headers:
           schema:
            type: string
           examples:
             302Error:
               description: "Forbidden profile. Redirect to homepage"
               value: "/"
/api/user/search:
  get:
    security:
     - cookieuser: []
    operationId: R201
    summary: "R201: Search for users tags"
    description: "Search and list user tags. Access: Authenticated-USR, ADM"
     - "M02"
   parameters:
      - in: query
       name: account_tag
       schema:
         type: string
       required: true
    responses:
      "200":
       description: "Ok. Show users with that user_tag (or part)" #admins can search all users
/user/{account_tag}/action:
  post:
    security:
     - cookieuser: [] #only admin can delete or unblock/block any account (user can only delete his own account)
    operationId: R202
    summary: "R202: Block/Unblock/Delete Account"
    description: "Only admin can delete or unblock/block any account and user can only delete his own account. Access: Authenticated-USR, ADM"
      - "M02"
    requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
             operation:
               type: string
               pattern: ^(block)|(unblock)|(delete)$
             _token:
               type: string
           required:
             - operation
             - _token
      "302":
       description: "Redirect after processing the action."
       headers:
         Location:
           schema:
             type: string
            examples:
             302UserDeleteSuccess:
               description: "Your account was delleted successfully. Redirect to logout"
               value: "/logout"
             302AdminDeleteSuccess:
               description: "User account was delleted successfully. Redirect to usersearch"
               value: "/usersearch?account_tag="
             302Admin(Un)BlockSuccess:
               description: "User account block action successfull. Redirect to user profile"
               value: "/{account_tag}"
             302Error:
               description: "Error. Redirect to main-page."
               value: "/"
######## M3 Content ###########
/post content search:
```

```
get:
   security:
     - cookieuser: []
   operationId: R301
   summary: "R301: Search for posts content"
   description: "Search and list posts according to text search. Access: Authenticated-USR, ADM"
     - "M03"
   parameters:
      - in: header
       name: text_search
       schema:
        type: string
       required: true
   responses:
      "200":
       description: "Ok. Show posts with that content (or part)" #admins can search all posts
/timeline:
 get:
   security:
     - cookieuser: []
   operationId: R302
   summary: "R302: View Feed"
   description: "Show the current logged user's feed. Access: Authenticated-USR, \ensuremath{\mathsf{ADM}}\xspace"
   tags:
     - "M03'
   responses:
     "200":
       description: "Ok. Show feed"
/post/new:
 post:
   operationId: R304
   security:
     - cookieuser: []
   summary: "R304: Create Post"
   description: "Create new post. Access: Authenticated-USR, ADM"
   tags:
     - "M03'
   requestBody:
     required: true
     content:
       multipart/form-data: # necessary for photos
        schema:
           properties:
             _token: #csrf
               type: string
             description:
               type: string
             parent_post:
               type: integer
             is_visible:
               type: boolean
             group_id:
               type: integer
             image1: #pic1
               type: string
               format: binary
             image2: #pic2
               type: string
               format: binary
             image3: #pic3
               type: string
               format: binary
             image4: #pic4
               type: string
               format: binary #max 4 pictures
           required:
              - _token
             - description
             - is_visible
   responses:
      "302":
       description: "Redirect after creating post."
       headers:
         Location:
           type: string
          examples:
```

