

User Documentation

Group 3

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Daily activities play an important role in impacting our everyday life. They always had a daily dose of work which had a positive impact on their health. But as time went on, there were many inventions aimed to make people's life easier like the washing machine, blender, food processor, vacuum cleaner, cars, etc. In a way, they helped us out, but this deviated people from an active lifestyle. They had to find alternative ways to maintain their health. But, in more cases, people generally do not understand the value of a healthy lifestyle. They are reluctant to do anything which deviates from their daily schedule. Also, people cannot continue a fitness regime for a long period of time. Though there are several determinant factors that can be controlled by an individual with regards to his health, ultimately the individual lacks motivation and knowledge required to follow a healthy lifestyle.

The main aim for this project is to provide people with an opportunity to follow a healthy lifestyle. In order to make this happen, it is necessary for one to be aware of the reasons behind an unhealthy lifestyle and find out ways to enable people to be a healthier person.

Reason for Health Analytics

The reasons for an unhealthy lifestyle are numerous, but if closely studied, they boil down to the following reasons mentioned below.

However, most of the people underestimate how severe this problem is. What they prefer most is a convenient and a leisure lifestyle. They can hardly realize whether their lifestyle is healthy or not until some diagnostic illness shows up. In some other cases, people know that they need exercise or that they need to follow good habits, but they pursue them irregularly and fail to put efforts on a daily basis. As a matter of fact, sub-health can pose a potential high risk to a variety of illnesses, and it will influence a person's life in every aspect. Some of them are chronic fatigue, distraction, memory deterioration and sleep disorder. What was mentioned above are only some of the symptoms which precisely interpret the subhealth status. Essentially, the problem is caused by being accustomed to bad habits in the five aspects listed below:

1. Long period of insufficient sleep These days most people don't get enough sleep. People stay up all night to study, work, or have fun. Inadequate sleep has both short- and long-term consequences on health. Its effects can be seen in reduced efficiency and productivity, errors, and accidents.
2. Irregular eating habits Irregular eating patterns effects calorie burning, appetite, and hunger hormones in a human system. It can also create a health risk through a metabolic disturbance.
3. Pressure from work or from academics .
3. Stress that continues for a long time can lead to a condition called distress which is a negative stress reaction. It can lead to many physical symptoms including headaches, stomach upset, high blood pressure, chest pain, and also sleeping problems.
4. Lack of sport activities in the daily routine Lack of exercise is the main cause of chronic diseases. Exercise plays a major role in protecting our health. Some physical activity is necessary to stimulate the body's own repair system.

5. Smoking or Drinking alcohol These activities cause multiple complications with the body that can range from mild to life-threatening. Smoking causes about 90% of lung cancers. Alcohol can affect the way the brain looks and works. Drinking and smoking too much can weaken your immune system, making your body a much easier target for disease

Remedial Measures

1. For example, if a person is trying to get rid of his drinking and smoking habits, he will be more motivated to do so if he forms a group in which there are a lot of people working towards the same goal. People in the group who have overcome this problem also can advise the other people about how they have achieved their goal.
2. People who are trying to reduce their stress levels can get together with other people who are also trying to do the same. Group activities can be organized for these people and psychiatrists can join the meetings to give some tips on how to overcome extreme stress levels.
- 3 People can be encouraged to write comments and suggest tips to their friends in their area or community.
4. Providing a one-stop information source makes people to have an easy access to the trending healthy food habits, tips for leading a stress-free lives, instead of them having to surf through multiple sources on the internet.
5. The Best way to motivate people is to statistically show all the data on the dashboard with the latest trends of, for example how the smoking/alcoholic beverages lead to how many health problems, and by doing something as simple as exercise can affect the overall health.

Vision

The goals identified and described in remedial measures can be achieved by implementing the following enumerated functionalities:

- 1) The purpose of the project shall be to represent a population from a pre-determined geographical area in terms of the following aspects:
 - a) Exercising patterns,
 - b) Smoking Frequency,
 - c) Alcohol consumption, and,
 - d) Dietary Habits.

The information required to develop necessary conclusions/statistics can be gathered through any available public social media sites (such as Twitter, Facebook, Instagram, etc.), private firms (cellular companies) and through personal devices (such as Fitbit or a smart phone) application.

