LawsForMe

Steven Landau, Tory Leo, Talha Azhar

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* Overview

LawsForMe™ is a web application that will inform users (via email) of laws that exist and that are being passed/proposed that might aﬀect their interests. When someone registers an account on the LawsForMe website their address will be used to determine their state and county. The user is assumed to be in the United States. The user will then enter their interests which will result in Federal, State, and County laws being scanned for possible laws that aﬀect their interest (positively or negatively). There will also be a forum section of the website where users will be able to discuss the impacts of various laws on various hobbies.

* Queries

The website will take into consideration numerous SQL tables. Possible tables and queries are as follows,

* Account - The account table will store information relating to a users account, such as username, password, and ID. The table will be queried anytime a user attempts to login.
* Address - The address table will hold all data relating to the address of the registered account. This includes information such as street, zipcode, city, state, and an ID which will also be used in the account table. This table will be queried whenever we need to scan for laws that aﬀect the given user.
* Permissions - The permissions table will hold an ID that is also used in the account table as well as the name of the permission level that has been granted to the given user. The permissions table will be queried anytime a user logs in or anytime they attempt to perform an operation that requires certain permissions.
* FederalLaws - This table will store all information relating to Federal Laws. It will be queried anytime the laws need to be scanned (such as a user inputting/updating their interests). This table will also be updated anytime a new federal law is introduced. The attributes of this table are still under discussion.
* StateLaws - This table is similar to the FederalLaws table except it is in charge of StateLaws. The attributes of this table are still under discussion.
* CountyLaws - This table is similar to StateLaws and FederalLaws but it’s in charge of state laws. The attributes of this table are still under discussion.
* Discussions - This table will store information relating to all discussions in the forum section of the website. The table will be able to store data about all of the discussions as well as comments that were made with a reference to the user that made them. The table will be accessed anytime a discussion needs to be retrieved (such as a user clicking on a discussion).
* Posts - This table will store all posts a given user has made. Each post will contain a reference to the discussion it was made in. This table will be queried whenever a user wishes to view their post history (or someone elses).
* Events - This database will store all events made by a given user. It will have an ID (the same as hte one in the account table) and another attribute that will identify the actions a user took once logged in. This is useful for data analytics however it is not yet clear how it can be utilized in the product itself.

* Requirements
  + Users must be able to register, giving a minimum of their email, and state.
  + Federal and Statelaws need to parsed in search of data relating to users interersts.
  + The website must have a fully functional forum section where users can discuss various laws.
  + Users must be emailed whenever a law is being proposed that could aﬀect their interests.

4 Progression

* + GitHub created for LawsForMe project
  + Database created on Reddwarf with tables
  + All team members have logged into Reddwarf
  + Created UML to lay out the design of the program

5 Use Cases

* + User enters Email/Password to login
  + User enters invalid Email/Password and notification is brought to login page with a warning, notifying them that it is invalid
  + To create an account, the user enters Email, Password, Address, if the credentials fail, user will be notified that the credentials are invalid and prompted to enter them again
  + Once the user logs in, they can select what interests, out of a list, by clicking on the elements of the list
  + Based on the user’s interests, laws will be listed, that effect their interests
  + User can click “OK” button to be brought to the law list page from the interest list page
  + User can click on the law and be taken to a page with more information related to the given law
  + User can hit the “back” button when on law page, to return to the page that lists laws
  + User can click on an icon on the law list page to be presented with a list of interests, which they can interact with
  + User can go to an information update screen to update their address
  + User can click the “Logout” button to be signed out of their account