EAP: Architecture Specification and Prototype

Collaborative News is a web platform for news sharing where you can also interact with other users.

A7: Web Resources Specification

In this artefact the resources to be used in the Collaborative News web application are defined and described, listing their properties using OpenAPI(YAML). CRUD(create, read, update, delete) operations are presented for each resource.

1. Overview

In this section, an overview of the web application is presented using modules to separate resources.

Module	Description
M01: Authentication and Individual Profile	Web resources associated with user authentication and individual profile management. Includes the following system features: login/logout, registration, view and edit personal profile information, follow others and see notifications.
M02: News, comments and votes	Web resources associated with news items. Includes the following system features: create/edit/delete news, comments and votes, and view item details.
M03: Detailed search and topics	Web resources associated with searching methods and news topics. Includes the following system features: search for news using several filters, follow and propose topics.
M04: User Administration and Static pages	Web resources associated with user management, specifically: manage user accounts and topic proposals. Web resources with static content are associated with this module: about and help.

2. Permissions

In this section, the permissions associated with web resources are presented.

Identifier	Name	Description
PUB	Public	Users without privileges
USR	User	Authenticated users
OWN	Owner	Authenticated users with editing privileges over his posts
ADM	Administrator	System administrators

3. OpenAPI Specification

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

a7 openapi.yaml

```
openapi: 3.0.0

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

servers:
- url: http://lbaw2103.lbaw.fe.up.pt/
    description: Production server
```

```
externalDocs:
  description: Find more info here.
  url: https://git.fe.up.pt/lbaw/lbaw2122/lbaw2103
tags:
  - name: 'M01: Authentication and Individual Profile'
  - name: 'M02: News, comments and votes'
  - name: 'M03: Detailed search and topics'
  - name: 'M04: User Administration and Static pages'
paths:
/login:
  get:
    operationId: R101
    summary: 'R101: Login Form'
    description: 'Provide login form. Access: PUB'
      - 'M01: Authentication and Individual Profile'
    responses:
      '200':
        description: 'Ok. Show UI15'
  post:
    operationId: R102
    summary: 'R102: Login Action'
    description: 'Processes the login form submission. Access: PUB'
    tags:
      - 'M01: Authentication and Individual Profile'
    requestBody:
      required: true
      content:
        application/x-www-form-urlencoded:
          schema:
            type: object
            properties:
              username:
                type: string
              password:
                type: string
            required:
                - username
                - password
    responses:
     '302':
      description: 'Redirect after processing the sign in credentials.'
      headers:
        Location:
         schema:
          type: string
         examples:
            302Success:
             description: 'Successful authentication. Redirect to Homepage.'
             value: '/news'
            302Error:
              description: 'Failed authentication. Redirect to login form.'
              value: '/login'
 /logout:
    post:
      operationId: R103
      summary: 'R103: Logout Action'
      description: 'Logout the current authenticated used. Access: USR, ADM'
      tags:
        - 'M01: Authentication and Individual Profile'
      responses:
        '302':
          description: 'Redirect after processing logout.'
          headers:
```

```
Location:
             schema:
               type: string
             examples:
               302Success:
                 description: 'Successful logout. Redirect to home page.'
                 value: '/news'
               302Error:
                 description: 'Failed to logout.'
                 value: '/news'
/sign_up:
   get:
     operationId: R104
     summary: 'R104: Sign Up Form'
     description: 'Provide new user sign up form. Access: PUB'
     tags:
       - 'M01: Authentication and Individual Profile'
     responses:
       '200':
         description: 'Ok. Show UI16'
   post:
     operationId: R105
     summary: 'R105: Sign Up Action'
     description: 'Processes the new user sign up form submission. Access: PUB'
     tags:
       - 'M01: Authentication and Individual Profile'
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               username:
                 type: string
               password:
                 type: string
               email:
                 type: string
               description:
                 type: string
               image:
                 type: string
                 format: binary
             required:
               - username
               - password
               - email
     responses:
       '302':
         description: 'Redirect after processing the new user information.'
         headers:
           Location:
             schema:
               type: string
             examples:
               302Success:
                 description: 'Successful authentication. Redirect to homepage.'
                 value: '/news'
               302Failure:
                 description: 'Failed authentication. Redirect to sign up page.'
                 value: '/sign_up'
/users/{id_user}:
   get:
     operationId: R106
     summary: 'R106: View User Profile'