2) The project shall be responsible to make this data available through a traditional desktop based interface (at bare minimum) through a website.

3) The developed website shall be required to support statistical representation of the area in terms of the above defined/listed aspects.

4) The website shall provide the capability to support advertisements (in the longer run and if time and funding permits).

5) Comparing the above

a) Exercising patterns,

b) Smoking Frequency,

c) Alcohol consumption, and,

d) Dietary Habits.

For colder and warmer places

For colder places we took the following places New York, New Jersey, Virginia, Maryland, New England

For Warmer places we took California, Texas, Arizona, and New Mexico

The plan is to make this website available to officials and NGOs interested in the information. These officials shall be able to access the website and view the gathered information on how the above aspects are currently propagating the area of interest. Additionally, they can review the gathered information to realize how effective their strategies are through the historical information aspect presented at the website.

6) The website shall allow users to enter their workout routines to calculate an approximated representation in terms of exercising effort.

Functionality 6 we extended goal for this project. The focus of the project is to provide statistical representation for government officials.

In this document, we will introduce the website to you and explain how to use it.

When you click into our website, you will see the following home page:

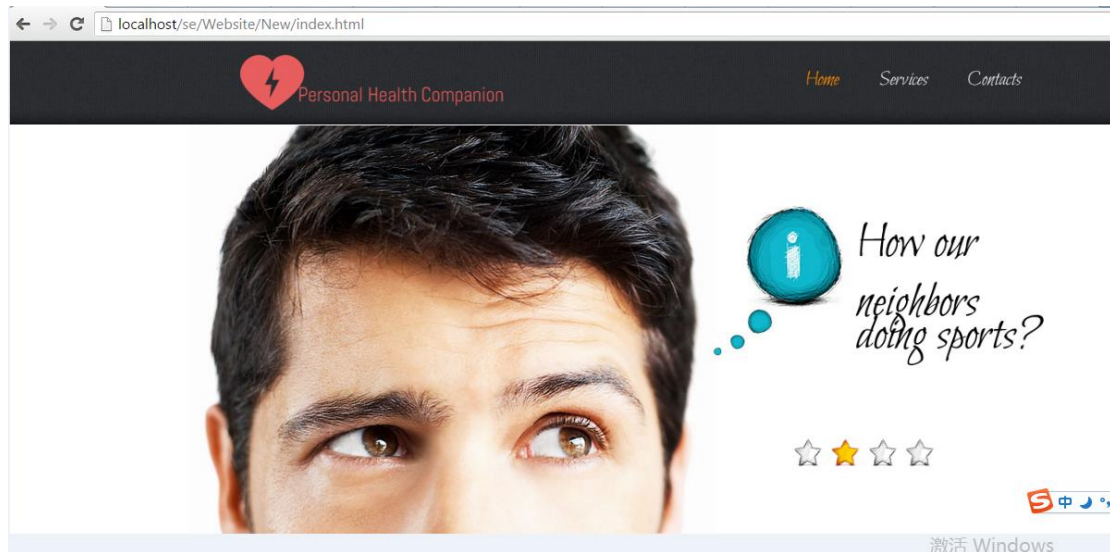


Figure 1: Home page

When user click into the service, which you can find in the navigation part:



Figure 2: Homepage navigation

User will see such a table for our features. And User can choose any of the features that they are interested in and click the button “Read More”, and it will jump into the corresponding html file.