```
302Success:
               description: "Post creation successful. Redirect to post page."
               value: "/{post_id}"
               description: "Error creating post. Redirect to timeline."
               value: "/feed"
/post/{post_id}:
 get:
   security:
     - cookieuser: []
   operationId: R305
   summary: "R305: View Post"
   description: "Show the post with path id. Access: Authenticated-USR, \ensuremath{\mathsf{ADM}}\xspace"
     - "M03"
   parameters:
     - in: path
      name: post_id
       schema:
         type: integer
       required: true
   responses:
       description: "Ok. Show post"
/post/{post_id}/edit:
   operationId: R306
   security:
     - cookieuser: []
   summary: "R306: Edit Post"
   description: "Edit post. Access: Authenticated-USR, ADM"
     - "M03"
   requestBody:
     required: true
     content:
       multipart/form-data: # necessary for photos
         schema:
           properties:
             _token: #csrf
               type: string
             description:
               type: string
             is_visible:
               type: boolean
             image1: #pic1
               type: string
               format: binary
             image2: #pic2
               type: string
               format: binary
             image3: #pic3
               type: string
               format: binary
             image4: #pic4
               type: string
               format: binary #max 4 pictures
            required:
              - _token
    responses:
      "302":
       description: "Redirect after editing post."
       headers:
         Location:
            type: string
           examples:
             302Success:
               description: "Post edit successful. Redirect to post page."
               value: "/{post_id}"
             302Error:
               description: "Error editing post. Redirect to timeline."
               value: "/feed"
/post/{post_id}/delete:
 post:
   operationId: R307
  security:
```

```
- cookieuser: []
   summary: "R307: Delete Post"
   description: "Delete post. Access: Authenticated-USR, ADM"
   tags:
     - "M03"
   requestBody:
     required: true
     content:
      application/x-www-form-urlencoded:
         schema:
          type: object
          properties:
            _token: #csrf
              type: string
           required:
             - _token
   responses:
     "302":
       description: "Redirect after editing post."
       headers:
        Location:
          schema:
            type: string
           examples:
            302Success:
              description: "Post delete successful. Redirect to profile."
               value: "/{account_tag}"
              description: "Error deleting post. Redirect to post."
              value: "/{post_id}"
/post/{post_id}/react:
 post:
   operationId: R401
   security:
     - cookieuser: []
   summary: "R401: React Post"
   description: "React Post Action. Access: Authenticated-USR, ADM"
     - "M04"
   requestBody:
    required: true
     content:
       application/x-www-form-urlencoded:
         schema:
          type: object
          properties:
            _token: #csrf
              type: string
             up_vote:
              type: boolean
            remove:
              type: boolean #to remove reaction
           required:
             - _token
            - up_vote
   responses:
     "302":
       description: "Redirect after editing post."
       headers:
        Location:
          schema:
            type: string
          examples:
             302Success:
              description: "Post delete successful. Redirect to profile."
              value: "/{account_tag}"
             302Error:
               description: "Error deleting post. Redirect to post."
               value: "/{post_id}"
/post/{post_id}/promotion:
 post:
   operationId: R402
   security:
     - cookieuser: []
   summary: "R402: Promote Post"
   description: "Promote Post Action. Access: Authenticated-USR, ADM"
```

```
tags:
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            _token: #csrf
              type: string
             remove:
              type: boolean #to remove promotion
           required:
             - _token
   responses:
     "302":
       description: "Redirect after editing post."
       headers:
        Location:
           schema:
            type: string
           examples:
             302Success:
              description: "Post delete successful. Redirect to profile."
              value: "/{account_tag}"
              description: "Error deleting post. Redirect to post."
               value: "/{post_id}"
/post/{post_id}/report:
 post:
   operationId: R403
   security:
     - cookieuser: []
   summary: "R403: Report Post"
   description: "Report Post Action. Access: Authenticated-USR, ADM"
   tags:
     - "M04"
   requestBody:
     required: true
     content:
      application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            _token: #csrf
              type: string
             description:
              type: string
            reason:
              type: string
           required:
             - _token
            - reason
   responses:
     "302":
       description: "Redirect after reporting post."
       headers:
        Location:
           schema:
            type: string
           examples:
             302Success:
              description: "Post report successful. Redirect to post."
               value: "/{post_id}"
              description: "Post report unsuccessful. Redirect to post."
              value: "/{post_id}"
/user/{account_tag}/report:
 post:
   operationId: R404
   security:
     - cookieuser: []
   summary: "R404: Report Account"
   description: "Report Account Action. Access: Authenticated-USR, ADM"
   tags:
   - "M04"
```

