

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

0. Project Description (SHOWCHAN)

The goal of this project is to provide tv show and movie aficionados with daily news and updates of this media. This very system will be community-based since only registered members are allowed to both rate and comment each other's submissions, triggering healthy discussions.

1. Overview

| | |
|--|--|
| 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. |
| M02: User Administration and Static pages | Web resources associates with user management, specifically: view and search users, delete or ban user accounts, view user information and view system access details for each user. Web resources with static content are associated with this module: dashboard and about. |
| M03: Posts | Web resources associated with Posts, includes the following system features: posts list and search, view and submit details. |
| M04: Inbox | Module dedicated to the interaction between users, including: inbox and individual conversations. |

2. Permissions

| | | |
|-----|---------------|---|
| PUB | Public | Group of users without privileges |
| USR | User | Authenticated user |
| OWN | Owner | Group of users that can update their profiles and have privileges regarding their items |
| ADM | Administrator | Group of administrators |

Define the permissions used by each module, necessary to access its data and features.

3. Modules

Web resources organized by module Document and describe the web resources associated with each module, indicating the URL, HTTP method, request parameters and response. Follow the RESTful resource naming At the end of this page is presented some usual descriptors to document the web resources.

3.1 Module M01: Authentication and Individual Profile

- R101: Login Form /login
- R102: Login Action /register
- R103: Logout Action /logout
- R104: Signup Form /signup
- R105: View Profile /profile/{id}
- R106: Edit Profile Form /edit_profile/{id}
- R107: Edit Profile Action /edit_profile/{id}
- R108: Password Recovery Form /password_reset
- R109: Password Recovery Form Action /password_reset

R101: Login Form

| | |
|-------------|--|
| URL | /login |
| Description | Page with a login form to authenticate a user into his account |
| Method | GET |
| UI | UI06 |
| SUBMIT | R102 |
| Permissions | PUB |

R102: Login Action

| | |
|--------------|---|
| URL | /login |
| Description | This web resource logs out the authenticated user of admin. |
| Method | POST |
| Request Body | + email: string, + username: string Email or Username |

| | | |
|--------------------|-------------------|----------|
| | +password: string | Password |
| Redirects | R301 | Success |
| | R101 | Error |
| Permissions | PUB | |

R103: Logout Action

| | | | |
|--------------------|---|--|---------|
| URL | /logout | | |
| Description | This web resource logs out the authenticated user or admin. | | |
| Method | POST | | |
| Redirects | R101 | | Success |
| Permissions | USR, ADM | | |

R104: Signup Form

| | |
|--------------------|---|
| URL | /signup |
| Description | Page with a form to register a new user account |
| Method | GET |
| UI | UI04 |
| SUBMIT | R105 |
| Permissions | PUB |

R105: Signup Action

| | | | |
|--------------|--|--|-----------------------|
| URL | /signup | | |
| Description | This web resource inserts a new user into the system. Redirects to the homepage on success and the register form on failure. | | |
| Method | POST | | |
| Request Body | +username: string | | Username |
| | +email: string | | Email |
| | +password: string | | Password |
| | +confirmPassword: string | | Password confirmation |
| Redirects | R301 | | Success |
| | R104 | | Error |
| Permissions | PUB | | |

R106: View Profile

| | | |
|--------------------|--------------------------|------------------|
| URL | /profile/{id} | |
| Description | Shows the user's profile | |
| Method | GET | |
| Parameters | + id: integer | user primary key |
| UI | UI10 | |
| Permissions | USR | |

R107: Edit Profile Form

| | |
|--------------------|----------------------------------|
| URL | /edit_profile/{id} |
| Description | Edits the current user's profile |
| Method | GET |

| | | |
|--------------------|--------------|------------------|
| Parameters | +id: integer | user primary key |
| UI | A completar | |
| SUBMIT | R108 | |
| Permissions | OWN | |

R108: Edit Profile Action

| | | |
|---------------------|---|---------------------|
| URL | /edit_profile/{id} | |
| Description | Web resource that changes user profile info based on the input received. Redirects to the user profile on success and edit profile page on failure. | |
| Method | POST | |
| Parameters | +id: integer | user primary key |
| Request body | ?username: string | New username |
| | ?picture: img | New profile picture |
| | ?name: string | New name |
| | ?password: string | New password |
| | ?quote: quote | New favourite quote |
| Redirects | R106 | Success |
| | R107 | Error |
| Permissions | OWN | |