```

```
description: 'Show the individual user profile. Access: USR, ADM'
     tags:
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Ok. Show UI13'
       '404':
         description: 'Not Found.'
/users/{id_user}/edit:
   get:
     operationId: R107
     summary: 'R107: Edit Profile Form'
     description: 'Provide Edit Profile Form. Access: OWN, ADM'
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Show form to edit profile'
   post:
     operationId: R108
     summary: 'R108: Edit Profile Action'
     description: 'Processes Edit Profile Form. Access: OWN, ADM'
     tags:
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               username:
                 type: string
               password:
                 type: string
               description:
                 type: string
               image:
                 type: string
                 format: binary
             required:
               - username
               - password
     responses:
       '302':
        description: 'Redirect after processing the profile edition form.'
```

```
headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The profile edition was successful. Redirect to user profile.'
                value: '/user/{id_user}'
              302Error:
                description: 'Failed to edit profile. Redirect to profile form edition.'
                value: '/user/{id_user}/edit'
/users/{id_user}/delete:
   delete:
     operationId: R109
     summary: 'R109: Delete Account'
     description: 'Delete account. Access: OWN, ADM'
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Ok'
       '404':
         description: 'Not found'
/users/{id_user}/follow:
 put:
    operationId: R110
    summary: 'R110: Follow user'
    description: 'Follow a user. Access: USR'
    tags:
      - 'M01: Authentication and Individual Profile'
    parameters:
      - in: path
       name: id_user
        schema:
           type: integer
        required: true
    responses:
      '200':
       description: 'Ok.'
      '401':
         description: 'Unauthorized'
 delete:
    operationId: R111
    summary: 'R111: Unfollow user'
    description: 'Unfollow a user. Access: USR'
    tags:
      - 'M01: Authentication and Individual Profile'
    parameters:
     - in: path
       name: id_user
        schema:
           type: integer
       required: true
    responses:
      '200':
       description: 'Ok.'
      '401':
```

```
description: 'Unauthorized'
/users/{id_user}/notifications:
   get:
     operationId: R112
     summary: 'R112: View User Notifications'
     description: 'Show the notifications of an individual user. Access: USR, ADM'
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Ok. Show UI13, user notifications'
         content:
           application/json:
               schema:
                   type: array
                   items:
                       type: object
                       properties:
                          id:
                            type: integer
                          content:
                            type: string
                          date:
                            type: date
       '403':
         description: 'Forbidden'
       '404':
         description: 'Not Found'
   delete:
     operationId: R113
     summary: 'R113: Delete Notification'
     description: 'Delete notification. Access: ADM'
     tags:
       - 'M01: Authentication and Individual Profile'
     parameters:
       - in: path
         name: id_user
         schema:
           type: integer
         required: true
     responses:
         description: 'Notification deleted'
       '403':
         description: 'Forbidden'
       '404':
         description: 'Not Found'
/news:
   get:
     operationId: R201
     summary: 'R201: Initial page news'
     description: 'Processes the user preferences and return an initial page. Not authenticated receive default page. Acces
     tags:
       - 'M02: News, comments and votes'
     responses:
       '200':
         description: 'Ok. Show UI01.'
         content:
```

```
application/json:
             schema:
               type: array
               items:
                 type: object
                 properties:
                   title:
                     type: string
                   content:
                     type: string
                   image:
                     type: string
                     format: binary
                   date:
                     type: date
                   topic:
                     type: string
/news/create:
   get:
     operationId: R202
     summary: 'R202: Create News Form'
     description: 'Provide the news form to a user. Access: USR'
     tags:
       - 'M02: News, comments and votes'
     responses:
       '200':
         description: 'Show form to write a news.'
   post:
     operationId: R203
     summary: 'R203: Create News Action'
     description: 'Processes the news form submission. Access: USR'
     tags:
       - 'M02: News, comments and votes'
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               title:
                 type: string
               content:
                 type: string
               topic:
                 type: array
                 items:
                   type: string
               image:
                 type: string
                 format: binary
           required:
               - title
               - content
               - topic
     responses:
      '302':
        description: 'Redirect after processing the news form.'
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The news was created successfully. Redirect to initial page.'
                value: '/news'
```