```
requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
          type: object
          properties:
            _token: #csrf
              type: string
            description:
              type: string
            reason:
              type: string
           required:
            - _token
            - reason
   responses:
     "302":
       description: "Redirect after reporting Account."
       headers:
        Location:
          schema:
            type: string
           examples:
            302Success:
              description: "Account report successful. Redirect to account."
              value: "/{account_tag}"
              description: "Account report unsuccessful. Redirect to account."
              value: "/{account_tag}"
/notifications:
 get:
   security:
     - cookieuser: []
   operationId: R405
   summary: "R405: View Notifications"
   description: "Show user notifications. Access: Authenticated-USR, ADM"
   tags:
     - "M04"
   responses:
     "200" •
      description: "Ok. Show notifications"
/api/friendship:
   security:
     - cookieuser: []
   operationId: R501
   summary: "R501: Send Friend Request"
   description: "Send friend request action. Access: Authenticated-USR, ADM"
   tags:
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
        schema:
          type: object
          properties:
            _token: #csrf
              type: string
           required:
            - _token
   responses:
     "302":
      description: "Redirect after processing the friends request."
        Location:
           schema:
            type: string
           examples:
            302Success:
              description: "The friend request was successfully done."
              value: "/{account_tag}"
            302Error:
              description: "The friend request went wrong."
              value: "/{account_tag}"
 delete:
```

```
security:
     - cookieuser: []
   operationId: R502
   summary: "R502: Remove Friend "
   description: "Remove friend action. Access: Authenticated-USR, ADM"
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
            _token: #csrf
               type: string
             id:
              type: integer
           required:
             - _token
   responses:
      "302":
       description: "Redirect after processing the friendship removal."
         Location:
          schema:
            type: string
           examples:
             302Success:
               description: "The friendship removal was successfully done."
               value: "/{account_tag}"
             302Error:
               description: "The friendship removal went wrong."
               value: "/{account_tag}"
/api/friendship/request:
 put:
   security:
      - cookieuser: []
   operationId: R503
   summary: "R503: Accept/Decline Friend Request"
   description: "Accept/Decline Friend Request action. Access: Authenticated-USR, ADM"
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
           properties:
            _token: #csrf
               type: string
             id:
              type: integer
           required:
             - _token
             - id
       description: "Redirect after processing the acceptance/decline of a friend request."
       headers:
         Location:
           schema:
            type: string
           examples:
               description: "The friend request acceptance was successfully done."
              value: "/{account_tag}"
             302Error:
               description: "The friend request acceptance went wrong."
               value: "/{account_tag}"
 delete:
   security:
     - cookieuser: []
   operationId: R503
   summary: "R503: Accept/Decline Friend Request"
   {\tt description:} \ {\tt "Decline Friend Request action. Access: Authenticated-USR, ADM"}
    - "M05"
   requestBody:
```

```
required: true
     content:
       application/x-www-form-urlencoded:
        schema:
          type: object
           properties:
            _token: #csrf
              type: string
            id:
              type: integer
           required:
             - _token
             - id
   responses:
     "302":
       description: "Redirect after processing the acceptance/decline of a friend request."
        Location:
           schema:
            type: string
           examples:
            302Success:
              description: "The friend request decline was successfully done."
               value: "/{account_tag}"
             302Error:
              description: "The friend request decline went wrong."
              value: "/{account_tag}"
/create_group:
 get:
   security:
     - cookieuser: []
   operationId: R504
   summary: "R504: Create group form"
   description: "Provide login form. Access: Authenticated-USR, ADM"
     - "M05"
   responses:
     "200":
      description: "Ok. Show create-group UI"
  post:
   security:
     - cookieuser: []
   operationId: R505
   summary: "R505: Create group Action"
   description: "Create a new group. Access: Authenticated-USR, ADM"
   tags:
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
        schema:
           type: object
           properties:
             name:
              type: string
             description:
              type: string
             is_public:
               type: boolean
             _token:
              type: string
             members:
               type: array
              items:
                type: object
                properties:
                  id:
                    type: integer
                   role:
                    type: string
                     pattern: ^(admin)|(pending)?
           required:
             - name
             - is_public
             - _token
             - members
   responses:
     "302":
      description: "Redirect after processing the group creation."
```

