User Requirements Specifications

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Functional Requirements

FR-01: Client should be able to post a review

FR-02: Client should be able to read reviews

FR-03: Client should be able to edit a review

FR-04: Client should be able to delete a review

FR-05: Client should be able to login

FR-06: Client should be able to view account information

FR-07: Client should be able to create an account

FR-08: Client should be able to delete account

FR-09: Client should be able to edit account

FR-10: Client should be able to create a movie

FR-11: Client should be able to see movies

FR-12: Client should be able to delete movies

FR-13: Client should be able to edit movies

FR-14: Client should be able to logout

FR-15: Client should be able to rate actors

Web (User):

1, 2, 3, 4, 5, 6, 7, 9, 11, 14

Desktop (Admin):

6, 7, 8, 9, 10, 11, 12, 13

Web and desktop:

6, 7, 9, 11, 14

MoSCoW for Functional Requirements

Must have:

- FR-1
- FR-5
- FR-7
- FR-10
- FR-14

Should have:

- FR-2
- FR-3
- FR-6
- FR-9
- FR-11
- FR-14

Could have:

- FR-4
- FR-8
- FR-12

Will not have:

• FR-15

Non-functional requirements

1. Performance:

- Response Time: The web application should load Razor Pages and respond to user interactions within a maximum of 2 seconds.
- Database Query Speed: Database queries should execute within 500 milliseconds on average.
- Resource Utilization: The system should use no more than 70% of available server CPU and memory resources under peak load.

2. Maintainability:

- Code Documentation: All code, including Razor Pages and WinForms components, should be well-documented to facilitate future maintenance and enhancements.
- Modularity: The codebase should follow a modular structure to ease future updates and extensions.
- Version Control: Utilize a version control system (e.g., Git) for source code management, with clear commit messages and branching strategies.
- Code Review: Implement a code review process to ensure code quality and adherence to coding standards.

3. Security:

- Authentication: Implement secure user authentication and authorization for both the web and WinForms applications.
- Data Encryption: Sensitive data should be encrypted both in transit (using HTTPS) and at rest (in the database).
- Input Validation: Implement input validation and sanitation to prevent SQL injection, cross-site scripting (XSS), and other common web vulnerabilities.

- Session Management: Ensure secure session management practices to protect user sessions from hijacking or unauthorized access.

4. Scalability:

- Load Balancing: Design the web application to be load-balanced to distribute traffic evenly across multiple servers.
- Database Scalability: Ensure the database can scale horizontally or vertically to accommodate increasing data volumes and user loads.
- Caching: Implement caching mechanisms for frequently accessed data to reduce the load on the server and improve response times.
- Elasticity: Set up auto-scaling for cloud-based infrastructure to handle sudden spikes in traffic without manual intervention.

Use Cases

UC-01: Post a review

Covers: FR-01

Actor: User

Pre-condition: Actor is logged in

Main Success Scenario:

- 1. Actor goes to the Main Page
- 2. System returns Main Page
- 3. Actor clicks the button to read/write movie reviews Page
- 4. System returns Read/Write movie reviews Page
- 5. Actor types a review
- 6. Actor posts
- 7. System confirms and posts the review

Extensions:

5a. Actor clicks on the cancel button.

- 1. System returns to the Main Page
- 2. End of use case

UC-02: Create Movie

Covers: FR-10

Actor: Admin

Pre-condition: logged in

Main Success Scenario

- 1. Actor goes to the movie section
- 2. System displays the Add New Movie Form

- 3. Actor fills in the required information
- 4. Actor confirms
- 5. System confirms and saves the information

Extensions:

- 4a. Actor clicks on the cancel button
 - 1. System returns to the Main Form
 - 2. End of use case
- 5a. Not all required information is filled in
 - 1. System shows a message that there is missing information
 - 2. Return to MSS step 2

UC-03: Edit a Movie

Covers: FR-13

Actor: Admin

Pre-condition: logged in

Main Success Scenario

- 1. Actor goes to the movie section
- 2. System displays all available movie
- 3. Actor selects a movie
- 4. Actor clicks on edit button
- 5. System displays the Edit Form
- 6. Actor fills in the required information
- 7. Actor confirms
- 8. System confirms and saves the information

Extensions:

- 6a. Actor clicks on the cancel button
 - 1. End of Scenario
- 8a. Not all required information is filled in
- 1. System shows a message that there is missing information
- 2. Return to MSS 2

