Project Proposal

Team One Punch Man

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Introduction

As hard-working students, we use a large amount of flash cards during midterms week or finals week, which may cause huge paper (tree) consuming. So this time our idea is to build a online flash card application. Users can create their cards or list of cards on our website, things will just work the same way as the actual flash cards.

Target group:

language learner, hard-working students, environment protector

Core Features

The project consists of three modules: User, List and Card. We selected these features as core features since these are must-have features for every similar online application.

Module 1: User
1. User Login:
   Description: The User shall input their username and password to login to the system. The System shall validate the user's credentials. Usernames are unique. So, the username can be candidate key of database.

2. User Registration with email
   Description: The User shall be able to register a username and password using his or her email. The System shall save the user and their password in the database.

3. Reset Password
   Description: The User shall be able to reset their password via inputting their email. Then system shall send an email and give them link to reset their password.

4. Update portfolio
   Description: The User shall be able to input their personal information about their age, school, name, etc. The system shall save their profile according to their username to a proper address.

5. User Logout

Description: The User shall be able to logout when click logout button. Then user will return to the login page.

Module 2: List
The List entity manage flash card lists created by users. List support the following basic functions:

1. Create a new list:
   Description: Each authorized user can create a List of flash cards by clicking the create list button on the main page. It will then lead user to a new page contains a create list form, the form contains the following fields that should be complicated to submit:
   List Name: string
   List Description: string
   Cards: see Cards Section for more information
   After form submitted the page will update the lists owned by user without refresh the whole page.

2. Remove an existing list
   Description: Each list item shown on the list detail page will provide a button to remove itself from the user's list collection. After user click the remove button the page will update the lists without refresh the whole page.

3. Rename an existing list:
   Description: Each list item shown on the list detail page will provide a method to rename the certain list. After renaming the page will update the new list information without refresh the whole page.

Module 3: Card
The card entity stores both words and related definition. Card supports the following basic functions:

1. Create a new card:
   Description: Each authorized user can create a new card by clicking the new card button on the list page. It will lead the user to a new page of create card form. The form contains following fields that need be submitted:
   word: string
   word definition: string
   The list will be updated without refreshing the page after a new card is submitted and inserted successfully.

2. Remove an existing card
   Description: Each card item shown on its related list pages will provide a button to remove the selected card. The list will be updated without refreshing the pages once the selected card is removed successfully.

3. Modify the content of a card
   Description: Each card item shown on its related list pages will provide a button to modify its content. The form for modifying the content is the same as the creating one. The list will be updated without refreshing the pages once the update is done successfully.

Extra Features

1. User:
   a. User Register through Facebook/Google
2. Quiz:
   a. Randomize cards in current list
   b. Quiz from selected list
3. SNS functionality:
   a. Add friends by email
   b. Share Lists with friends
4. UI Improvement
   a. Fit to any screen size