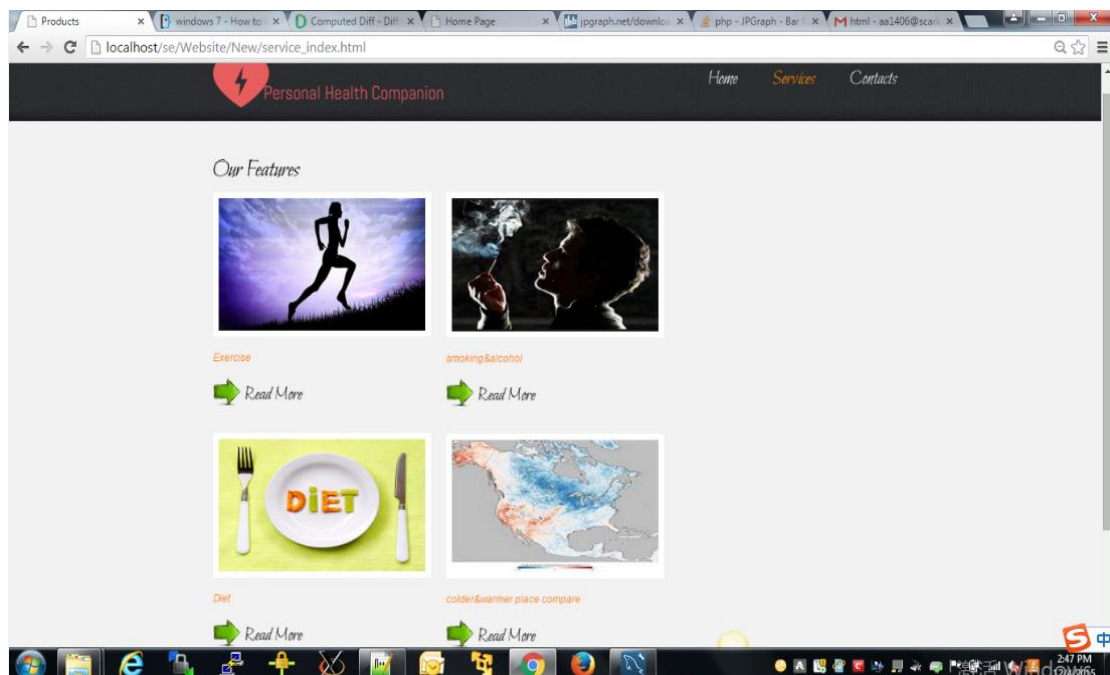


Figure 3: Features page

If I click “Exercise”, the website will go into the exercise.html, showing the weekly exercise trends.

