**MODULES:**

* Pre processing
* Calculating BMI and work out calculation
* Implementing K mine
* Mining utility item set
* Statistical representation

**MODULES DESCRIPTION:**

**Data Set Pre Processing.**

Pre process is the initial process, where data format will be processed for understandable data, which can be stored in the data base for further use. Now a day, people are going for this new technique to retrieve data from their databases. It is because the volume of their databases has become larger and larger very day. Normally, query tools are used to retrieve data from the database. But, if the database is larger, then it is difficult to retrieve data in an effective way using query tools. Sometimes data loss or data mismatch or data transaction failure may occur. Using data mining techniques, the relevant information can be extracted in an effective manner. It is applied only on specific records or historical data in the database and retrieves some interesting or hidden information from the database. So that pre processing make the data set more efficient to access and execute. The pre processed data will be current data set. This process contains manual input process.

**Calculating BMI and work out calculation**

This module contains two process BMI and Workout process calculation. Both process will works individual as a user interface model. Initially workout time, sleeping time, rest time and sitting will be fetched from the user. Using Fmod function the average work out time of the user will be calculated. The same case will be applied for BMI calculation. For BMI calculation Height and weight of the user will be taken as input and calculate the corresponding body mass index of the user.

**Implementing K mine process**

This module is the implementation of the core content. According to the K mining process "bottom up" approach has been used. Here all the data training will be done internally. Here various considerations will be done like calorie range, protein range, vitamin range and etc. These ranges will process with the user input data to create a suggestion on their health and insufficient detaiks.

**Mining Utility Item Set**

Mining high utility item sets from a transactional database refers to the discovery of item sets with high utility of various statistical information. A number of relevant approaches have been used in this module for more consideration in the analysis part. This module deals with both trained data and input data process. These conderations will be done for individual users. This modules works well on bulk information. This module calculates the daily input of the user, while getting the input the user’s meal detail will be taken as the input like breakfast lunch and dinner. The average result of daily conception will be calculated and result will be generated in three various types like Insuffient, Normal and excess. For insuffient coloums the relevant details will be

, they incur the problem of producing a large number of candidate item sets for high utility item sets. Such a large number of candidate item sets degrades the mining performance in terms of execution time and space requirement. The situation may become worse when the database contains lots of long transactions or long high utility item sets. In this paper, we propose an efficient algorithm, namely UP-Growth (Utility Pattern Growth), for mining high utility item sets with a set of techniques for pruning candidate item sets. The information of high utility item sets is maintained in a special data structure named UP-Tree (Utility Pattern Tree) such that the candidate item sets can be generated efficiently with only two scans of the database. The performance of UP-Growth was evaluated in comparison with the state-of-the-art algorithms on different types of datasets. The experimental results show that UP-Growth not only reduces the number of candidates effectively but also outperforms other algorithms substantially in terms of execution time, especially when the database contains lots of long transaction

**Statistical Representation**

Statistics is a special subject that deals with large (usually) numerical data. The statistical data can be represented graphically. In fact, the graphical representation of statistical data is an essential step during statistical analysis.  This is the representation of data by using graphical symbols such as lines, bars, pie slices, dots etc. A graph does represent a numerical data in the form of a qualitative structure and provides important information. A bar graph is a very frequently used graph in statistics as well as in media. A bar graph is a type of graph which contains rectangles or rectangular bars. The lengths of these bars should be proportional to the numerical values represented by them. In bar graph, the bars may be plotted either horizontally or vertically. But a vertical bar graph (also known as column bar graph) is used more than a horizontal one. The rectangular bars are separated by some distance in order to distinguish them from one another. The bar graph shows comparison among the given categories. Mostly, horizontal axis of the graph represents specific categories and vertical axis shows the discrete numerical values.