UC-04: Delete a Movie

Covers: FR-12

Actor: Admin

Pre-condition: logged in

Main Success Scenario

- 1. Actor goes to the Movie section
- 2. System displays all available movies
- 3. Actor selects a movie
- 4. Actor clicks on delete button
- 5. System displays a message that it was successfully deleted and displays the new list of movies in the list box

Extensions:

- 3a. Actor does not select a movie
- 1. System displays a message that no movie was selected
- 2. Return to MSS 2

UC-05: Login

Covers: FR-05

Actor: Admin/User

Pre-condition: Actor already has an account

Main Success Scenario

- 1. Actor goes to the login page
- 2. System opens login page and asks for email and password
- 3. Actor inputs the required information and clicks the login button
- 4. System checks and logs the actor in
- 5. Actor is logged in

Extensions:

- 4a. Actor inputs wrong credentials
- 1. System shows a message that there is no account with these credentials
- 2. Return to MSS 2

UC-06: Create Account

Covers: FR-09

Actor: User/Admin

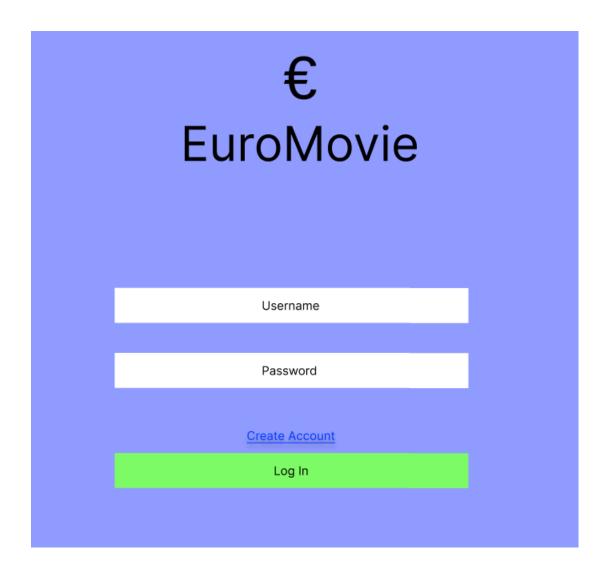
Main Success Scenario

- 1. Actor clicks and goes to the Create Account section
- 2. System open Create Account section
- 3. Actor fills in the required information
- 4. System checks if the credentials meet the criteria
- 5. System creates an account
- 6. Actor creates has an account

Extensions:

- 3a. Actor clicks on the cancel button
 - 1. System returns to the Login section
 - 2. End of use case
- 4a. Not all the credentials meet the criteria
 - System shows a message that says there is missing or has wrong credentials
 - 2. Return to MSS 2

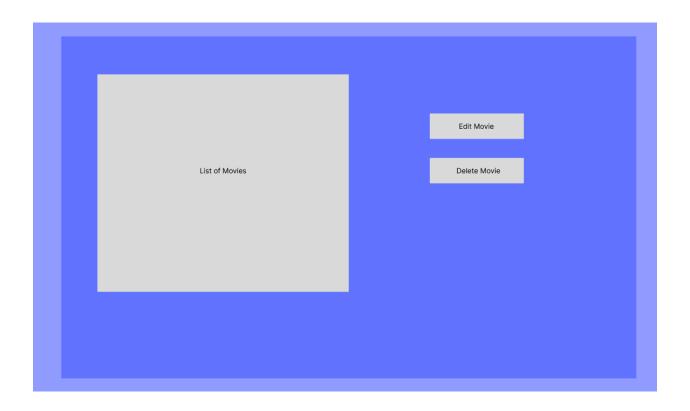
Login



Main Form User

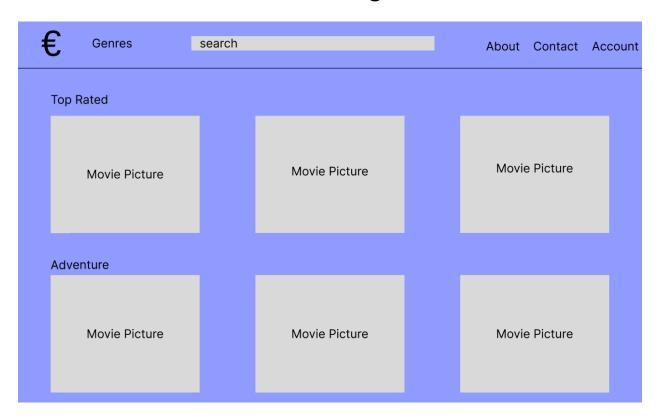


Movie Form



Website wireframes

Home Page



Login Page

€ EuroMovie

Username

Password

Create Account

Log In