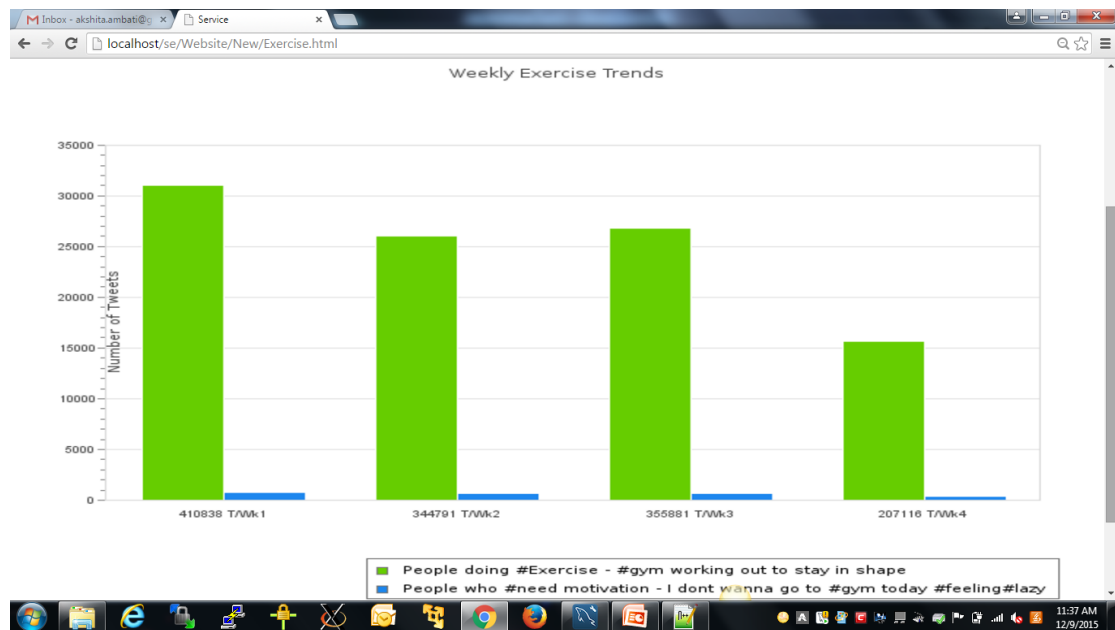


Figure 4: Weekly Trends for exercise

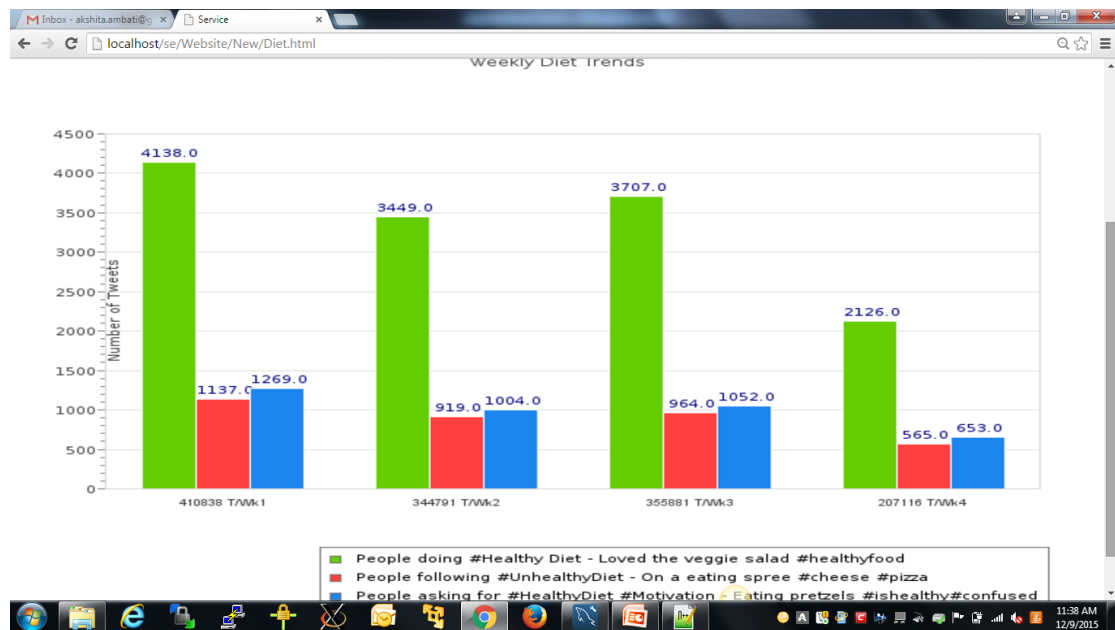


Figure 5: Weekly Trends for Diet

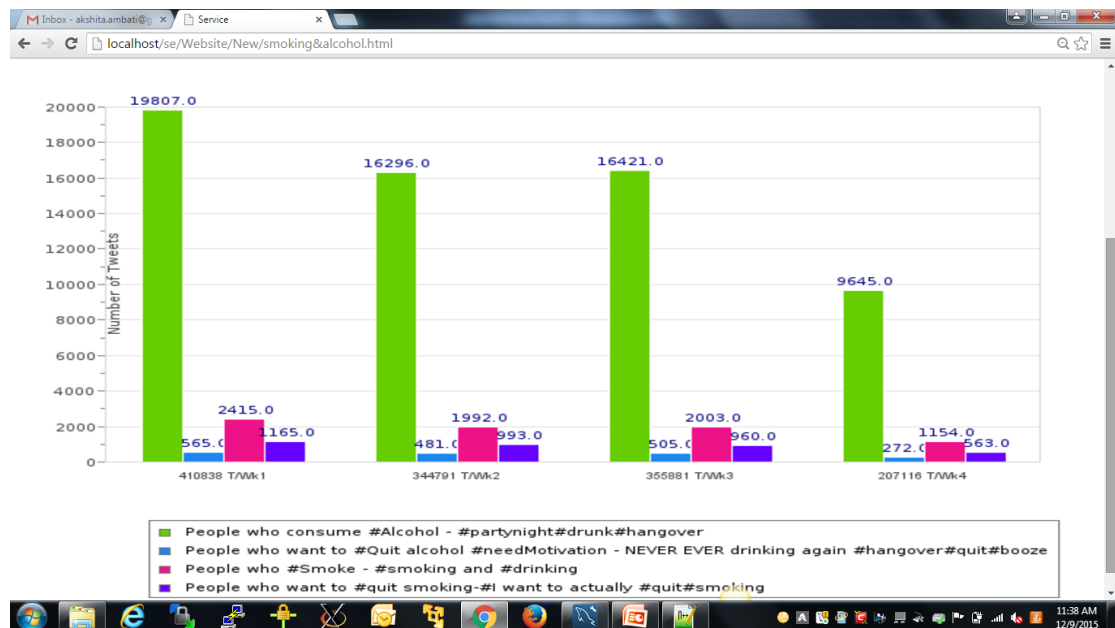


Figure 6: Weekly Trends for Smoking & Alcohol

As you can see, there is a navigation part too. And when you click into certain feature, It will show a drop-down list based on our different features.