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302Error:
                description: 'Failed to create a news. Redirect to news form.'
                value: '/news/create'
/news/{id_news}:
   get:
     operationId: R204
     summary: 'R204: News Details'
     description: 'News Details Page. Access: PUB, USR'
     tags:
      - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Ok. Show UI10.'
         content:
           application/json:
             schema:
               type: object
               properties:
                 title:
                   type: string
                 content:
                   type: string
                 topic:
                   type: array
                   items:
                     type: string
                 image:
                   type: string
                   format: binary
                 date:
                   type: date
                 reputation:
                   type: integer
                 writer:
                   type: string
   delete:
     operationId: R205
     summary: 'R205: Delete news'
     description: 'Delete a news. Access: OWN, ADM'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '302':
        description: 'Redirect after processing the news form.'
       headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The news was deleted successfully. Redirect to homepage.'
                value: '/news'
              302Error:
                description: 'Failed to delete the news. Redirect to the news page.'
```

```
value: '/news/{id_news}'
/news/{id_news}/edit:
   get:
     operationId: R206
     summary: 'R206: Edit News Form'
     description: 'Provide the news form to a user for edition. Access: OWN, ADM'
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Show form to edit a news.'
   post:
     operationId: R207
     summary: 'R207: Edit News Action'
     description: 'Processes the news form edition submission. Access: OWN, ADM'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               title:
                 type: string
               content:
                 type: string
               topic:
                 type: array
                 items:
                   type: string
               image:
                 type: string
                 format: binary
           required:
               - title
               - content
               - topic
     responses:
      '302':
        description: 'Redirect after processing the news form edition.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The news edition was successful. Redirect to initial page.'
                value: '/news/{id_news}'
              302Error:
                description: 'Failed to edit the news. Redirect to news form edition.'
                value: '/news/{id_news}/edit'
```

```
/news/{id_news}/create_comment:
   get:
     operationId: R208
     summary: 'R208: Comment Form'
     description: 'Provide the comment form to a user. Access: USR'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'Show form to write a comment.'
   post:
     operationId: R209
     summary: 'R209: Comment Action'
     description: 'Processes the comment form submission. Access: USR'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               content:
                 type: string
     responses:
      '302':
        description: 'Redirect after processing the comment form.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The comment was created successfully. Redirect to the news page.'
                value: '/news/{news_id}'
              302Error:
                description: 'Failed to create the comment. Redirect to the news page.'
                value: '/news/{news_id}'
/news/{id_news}/edit_comment:
  get:
    operationId: R210
    summary: 'R210: Edit Comment Form'
    description: 'Provide the comment form to a user for edition. Access: OWN, ADM'
    tags:
       - 'M02: News, comments and votes'
    parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
```

```
responses:
       '200':
         description: 'Show form to edit a comment.'
  post:
     operationId: R211
     summary: 'R211: Edit Comment Action'
     description: 'Processes the comment form edition submission. Acess: OWN, ADM'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               content:
                 type: string
     responses:
       '302':
         description: 'Redirect after processing the comment form edition.'
         headers:
           Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The comment edition was successful. Redirect to the news page.'
                value: '/news/{news_id}'
              302Error:
                description: 'Failed to edit the comment. Redirect to the news page.'
                value: '/news/{news_id}'
/news/{id_news}/delete_comment:
   delete:
     operationId: R212
     summary: 'R212: Delete comment'
     description: 'Delete a comment. Access: OWN, ADM'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '302':
        description: 'Redirect after processing the comment form.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'The comment was deleted successfully. Redirect to the news page.'
                value: '/news/{news_id}'
              302Error:
```