```
headers:
         Location:
           schema:
            type: string
           examples:
             302Success:
              description: "Successful group creation. Redirect to group_page."
               value: "/group/{group_id}"
             302Error:
               description: "Failed group creation. Redirect to user profile."
               value: "/{account_tag}"
         Set-cookie:
           schema:
             type: string
             description: sessionID
             example: SESSIONID=abcde12345; Secure; Path=/; HttpOnly; SameSite=Strict
/group/{group_id}:
 get:
   security:
     - cookieuser: []
   operationId: R506
   summary: "R506: View Group Feed (and members)"
   description: "Show the group feed. Access: Authenticated-USR, ADM"
   tags:
     - "M05'
   responses:
     "200":
      description: "Ok. Show group feed"
/api/group/invite:
 post:
   security:
     - cookieuser: []
   operationId: R507
   summary: "R507: Send Group Member Request"
   description: "Send group member request action. Access: Authenticated-USR, ADM"
   tags:
      - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
          type: object
          properties:
             _token: #csrf
              type: string
             group:
               type: integer
            invitee:
              type: integer
           required:
             - _token
             - member_id
   responses:
       description: "Redirect after processing the group member request."
         Location:
           schema:
            type: string
           examples:
             302Success:
               description: "The group member request was successfully sent."
               value: "/group/{group_id}"
             302Error:
               description: "The group member request went wrong."
               value: "/group/{group_id}"
 put:
   security:
     - cookieuser: []
   operationId: R509
   summary: "R509: Accept/Decline group member request"
   description: "Accept group member request action. Access: Authenticated-USR, ADM"
   tags:
     - "M05"
   requestBody:
     required: true
     content:
     application/x-www-form-urlencoded:
```

```
schema:
           type: object
           properties:
             _token: #csrf
              type: string
             group_id:
              type: integer
           required:
             - _token
             - group_id
   responses:
     "302":
       description: "Redirect after processing the acceptance/decline of a group member request."
       headers:
         Location:
          schema:
             type: string
           examples:
             302Success:
               description: "The group member request acceptance was successfully done."
               value: "/group/{group_id}"
               description: "The group member request acceptance went wrong."
               value: "/group/{group_id}"
  delete:
   security:
     - cookieuser: []
   operationId: R509
   summary: "R509: Accept/Decline group member request"
   \label{thm:description: Decline group member request action. Access: Authenticated-USR, ADM"
   tags:
      - "M05"
   requestBody:
     required: true
       application/x-www-form-urlencoded:
          type: object
          properties:
             _token: #csrf
              type: string
             group_id:
               type: integer
           required:
             - _token
             - group id
   responses:
      "302":
       description: "Redirect after processing the acceptance/decline of a group member request."
       headers:
         Location:
           schema:
            type: string
           examples:
               description: "The group member request decline was successfully done."
               value: "/group/{group_id}"
             302Error:
               description: "The group member request decline went wrong."
               value: "/group/{group_id}"
/api/group:
 delete:
   security:
     - cookieuser: []
   operationId: R508
   summary: "R508: Remove Member "
   description: "Remove member action. Access: Authenticated-USR, ADM"
   tags:
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
         schema:
           type: object
          properties:
             _token: #csrf
              type: string
             userid:
             type: integer
```