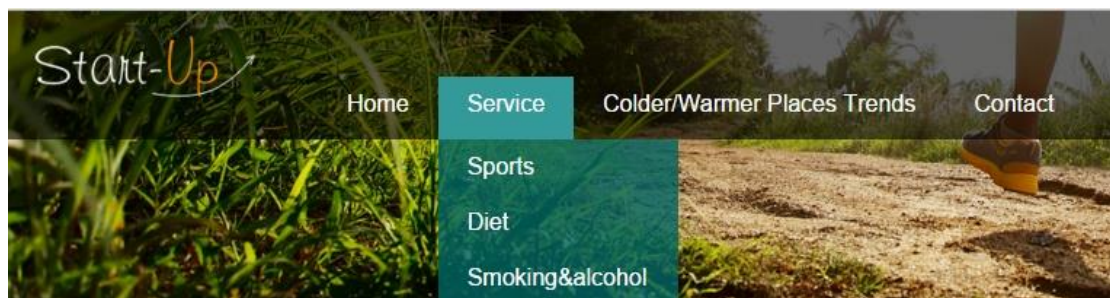


Figure 7: Navigation for features

When I want to know the difference trend between the warm and cold place, you can click any of the features as you like. For example, if we click "exercise", "diet", "Smoking & Alcohol" we have different trends for different types.

