

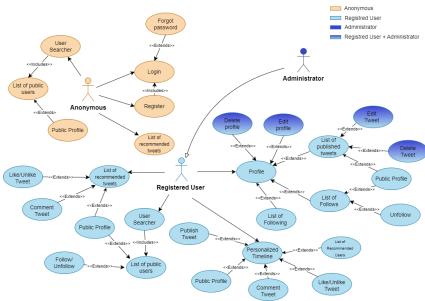
#### INTRODUCTION

We are going to develop a sports-oriented Twitter called **SLAM**, where we provide users with the latest updates, analysis, and discussions on the world of sports. Our aim is to provide them with a reliable source of information on their favorite teams and athletes, while also offering insights and commentary on major sporting events.

Our goal is to create a dynamic community of sports enthusiasts, where we can engage in lively discussions and share our passion for the games we love. We encourage people to join the conversation, share their thoughts and opinions, and connect with like-minded individuals from around the world.

#### **TYPE OF USERS**

Slam will have 3 different types of user (**registered**, **anonymous and administrator**), each of these will have access to different functionalities depending on their role. These functionalities are described in the following use case diagram.

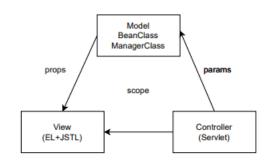


#### **ARCHITECTURAL PATTERN**

We used the **MVC** (Model-View-Controller) pattern in order to organize and structure our dynamic website effectively. This architectural design pattern separates the different components of our application, providing clarity and maintainability to our codebase.

At the heart of our MVC diagram lies the Model, which represents the underlying data and business logic of our website. The Model encapsulates the information and functionalities that are essential for the functioning of our application. It is responsible for tasks such as data retrieval, data manipulation, and validation.

The View component handles the presentation layer of our website. It represents the user interface and is responsible for displaying the data from the Model to the users in a visually appealing and intuitive manner. The View ensures that the information is presented in the most appropriate format, be it



HTML, CSS, or any other technology required for rendering the user interface.



The Controller acts as the intermediary between the Model and the View. It receives user inputs and initiates the appropriate actions within the Model, which may involve fetching or updating data. The Controller also interacts with the View, updating it with the latest information from the Model or instructing it to display specific views based on user interactions.

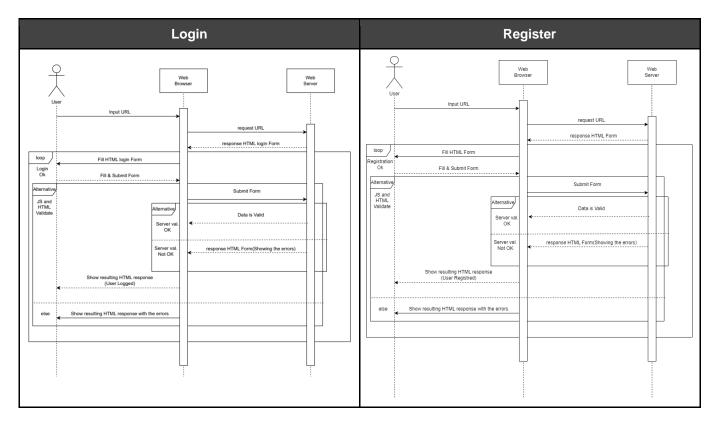
By implementing the MVC pattern, we achieve a clear separation of concerns within our dynamic website. This separation allows us to modify or enhance specific components independently without affecting the entire system. It also promotes code reusability, as different Views can utilize the same Model or multiple Controllers can interact with a single Model.

Overall, the MVC pattern improves the maintainability, scalability, and testability of our dynamic website, making it easier to develop, debug, and enhance over time.

#### LAYERS AND MVC DIAGRAMS

The user will start from a landing page where 3 options will be displayed: Login, register, or continue anonymously.

If the user chooses to access either of the first two options, it will be redirected to the login or registration form, respectively. As we will see, they have a similar design, consisting of a box containing a set of fields that the user will have to fill in to access their account or register. It is worth noting that if the user wants to access their account but does not remember the password, they will have a field that allows them to change it to a new one. Next, we have the **sequence diagrams** in each of these cases.