R109: Password Recovery Form

| | | |
|--------------------|---|--|
| URL | /password_reset/{id} | |
| Description | Page with a form to request a token to reset the password | |
| Method | GET | |
| UI | A completar | |
| SUBMIT | R110 | |
| Permissions | PUB | |

R110: Password Recovery Action

| | | |
|---------------------|---|------------|
| URL | /password_reset/{id} | |
| Description | Web resource that sends a reset password link to the specified email. | |
| Method | POST | |
| Request Body | +email: string | User email |
| Redirects | R102 | Success |
| | R109 | Error |
| Permissions | PUB | |

3.2 Module M02: User Administration and Static Pages

Endpoints of User Administration and Static pages

- R201: Get Users /users
- R202: Get Moderators /users
- R203: Get Statistics /statistics
- R204: Get Reports /reports
- R205: Promote User /users/{id}/promote
- R206: Demote Moderator /users/{id}/demote
- R207: Ban User /users/{id}/ban

- R208: About /about
- R209: 404 /404

R201: Get Users

| | |
|--------------------|---------------------------|
| URL | /users |
| Description | Get all registered users. |
| Method | GET |
| UI | UI14 |
| Permissions | ADM |

R202: Get Moderators

| | |
|--------------------|---|
| URL | /mods |
| Description | Get all Moderators. The Moderators are Users. This works as a shortcut to access Moderators list. |
| Method | GET |
| UI | UI16 |
| Permissions | ADM |

R203: Get Statistics

| | |
|--------------------|--|
| URL | /statistics |
| Description | Get Statistics related to Posts, Comments and Reports. |
| Method | GET |
| UI | UI15 |
| Permissions | ADM |

R204: Get Reports

| | |
|--------------------|--|
| URL | /reports |
| Description | Get all Reports related to the Comments and Posts. |
| Method | GET |
| UI | UI17 |
| Permissions | ADM |

R205: Promote User

| | | |
|--------------------|---|---|
| URL | /users/{id}/promote | |
| Description | This web resource promotes a User (to Moderator). | |
| Method | PUT | |
| Parameters | +id: integer | User id |
| Returns | 200 OK | The user was successfully promoted. |
| | 400 Bad Request | Error. Error message is specified via a HTTP header. |
| | 404 Not Found | Error. No user with the specified primary key exists. |
| Permissions | ADM | |

R206: Demote Moderator

| | | |
|--------------------|--|---------------------|
| URL | /users/{id}/demote | |
| Description | This web resource demotes a Moderator (to Member). | |
| Method | PUT | |
| Parameters | +id: integer | User (moderator) id |

| | | |
|--------------------|-----------------|---|
| Returns | 200 OK | The user was successfully demoted. |
| | 400 Bad Request | Error. Error message is specified via a HTTP header. |
| | 404 Not Found | Error. No user (moderator) with the specified primary key exists. |
| Permissions | ADM | |

R207: Ban User

| | | |
|--------------------|---|---|
| URL | /users/{id}/ban | |
| Description | This web resource produces a banishment of particular user. | |
| Method | PUT | |
| Parameters | +id: integer | User id |
| Returns | 200 OK | The user was successfully banned. |
| | 400 Bad Request | Error. Error message is specified via a HTTP header. |
| | 404 Not Found | Error. No user with the specified primary key exists. |
| Permissions | ADM | |

R208: About

| | |
|--------------------|-----------------|
| URL | /about |
| Description | Get about page. |
| Method | GET |
| UI | UI19 |
| Permissions | PUB |

R209: 404

| | |
|--------------------|---------------|
| URL | /404 |
| Description | Get 404 page. |
| Method | GET |
| UI | UI20 |
| Permissions | PUB |

3.3 Module M03: Posts

- R301: View Posts /homepage
- R302: Search Post by Tag /homepage/{search}
- R303: Search Post by Category /homepage/{search}
- R304: View Post
- R305: Submit Post Form /sub-params
- R306: Submit Post Action /sub-params/{id}

R301: View Posts

| | |
|--------------------|---|
| URL | /homepage |
| Description | Shows a few posts made by the users of the system |
| Method | GET |
| UI | UI01 |
| Permissions | PUB |

R302: Search Post by Tag

| | |
|--------------------|---|
| URL | /homepage/{search} |
| Description | Shows a few posts made by the users of the system with a specific tag |
| Method | GET |

| | | |
|----------------------|------------------|-------------------------------------|
| Parameters | ?query: string | String field to search for in posts |
| | ?tag: string | String Tag of the post |
| | ?author: string | Author of the post |
| | ?content: string | Content of the post |
| UI | UI01 | |
| Response body | JSON201 | |
| Redirects | R301 | Success |
| | R302 | Error |
| Permissions | PUB | |

