FluTracker Documentation

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# **Application Overview**

# This is a web application for tracking Flu activity in the United States. This system is mostly useful for epidemiologists and the general public for entering their flu predictions based on domain knowledge. In order to make the predictions, a user needs to sign up first. Once signed up the user can enter their predictions and finally, after CDC (Centers for Disease Control and Prevention) publishes actual data based on ground surveillance reports, the user predictions are evaluated in terms of accuracy. Each user is given points based on the accuracy of his estimates and points get accumulated over time to give the user a rank. In addition to making predictions, users can also refer to previous predictions made by him as well as published data from various flu tracking systems like Google Flu trends, Health Map, and other followed users. The website acts a single place to download various data sets. The overall objective of the application is to increase flu awareness in the society and help data analysts and epidemiologists in better modeling and predicting flu activity. Also, this web application provides relevant information to casual users. The website can provide relevant information to the causal user in the following way: Provide preventive suggestions, estimate the number of people infected in his/her area and given his/her demographics, estimate the probability of whether he/she getting infected.

# **Intended Audience**

# This application is intended for data analysts, epidemiologists, and the general public for making predictions, publishing them and connecting with other domain experts.

# **Actions performed by a user:**

# Create a new user account,

* Login to a user account,
* View predictions based on region or location.
* Edit/ delete predictions.
* Add new predictions.
* View user profile.

# **Project 3 Requirements addressed**

# **User Account**

# This application allows a user to create an account. This is achieved on the Register page. After signing in, the user can login to the system via the Login page.

# **Views and Templates**

The application has the following views:

# **Index or Home View:** The splash screen is the index or the home view. On this screen, the user can find the information about the application and user can sign up from this page as well as login, if an account already exists.

# **List View:** After logging in, a user is redirected to a dashboard screen. On this screen he can select a region or a location from a group of regions. Our database has 10 different regions that are shown to the user as a list. From this list the user makes a selection.

# **Detail View:** Depending on the entry selected by the user the predictions made by the user are displayed. This is the detail view which shows the individual records in the system. Each record is a prediction made on a specific date by the user. For example, one record would show that for the region Virginia the user predicted a number equal to 500 flu cases for the date 10/15/2014.

# **Edit View and Delete View:** For all the rows in the list view, a user can edit as well as delete records. These views appear only to the users who are logged in.

# **Add View:** A user can make new predictions for a specific date for a region which is the Add View, thus it allows users to add new records to the system.

#### **Database:**

#### All values are retrieved through the flu database.

#### **Running the project on your system:**

* Startup Apache and MySQL in the XAMPP control panel.
* Create a new database named “flu” using the phpMyAdmin interface provided in XAMPP.
* Import the flu.sql file into the flu database through phpMyAdmin. This will populate the database with the relevant records.
* Configure the SERVER\_PATH in the config.php file depending on the location of the application in your system. The SERVER\_PATH is used to reference all the public files. (For Mac user, the application is in htdocs folder in xampp. If set incorrectly all CSS and JavaScript would not be applied to the pages.)
* Open a web browser and navigate to <http://localhost/flutracker> in order to explore the Flu Tracker web application.
* Login with username as vivekb88 and password as vivekb88 or you can sign up for a new account and use it to login to the application.