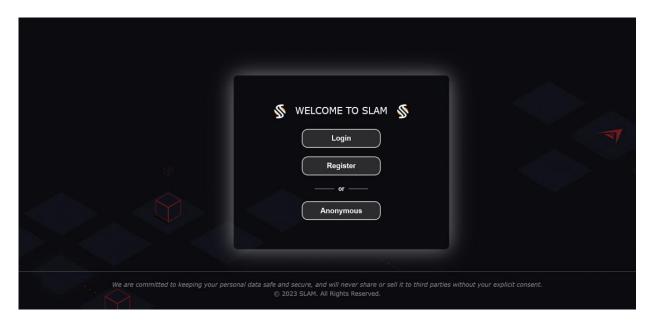


Once the user has logged in, chosen the option to continue anonymously, or is an administrator, it will have a navigation menu located on the left side in a fixed position, with all the functionalities explained in the use case diagram. On the other hand, the content of each functionality will be displayed to the right of the navigation bar, allowing scrolling through the page to view it in its entirety.

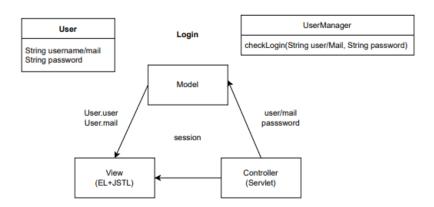


Next, we will see each of the screens (from logged user) together with their MVC diagram.