```
description: 'Failed to delete the comment. Redirect to the news page.'
                value: '/news/{news_id}'
/news/{id_news}/vote_on_news:
   put:
     operationId: R213
     summary: 'R213: Vote on news'
     description: 'Vote on news. Access: USR'
      - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'The vote was added successfully.'
       '401':
         description: 'Unauthorized'
   delete:
     operationId: R214
     summary: 'R214: Remove vote on news'
     description: 'Remove vote on news. Access: OWN'
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'The vote was removed successfully.'
         description: 'Unauthorized'
/news/{id_news}/vote_on_comment/{id_comment}:
   put:
     operationId: R215
     summary: 'R215: Vote on comment'
     description: 'Vote on comment. Access: USR'
     tags:
      - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
       - in: path
         name: id_comment
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'The vote was added successfully.'
         description: 'Unauthorized'
   delete:
     operationId: R216
     summary: 'R216: Remove vote on comment'
```

```
description: 'Remove vote on comment. Access: OWN'
     tags:
       - 'M02: News, comments and votes'
     parameters:
       - in: path
         name: id_news
         schema:
           type: integer
         required: true
       - in: path
         name: id_comment
         schema:
           type: integer
         required: true
     responses:
       '200':
         description: 'The vote was removed successfully.'
       '401':
         description: 'Unauthorized'
/news/search_exact:
  get:
    operationId: R301
    summary: 'R301: Exact Match Search'
    description: 'Search for specific news posts using text. Access: USR'
    tags:
     - 'M03: Detailed search and topics'
    parameters:
      - in: query
       name: string
        description: 'String to use for exact match search'
           type: string
       required: true
    responses:
      '200':
       description: 'Ok. Show UI11'
        content:
           application/json:
               schema:
                   type: array
                   items:
                       type: object
                       properties:
                           title:
                             type: string
                           content:
                             type: string
                           image:
                             type: string
                             format: binary
                           date:
                             type: date
                           writer:
                             type: string
                           topic:
                             type: array
                             items:
                               type: string
      '400':
        description: Bad Request
/news/search:
   get:
     operationId: R302
     summary: 'R302: Full-text Search'
     description: 'Search for news posts using text. Access: USR'
```

```
tags:
      - 'M03: Detailed search and topics'
     parameters:
     - in: query
       name: string
       description: String to use for full-text search
        schema:
           type: string
       required: true
     responses:
      '200':
        description: 'Ok. Show UI11'
        content:
           application/json:
               schema:
                   type: array
                   items:
                       type: object
                       properties:
                          title:
                            type: string
                          content:
                            type: string
                          image:
                            type: string
                          date:
                            type: date
                          writer:
                            type: string
                          topic:
                            type: array
                            items:
                              type: string
      '400':
        description: Bad Request
/news/topic/{id_topic}:
 get:
    operationId: R303
    summary: 'R303: Search by topic'
    description: 'Search for news with a certain topic. Access: USR'
      - 'M03: Detailed search and topics'
    parameters:
     - in: query
       name: id_topic
        schema:
           type: integer
       required: true
    responses:
      '200':
        description: 'Ok. Show UI11'
        content:
           application/json:
               schema:
                   type: array
                   items:
                       type: object
                       properties:
                          title:
                            type: string
                          content:
                            type: string
                          image:
                            type: string
                          date:
                            type: date
                          writer:
```