```
groupid:
               type: integer
           required:
             - _token
             - userid
   responses:
     "302":
       description: "Redirect after processing the friendship removal."
         Location:
           schema:
            type: string
           examples:
             302Success:
               description: "The member removal was successfully done."
               value: "/group/{group_id}"
             302Error:
               description: "The member removal went wrong."
               value: "/group/{group_id}"
/group/edit:
 post:
   security:
     - cookieuser: []
   operationId: R510
   summary: "R510: Edit group "
   description: "Edit group action. Access: Authenticated-USR, ADM"
     - "M05"
   requestBody:
     required: true
     content:
       application/x-www-form-urlencoded:
           type: object
           properties:
            groupname:
               type: string
             groupdescription:
               type: string
             is_public:
              type: boolean
             groupdesc:
               type: string
             _token:
               type: string
           required:
             - token
             - groupdescription
   responses:
      "302":
       description: "Redirect after processing the group editing."
       headers:
         Location:
            type: string
             302Success:
               description: "The group editing was successfully done."
               value: "/group/{group_id}"
             302Error:
               description: "The group editing went wrong."
               value: "/group/{group_id}"
/group/{group_id}/change_permissions:
   security:
     - cookieuser: []
   operationId: R511
   summary: "R511: Change Member Permisisons"
   description: "Change Member Permisisons action. Access: Group-Administrator, ADM"
   tags:
   requestBody:
     required: true
     content:
      application/x-www-form-urlencoded:
        schema:
       type: object
```

```
properties:
             _token: #csrf
               type: string
             member_id:
              type: integer
             admin:
               type: boolean
           required:
             - _token
             - member_id
             - admin
   responses:
      "302":
       description: "Redirect after processing the member permissions changing."
         Location:
           schema:
            type: string
           examples:
             302Success:
               description: "The member permissions changing was successfully done."
               value: "/group/{group_id}"
            302Error:
               description: "The member permissions changing went wrong."
               value: "/group/{group_id}"
######## M6 Content ############
/home:
 get:
   operationId: R601
   summary: "R601: Home page"
   description: "Provide page with brief presentation of main features, About us section, Contacts section, Ask for help section. Access: PUB"
     - "M06"
   responses:
     "200":
       description: "Ok. Show new post UI"
/ads:
 get:
   operationId: R602
   summary: "R602: Ads"
   description: "Provide list of ads (related to specific university)"
     - "M06"
   parameters:
     - in: query
      name: university_name
      schema:
        type: string
      required: false
   responses:
      "200":
       description: "Ok. Show ads"
```

9. Implementation Details

9.1. Libraries Used

TailwindCSS (https://tailwindcss.com/) is used for styling the web pages, for example in the following code, found in the file linkRequest.blade.php:

Mailtrap was used for sending password recovery emails, for example in the following code, found in the file PasswordRecoveryController.php:

```
$mailData = [
   'account_tag' => $user->account_tag,
   'recovery_code' => $recoveryCode,
   'email' => $request['email'],
];