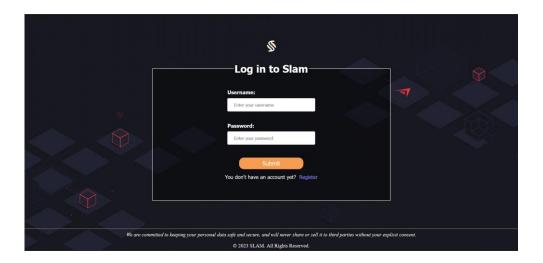
## **Landing Page**



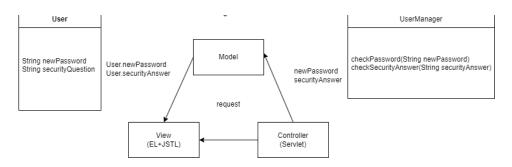
# **Login Form**

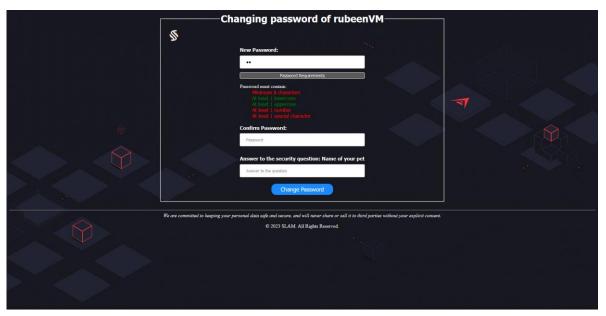






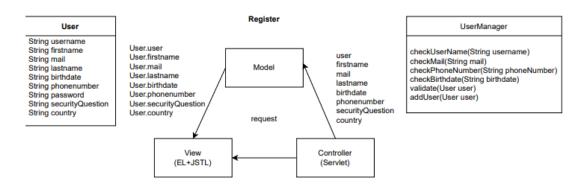
## **Change Password Form**





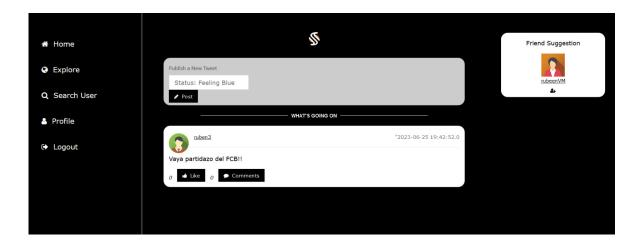


## **Register Form**





### **Timeline Usuaris**

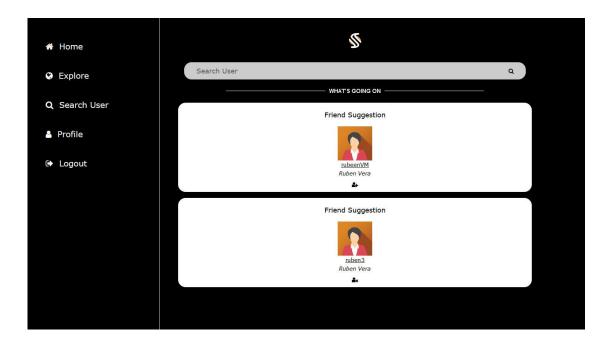


### **Explore**



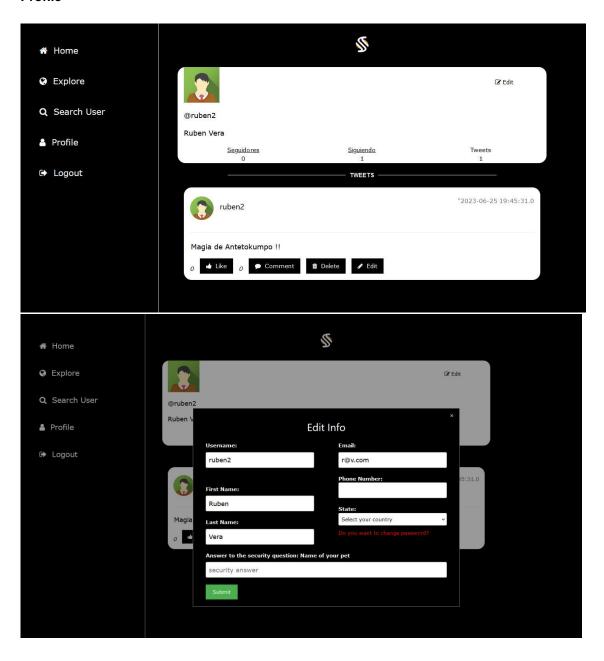


### Search User





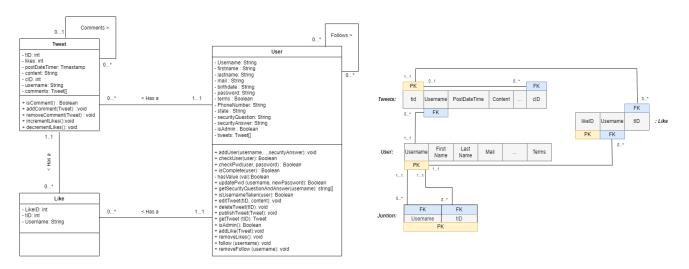
## **Profile**





#### **DATABASE DESIGN**

In order to understand how the design of the database is implemented we designed the following UML and relational database design



## FILE STRUCTURE AND DESIGN (CSS)

Our idea is to create a sports-oriented Twitter where the entire interface is minimalist and simple so that the user can enjoy the experience to the fullest. We have also thought that the name should be short and easy to remember, which is why we have opted for a short name, as well as a simple but creative and memorable logo.



To achieve the desired design, we utilized some designs provided by W3Schools (<a href="https://www.w3schools.com/w3css/">https://www.w3schools.com/w3css/</a>) as a starting point. We then customized them to suit our specific requirements and incorporated our own unique design elements.



The main structure of our JavaServer Pages (JSP) files is as follows:

```
<!-- Page Container -->
<div class="w3-container w3-content w3-round-xlarge" style="max-width:80%;margin-top:3%">
  <!-- The Grid -->
  <div class="w3-row">
   <!-- Left Column -->
    <div class="w3-col m3 left-column">
       <div class="w3-left-align w3-large">
               // Home, Explore ... buttons
       </div>
    </div>
    <!-- End Left Column -->
    <!-- Vertical Line Separator-->
    <div class="verticalLine"></div>
   <!-- End Vertical Line Separator-->
   <!-- Right Column -->
   <div class="w3-col m7">
       // Content code...
    </div>
    <!-- End Right Column -->
  </div>
  <!-- End Grid -->
</div>
<!-- End Page Container -->
```