```
type: string
                          topic:
                            type: array
                            items:
                              type: string
/news/topic/{id_topic}/follow:
 put:
    operationId: R304
    summary: 'R304: Follow topic'
    description: 'Follow a topic. Access: USR'
    tags:
      - 'M03: Detailed search and topics'
    parameters:
      - in: path
       name: id_topic
        schema:
           type: integer
       required: true
    responses:
      '200':
        description: 'Ok.'
      '401':
         description: 'Unauthorized'
 delete:
    operationId: R305
    summary: 'R305: Unfollow topic'
    description: 'Unfollow a topic. Access: USR'
    tags:
      - 'M03: Detailed search and topics'
    parameters:
     - in: query
       name: id
       description: Identifier of the topic
        schema:
           type: integer
       required: true
    responses:
      '200':
        description: 'Ok.'
      '401':
         description: 'Unauthorized'
/news/topic/propose_topic:
   get:
     operationId: R306
     summary: 'R306: New Topic Form'
     description: 'Provide the topic proposal form to a user. Access: USR'
     tags:
       - 'M03: Detailed search and topics'
     responses:
       '200':
         description: 'Ok.'
   post:
     operationId: R307
     summary: 'R307: Process topic form'
     description: 'Processes the topic proposal form submission. Access: USR'
     tags:
       - 'M03: Detailed search and topics'
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
```

```
topic:
                 type: string
           required:
             - topic
     responses:
      '302':
        description: 'Redirect after processing the topic proposal form.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'Success on proposing the topic. Redirect to topic page.'
                value: '/news/topic'
              302Error:
                description: 'Failed to propose topic. Redirect to topic page.'
                value: '/news/topic'
/about:
   get:
     operationId: R401
     summary: 'R401: View About Page'
     description: "Show About page. Access: PUB"
     tags:
       - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Ok. Show UI02'
/help:
   get:
     operationId: R402
     summary: 'R402: View Help Page'
     description: "Show Help page. Access: PUB"
     tags:
       - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Ok. Show UI03'
/admin/users:
   get:
     operationId: R403
     summary: 'R403: View Users Management Page'
     description: "View Users Management Page. Access: ADM"
     tags:
       - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Ok. Show UI17'
         content:
           application/json:
             schema:
               type: array
               items:
                 type: object
                 properties:
                   id:
                     type: integer
                   username:
                     type: string
                   email:
                     type: string
                   reputation:
                     type: integer
       '403':
         description: 'Forbidden'
```

```
/admin/users/create:
   get:
     operationId: R404
     summary: 'R404: User Creation Form'
     description: "User Creation Form. Access: ADM"
       - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Ok. Show UI17, form to create a user.'
   post:
     operationId: R405
     summary: 'R405: User Creation Action'
     description: "Process User Creation Form. Access: ADM"
     tags:
       - 'M04: User Administration and Static pages'
     requestBody:
       required: true
       content:
         application/x-www-form-urlencoded:
           schema:
             type: object
             properties:
               username:
                 type: string
               password:
                 type: string
               email:
                 type: string
               description:
                 type: string
               image:
                 type: string
                 format: binary
               is_admin:
                 type: integer
           required:
               - username
               - password
               - email
               - is_admin
     responses:
      '302':
        description: 'Redirect after processing the user creation form.'
        headers:
          Location:
            schema:
              type: string
            examples:
              302Success:
                description: 'User was created successfully. Redirect to admin page.'
                value: '/admin/users'
              302Error:
                description: 'Failed to create user. Redirect to user creation form .'
                value: '/admin/users/create'
/admin/users/search:
  get:
    operationId: R406
    summary: 'R406: User Search'
    description: 'Search for users. Access: ADM'
    tags:
      - 'M04: User Administration and Static pages'
    parameters:
```

