CentralN Documentation

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CentralN Documentation

Project Overview: CentralN is a forum platform for Eduvos students, allowing them to share, discover, and interact with posts, events, and multimedia content. CentralN is built with **HTML**, **CSS**, **JavaScript**, **and PHP**. It offers an intuitive user experience inspired by popular social media platforms.

Project Structure:

Assets:

 Contains CSS, JS, images, and icons used across the application.

. Create:

Includes index.php and script.js for creating new posts. Here, users can upload images and use QuillJS for rich text editing. The post tags are automatically separated using a comma trick.

. Database:

 Contains Forum.sql which defines the database structure, including tables for users, posts, events, videos, and notifications (the latter two are not yet fully integrated).

. Login:

Includes index.js, assets, and PHP files for login and sign-up functionalities. A Forgot Password feature is available, which uses a PHP script to send password reset emails through a simple API call.

. Profile:

Includes index.php and editProfile.php, where users can view their account details, log out, and edit their profile information.

· View-Post:

 Contains index.php, style.css, and script.js to handle viewing a post, including comments and replies.

Root Folder:

- index.php: Shows the homepage, featuring the latest posts, popular tags, events, and a search bar.
- event: Displays a specific event by ID, with sections for upcoming and past events.
- script.js, style.css: Shared assets across different pages.

Asset utils folder (assets/utils):

- ndamulelo.rasendedza.centraln: Contains servlets and utility classes.
 - dbutils.php: Handles database connections.
 - posting.php: Handles post-related requests.
 - account.php: Manages user requests and authentication.
 - userutils.php: Contains user-related utility functions.

URL Endpoints:

Home Page: /

 Displays the latest posts, popular tags, and upcoming events. The search bar allows users to search for posts by keywords or tags.

• Event Details: /Event?id=

Shows event details for a specific event by its ID. The page also features upcoming and past events on the sides.

• Post View: /view-post?id=

Displays a post by its ID, showing the post content, image, meta information (e.g., likes, views), and comments. Users can reply to comments, and the post creator can reply to comments on their own post.

• Login Page: /Login

- Handles user login with a "Forgot Password" feature that sends a reset link via email.
- Search Posts: /posts?searchterm=&type=search or /posts?tags=&type=tags

 Displays search results based on the search term or tags selected by the user.

. Create Post: /create

The page where users can create new posts with an image, tags, and rich text content.

• User Profile: /Profile

 Displays the user's profile, including their posts, liked content, and interactions.

• Edit Profile: /Profile/EditProfile.php

 Allows users to edit their profile details, such as username and profile picture.

My Friends: /My-Friends

 Displays all list of all friends associated with the account.

Users: /users

Show all users in the CentralN database.

Features:

1. Rich Text Editing:

 QuillJS provides a WYSIWYG editor for creating posts, allowing students to format their content easily.

2. Tag Management:

 Tags are auto-separated in real time using a comma trick inspired by YouTube Studio.

3. Comment Threads:

Nested comment threads similar to **Reddit**,
 allowing for organized discussions within posts.

4. Event Management:

 Users can view details about events, including upcoming and past events, with details on the left and right sides of the event page.

5. Video Integration (Upcoming):

 While not yet fully implemented, video uploading and viewing will be supported.

6. Notifications (Upcoming):

 Users will soon receive real-time notifications for updates on their posts, comments, and events.

7. Forgot Password:

 The forgot password functionality is handled via a PHP-based API that sends a reset link via email.

Homepage Overview:

. Navbar:

The navbar includes a search bar to search posts by keywords. It also has a profile icon that links to the user profile.

. Left Aside:

 Displays Popular Tags, which, when clicked, leads to the search results page but filtered by tags (type=tags).

. Main Section:

Displays posts ordered by creation time. Each post includes a like button and can be clicked to view more details on the **Post View** page.

. Right Section:

Shows Events, with upcoming events on the left and past events on the right on the Event Page.

Post Creation Overview:

Image Upload:

Users can upload images as part of their posts.

. Tags:

 Tags are separated automatically by commas, making it easy for users to categorize their posts.

Post Content:

 QuillJS powers the rich text editor, giving users a smooth post creation experience with various formatting options.

Database Overview:

 The database schema includes tables for users, posts, events, videos, and notifications. While the notifications and videos are not yet in use, they provide room for future expansion.

Future Development:

1. Video Integration:

 Add video support for uploading and viewing within posts and events.

2. Notifications:

 Real-time notifications will be added for post engagements, comments, and event reminders.

CentralN continues to grow, aiming to offer Eduvos students a dynamic and interactive platform for communication and collaboration.

README - CentralN Eduvos Student Forum

Requirements:

- . XAMPP
- MySQL Server
- . PHP
- QuillJS (for rich text editing)
- A modern web browser (Chrome, Firefox, Edge, etc.)

1. Set Up MySQL Database:

 Install and configure MySQL (version 5.7 or above) on port 3306.

- Import the Forum.sql file located in the root of the project to set up the required database structure. Use the following command in your MySQL terminal or your preferred MySQL tool (e.g., phpMyAdmin):
- The SQL file contains tables for users, posts, events, videos, notifications, and other essential data.

2. Configure the Web Application:

- Ensure your application is configured to run on localhost. This is crucial for the application to function correctly.
- Make sure your server is set up to point to the root folder of this project, which includes the PHP files, and assets.

3. Set Up Apache Tomcat:

- Install and configure XAMPP to run on localhost
 This is required for CentralN.
- Deploy the application on XAMPP either by copying the project folder to the HTDOCS directory of xampp or by using the PHPStorm.

4. Run the Application:

- Start your Server.
- Access the application via the following URL: http://localhost/

Rules & Guidelines:

1. Run the Application on localhost:

The application is configured to run on localhost. Ensure that no other applications are using this port. If localhost is unavailable, update the server configuration or adjust the xampp settings.

2. Database Configuration:

The MySQL database must be running on port 3306. The default SQL file Forum.sql should be executed to set up the database correctly. Failure to do so will result in database errors when accessing features like posts, events, or user profiles.

3. Make Sure to Execute the Forum.sql File:

Ensure that the Forum.sql file is executed in your MySQL instance before launching the application. This step is essential for setting up the schema and tables required by the app.

4. Login and Sign-Up:

The login system requires a valid email. Ensure that you provide a correct email during sign-up to use the password reset feature via email.

5. Browser Compatibility:

 CentralN supports modern browsers such as Chrome, Firefox, and Edge. Ensure you use an updated version for the best experience.N.B mobile not supported

6. File Paths:

Make sure your project paths (for assets, login, profile, create, etc.) are correct in your web server configuration. Incorrect paths might cause issues with loading images, CSS, and JavaScript files.

Running in Development Mode:

If you are working on development, ensure that:

- Xampp is running on localhost.
- MySQL is properly connected on localhost:3306.
- You have quill.min.js and any other dependencies included in the /assets/js/ folder.

Enjoy using CentralN!