R303: Search Post by Category

| | | |
|----------------------|---|-------------------------------------|
| URL | /homepage/{search} | |
| Description | Shows a few posts made by the users of the system with a specific tag | |
| Method | GET | |
| Parameters | ?query: string | String field to search for in posts |
| | ?category: string | Category of the post |
| | ?author: string | Author of the post |
| | ?content: string | Content of the post |
| UI | UI01 | |
| Response body | JSON202 | |
| Redirects | R301 | Success |
| | R303 | Error |
| Permissions | PUB | |

R304: View Post

| | | |
|--------------------|---|-----------------|
| URL | /post | |
| Description | Shows post information, it being either a text, image or link type post | |
| Method | GET | |
| Parameters | +id: integer | Post identifier |
| UI | UI03 | |
| Permissions | PUB | |

R305: Submit Post Form

| | | |
|--------------------|---------------------------------------|------------------|
| URL | /sub-params | |
| Description | Page with a form to submit a new post | |
| Method | GET | |
| Parameters | +id: integer | User primary key |
| UI | UI09 | |
| SUBMIT | R306 | |
| Permissions | PUB | |

R306: Submit Post Action

| | | |
|--------------------|--|------------------|
| URL | /sub-params/{id} | |
| Description | Web Resource for the user to submit a post | |
| Method | POST | |
| Parameters | +id: integer | User primary key |

| | | |
|---------------------|------------------|--------------|
| UI | UI01 | |
| Request Body | ?title: string | Post title |
| | ?content: string | Post content |
| | ?image: string | Post image |
| | ?link: string | Post link |
| | ?source: string | Post source |
| Redirects | R301 | Success |
| | R305 | Error |
| Permissions | PUB | |

3.4 Module M04:

- R401: View Inbox
- R402: Open_inbox Form
- R403: Open_inbox Action

R401: View inbox

| | | |
|--------------------|---|------------------|
| URL | /inbox | |
| Description | Shows a list of conversations belonging to a user | |
| Method | GET | |
| Parameters | +id: integer | User primary key |
| UI | UI12 | |
| Permissions | USR | |

R402: Open_inbox form

| | | |
|--------------------|----------------------------------|------------------------------|
| URL | /open_inbox | |
| Description | Shows conversation between users | |
| Method | GET | |
| Parameters | +id: integer | User primary key |
| | +recipient: string | Message recipient's username |
| UI | UI13 | |
| Permissions | USR | |

R403: Open_inbox action

| | | |
|---------------------|---|------------------------------|
| URL | /open_inbox | |
| Description | Page that displays a conversation between the authenticated user and a friend | |
| Method | POST | |
| Parameters | +id: integer | User primary key |
| | +recipient: string | Message recipient's username |
| Request Body | ?body: string | Message |
| Permissions | USR | |

4.

/XML Types

```
JSON201: Search by Tag
{
  "post": [
    {
      "id": "1",
      "title": "Netflix cancels 'Everything Sucks'",
```

```

    "url: https://dummylink.com"
    "tag: everything sucks"
    "category: TV"
  },
  {
    "id": "15",
    "title": "Boss Baby the series now on movie",
    "opinion: Lorem ipsum dona beu."
    "source: https://dummylink.com"
    "tag: boss baby"
    "category: TV"
  }
]
}

JSON201: Search by Category
{
  "post": [
    {
      "id": "2",
      "title": "A Series of Unfortunate Events is amazing",
      "image: https://dummyimage.com/images/asoue.jpg"
      "tag: a series of unfortunate events"
      "category: TV"
    },
    {
      "id": "13",
      "title": "Lady Bird wins the Oscar",
      "url: https://dummylink.com"
      "tag: lady bird"
      "category: Movie"
    }
  ]
}

```

Revision history

Changes made to the first submission:

- **R108** now **returns an image** instead of returning the image's path.
- **R202** no longer redirects to the same URL as R201.
- Added **redirects for content filtering** in case of both success and error.
- **Removed link, text and image post resource separation** by now accepting an id post parameter.
- **Inbox-related resources** now include receiver parameters.
- Removed **relative path** on resource **R403**.
- **Fixed link on R110** so it reflects which user the password is being reset on.
- Added an index for **module 4**.
- Deleted web resource descriptors.
- **Overall small additions of missing information** on several resources (check revision history).

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