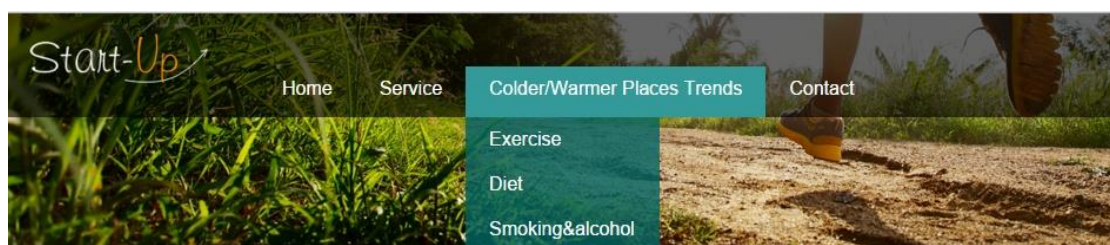


Figure 8: Navigation for features

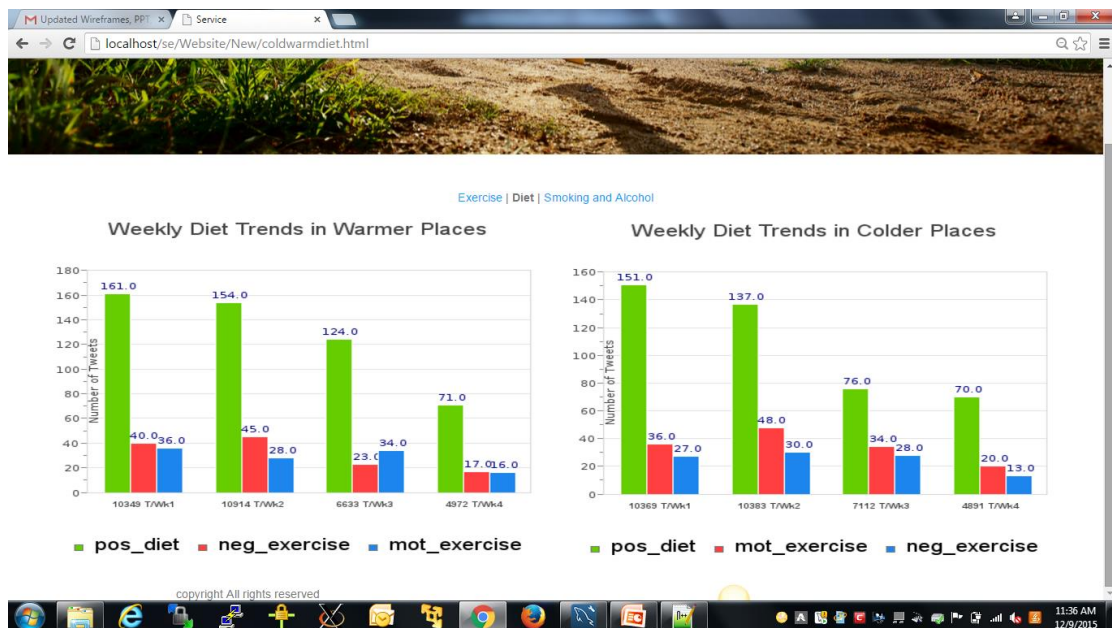


Figure 9: Weekly diet trends for colder and warmer places

Also, you can see different trend for weekly tweets for Smoking and Alcohol.

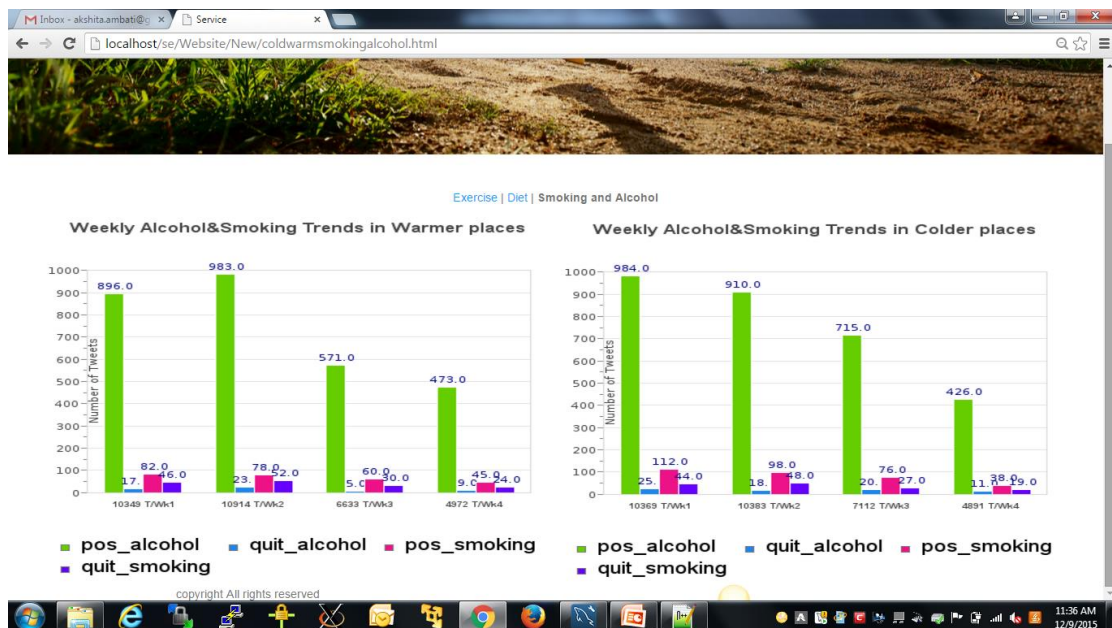


Figure 10: Weekly alcohol/smoking trends for colder and warmer places.



Figure 11: Weekly exercise trends in colder/warmer places

Users will enter this page after clicking “Contacts” and they can easily find the location of our team from the map.

How to Find Us

Science and Engineering Resource Center

If you have any question or you want get more professional advice, Please feel free to contact us!

Tips: Know more about sub-health.
 Suboptimal health can be defined as a state characterized by some disturbances in psychological behaviors or physical characteristics, or in some indices of medical examination, with no typical pathologic features, which exactly characterize common situation that most of people are facing.

Contact Form

Name:

Email:

Phone:

Message:

Presented by Rutgers students.
Software Engineering Group#3

Figure 12: Contact page

And they can also write down advises about our project on the contact form showed at the right of this website.