Mail::to($mailData['email'])->send(new PasswordRecovery($mailData));
```

9.2 User Stories

US Identifier	Name	Module	Priority	Team Members	State
US201	See Timeline	Module A	High	Diogo Costa	80%
US002	Sign-Up	Module A	High	André Ávila, Diogo Costa	100%
US001	Log-In	Module A	High	André Ávila, Diogo Costa	100%
US205	Log Out	Module A	High	André Ávila	100%
US202	Create a Post	Module A	High	André Ávila, Diogo Costa	100%
US207	View Private Profile	Module A	High	André Ávila, Diogo Costa	100%
US206	Edit Profile	Module A	High	André Ávila, Diogo Costa	100%
US228	Change Profile Visibility	Module B	Medium	André Ávila	100%
US102	View Profile	Module A	High	André Ávila, Diogo Costa	100%
US208	Send Friend Requests	Module B	Medium	André Ávila	100%
US209	Remove Friends	Module B	Medium	André Ávila	100%
US211	Decline Friend Requests	Module B	Medium	André Ávila	100%
US210	Accept Friend Requests	Module B	Medium	André Ávila	100%
US227	Receive Friend Request Notifications	Module B	Medium	André Ávila	100%
US222	Check Personal Notifications	Module B	Medium	André Ávila	100%
US401	Find User Account	Module A	High	Manuel Amorim	100%
US101	Search	Module A	High	Manuel Amorim	30%
US203	Edit a Post	Module A	High	Manuel Amorim	0%
US204	Delete a Post	Module A	High	Manuel Amorim	0%
US215	Create a Group	Module B	Medium	André Ávila	100%
US402	View User Account	Module A	High	Francisco Serra, Diogo Costa	100%
US403	Edit User Account	Module A	High	Francisco Serra, Diogo Costa	100%
US216	Invite to a Group	Module B	Medium	André Ávila	100%
US303	Add to Group	Module B	Medium	André Ávila	100%
US218	Create a Post on a Group	Module B	Medium	André Ávila	100%
US225	View Group's Members	Module B	Medium	André Ávila	100%
US301	Edit Group Information	Module B	Medium	André Ávila	100%
US306	Change Group Visibility	Module C	Low	André Ávila	100%

US US236 Identifier	MianweOther Users' Friends	Module	Poiority	Acainé Meira bers	\$00%
US219	Leave a Group	Module B	Medium	André Ávila	100%
US302	Remove Member	Module B	Medium	André Ávila	100%
US404	Create User Account	Module A	High	Francisco Serra	100%
US003	Recover Password	Module B	Medium	André Ávila	100%
US405	Block and Unblock User Accounts	Module B	Medium	Francisco Serra, Manuel Amorim	100%
US406	Delete User Account	Module B	Medium	Francisco Serra	100%
US104	See About Us	Module B	Medium	Diogo Costa	100%
US108	See Specific Post	Module C	Low	André Ávila	20%
US224	Add Profile Picture	Module B	Medium	Francisco Serra	0%
US230	View Friends Feed	Module C	Low	André Ávila	10%
US105	See Contacts	Module B	Medium	Diogo Costa	100%
US105	Mobile-responsive	Module B	Medium	Diogo Costa	100%
US103	See Main Features	Module B	Medium		
US106	Contextual Error Messages	Module B	Medium		
US107	Contextual Help	Module B	Medium		
US212	Comment on a Post	Module B	Medium		
US213	Edit a Comment on a Post	Module B	Medium		
US214	Delete a Comment on a Post	Module B	Medium		
US220	React to a Post	Module B	Medium		
US221	React to a Comment	Module B	Medium		
US223	Delete My Account	Module B	Medium		
US226	Receive Likes on a Post Notifications	Module B	Medium		
US229	Appeal for Unblock	Module C	Low		
US231	Tag Friend in a Post	Module C	Low		
US232	Manage a Post's Visibility	Module C	Low		
US233	Tag a Friend on a Comment	Module C	Low		
US234	Request to Join a Public Group	Module C	Low		
US235	Receive Suggestions	Module C	Low		
US237	See University Related Ads	Module C	Low		
US304	Manage Member Permissions	Module C	Low		
US305	Remove Post from Group	Module C	Low		
US307	Manage Join Requests	Module C	Low		
US308	Add Group Administrators	Module C	Low		

A10: Presentation

1. Product presentation

URL: http://lbaw2222.lbaw.fe.up.pt

Unilinks is a social network targeted to college students, with the aim to bring the community together. The website has several features to achieve this, with the main ones being:

- User links (friendships)
- Groups Posting
- Public and private profiles
 User biography and information
- Post searchNotifications

The admins have tools available to moderate the community, such as blocking, editing, creating and deleting user profiles. There is also an admin panel where every user's information is available.

The product is available here

2. Video presentation

The video presentation is available here.

Revision history

Changes made to the first submission:

1. ..

GROUP2122, 03/01/2023

- André Ismael Ferraz Ávila, up202006767@edu.fe.up.pt (Editor)
- Francisco Maria Lopes Pinto Pimentel Serra, up202007723@edu.fe.up.pt
 Diogo Miguel Ferreira da Costa, up202007770@edu.fe.up.pt
 Manuel João Gomes Alves Amorim, up202007485@edu.fe.up.pt