```
- in: query
        name: string
        description: 'String to use for user search'
        schema:
           type: string
        required: true
    responses:
      '200':
        description: 'Ok. Show UI17'
        content:
           application/json:
             schema:
               type: array
               items:
                 type: object
                 properties:
                   id:
                     type: integer
                   username:
                     type: string
                   email:
                     type: string
                   reputation:
                     type: integer
      '400':
        description: Bad Request
/admin/topic_suggestions:
   put:
     operationId: R407
     summary: 'R407: Approve Topic Proposal'
     description: 'Accept topic suggested by a user. Access: ADM'
     tags:
      - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Topic added successfully.'
         description: 'Unauthorized'
   delete:
     operationId: R408
     summary: 'R408: Decline Topic Proposal'
     description: 'Decline topic suggested by a user. Access: ADM'
      - 'M04: User Administration and Static pages'
     responses:
       '200':
         description: 'Topic removed successfully.'
       '401':
         description: 'Unauthorized'
```

A8: Vertical prototype

In this artefact we include the implementation of the features that were considered necessary, aiming to endorse the presented composition and to get familiar with the technologies used.

1. Implemented Features

1.1. Implemented User Stories

The user stories implemented in the prototype are identified in this section.

User Story reference	Name	Priority	Description
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User Story reference	Name	Priority	Description
US01	Sign-up	High	As a Visitor, I want to sign-up so I can become a Member
US02	Sign-in	High	As a Visitor, I want to sign-in to access my Member features
US06	View news item	High	As a User, I want to view specific news item, so that I can access more information
US09	Search for news items and comments	High	As a User, I want to search for specific posts, so that I can access what I'm looking for
US12	Exact match search	Low	As a User, I want to search for specific posts, so that I can access what I'm looking for faster
US14	Edit profile	High	As a Member, I want to edit my profile, so that I can present myself to other Members
US15	View own profile	High	As a Member, I want to view my own profile, so that I can get to know how it looks like and see my reputation
US16	View others users' profiles	High	As a Member, I want to view others Member's profiles, so that I can see their information and reputation
US19	Create news item	High	As a Member, I want to create a news item, so that I can share it with other people
US28	Edit news item	High	As a Writer, I want to edit my own news item, so that I keep them updated
US29	Delete news item	High	As a Writer, I want delete my own news items, so that I'm not sharing wrong information
US33	Delete user accounts	High	As an Admin, I want to remove a user from the system, so that he can no longer access restricted content
US35	Block user accounts	Medium	As an Admin, I want to block a user with low reputation, so that he can no longer access restricted content for a specific period of time
US36	Unblock user accounts	Medium	As an Admin, I want to unblock a user, so that he can now access restricted content again
US38	View Top News Feed	High	As a User, I want to view top news feed, so that I can see the trending and recent news on the feed
US39	View User News Feed	High	As a Member, I want to view my news feed, so that I can see the news suggest to me on the feed
US40	Administer User Accounts	Medium	As an Admin, I want to administer user accounts, so that I can search, view, edit, create and delete user accounts

1.2. Implemented Web Resources

The web resources implemented in the prototype are identified in this section.

Module M01: Authentication and Individual Profile

Web Resource Reference	URL
R101: Login Form	GET <u>/login</u>
R102: Login Action	POST /login
R103: Logout Action	POST /logout
R104: Sign-up Form	GET <u>/sign_up</u>
R105: Sign-up Action	POST /sign_up
R106: View User Profile	GET <u>/users/{id_user}</u>
R107: Edit Profile Form	GET <u>/users/{id_user}/edit</u>

Web Resource Reference	URL
R108: Edit Profile Action	POST /users/{id_user}/edit

Module M02: News, comments and votes

Web Resource Reference	URL
R201: Initial Page News	GET <u>/news</u>
R202: Create News Form	GET /news/create
R203: Create News Action	POST /news/create
R204: News Details	GET /news/{id_news}
R205: Delete News	DELETE /news/{id_news}
R206: Edit News Form	GET <u>/news/{id_news}/edit</u>
R207: Edit News Action	POST /news/{id_news}/edit

Module M03: Detailed search and topics

Web Resource Reference	URL
R301: Exact Match Search	GET /news/search exact
R302: Full-text Search	GET <u>/news/search</u>

Module M04: User Administration and Static pages

Web Resource Reference	URL
R403: View Users Management Page	GET <u>/admin/users</u>
R404: User Creation Form	GET <u>/admin/users/create</u>
R405: User Creation Action	POST /admin/users/create

2. Prototype

The prototype is available at http://lbaw2103.lbaw.fe.up.pt/

Credentials:

• admin user: admin user: admin@fe.up.pt/admin123

• regular user: collab@fe.up.pt</u>/collab123

The code is available at https://git.fe.up.pt/lbaw/lbaw2122/lbaw2103

Revision history

Changes made to ER and EBD are documented in the respective documents.

GROUP2103, 03/01/2022

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