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SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE (SITRC) NASHIK -422213

SAVITRIBAI PHULE PUNE UNIVERSITY

LP-2 MINI PROJECT REPORT ON

BMI CATALOG SYSTEM

SUBMITTED TOWARDS THE
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF

BACHELOR OF COMPUTER ENGINEERING

BY

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DEPARTMENT OF COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the Project Entitled

BMI CATALOG SYSTEM

Submitted by

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3. SATYAM CHAUDHARI

is a bonafide work carried out by Students under the supervision of Prof. Dr. Vivek Waghmare and it is submitted towards the partial fulfillment of the requirement of Bachelor of Engineering (Computer Engineering).

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PROJECT APPROVAL SHEET

A Project Title:

BMI Catalog System

Is successfully completed by

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At

DEPARTMENT OF COMPUTER ENGINEERING

Sandip Institute of Technology and Research Centre

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE ACADEMIC YEAR 2019-2020

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Contents:-

Abstract

The BMI Catalog is a software application which avoids more manual hours that need to spend in personally calculate and find the BMI for a particular person at a single click. Body mass index is a familiar term for those who are weight conscious. It is the term that let user know about the overall body composition in terms of fat. The available body mass index calculators whether online or on Play Store do not provide Malaysian meal suggestions. Hence, this paper proposes an application for body mass index calculator . The objectives of the study are to design and develop BMI Calculator application for the purpose of calculating body mass index .

Problem Statement:-

Now a days many people are not that healthy as per health standards . In todays busy life they are not able to focus on their weight, this could put them at high risk . And maintaining the BMI balance also difficult to them .

Hence we proposed this project so the user can keep his previous information while following diet and can determine whether hi is reaching to health goal or not.

So we made **BMI Catalog System** with backend as MySQL Tasks

Introduction:-

- In todays world heath is a major issue and every person is curious about their health and want to keep track of their weight and BMI.
- So We Proposed this system that help person to calculate their BMI and save it for tracking their progress.
- The user can maintain his BMI and can check the record as per his need .
- BMI Catalog System keep all the record related to that person like persons Name , Height ,Weight and BMI

Introduction about MySQL:-

MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various web-based software applications. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. We use this MySQL for connecting database with Python program. so we can easily perform the operation like insert , delete and show upon the MySQL database.

Motivation:-

1)The mission of the BMI catalog system project is to create an integrated information technology environment for all types of health conscious people .
2)to overcome existing problems occurring in maintenance of health related information like weight and BMI

Significance of work done

The proposed system is intended to make life easy. The main purpose of the project is to build an integrated database system to facilitate easy access of records of person . The BMI Catalog System will allow the add, delete and list of details of user. It will also enhance efficient management of record.

To identify the problems involved in the implementation of the current system; To develop a catalog system that allows the user to list and delete the information; To develop the prototype of an integrated BMI Catalog System that can be implemented.

Related Work:-

Recently, there has been so much research in the development of Health tracking system ,some of which include Internet systems like web-base system, mobile based system, some of the others computerized database system.

The benefits of like these systems eliminate many paper works involves in it, removing the opportunity of losing users data.

Following are some related websites:-

1)https://www.tutorialspoint.com/python/python_gui_programming.htm
2)https://dev.mysql.com/doc/connector-python/en/connector-python-introduction.html

Methodology:-

The main methodology involves feasibility study, data collection, system analysis and design, developing and implementing BMI Catalog System.

The data considered necessary to build the system were` collected and analyzed. The methodology is very important to ensure that the new system would give benefits to the user.In our system we also add following points:-

1) MySQL Python Connector:-

To access the MySQL.connector database from Python, you need a database driver. MySQL.connector/Python is a standardized database driver provided by MySQL.

MySQL.connector/Python supports almost all features provided by MySQL version 5.7. It allows you to convert the parameters value between Python and MySQL data types e.g., Python datetime and MySQL DATETIME.

MySQL.connector/Python is designed specifically to MySQL. It supports all MySQL extensions to standard SQL such as LIMIT clause.

MySQL.connector/Python allows you to compress the data stream between Python and MySQL.connector database server using protocol compression. It supports connections using TCP/IP socket and secure TCP/IP connection using SSL.

2) Tkinter:-

Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit.

Creating a GUI application using Tkinter is an easy task. All you need to do is perform the following steps

i)Import the Tkinter module.
ii)Create the GUI application main window.
iii)Add one or more of the above-mentioned widgets to the GUI application.
iv)Enter the main event loop to take action against each event triggered by the user.

3) MySQL Database

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons –

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table.

Flowchart:-

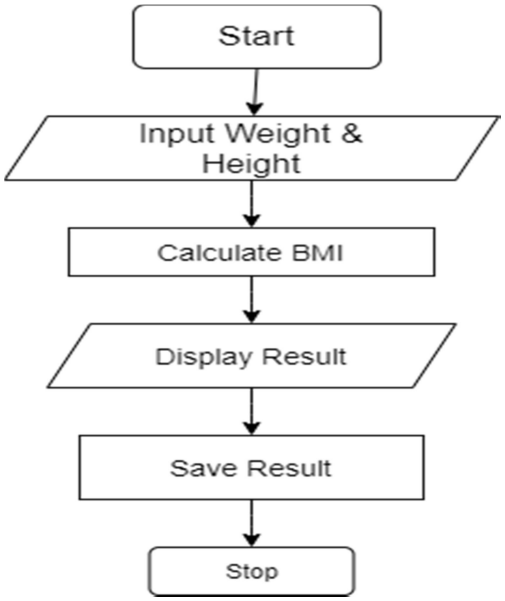

Fig:Flowchart

Result:-

A GUI based BMI Catalog System intended to track and store users records is the outcome of the project after a critical analysis, design, building and testing of the system.

Evaluation was properly done to ensure that the system meet all the requirements and specifications.

A stringent plan to monitor the implementation of the new system is laid-out and the entire project documented. Finally, the new system is deployed.

Output:-

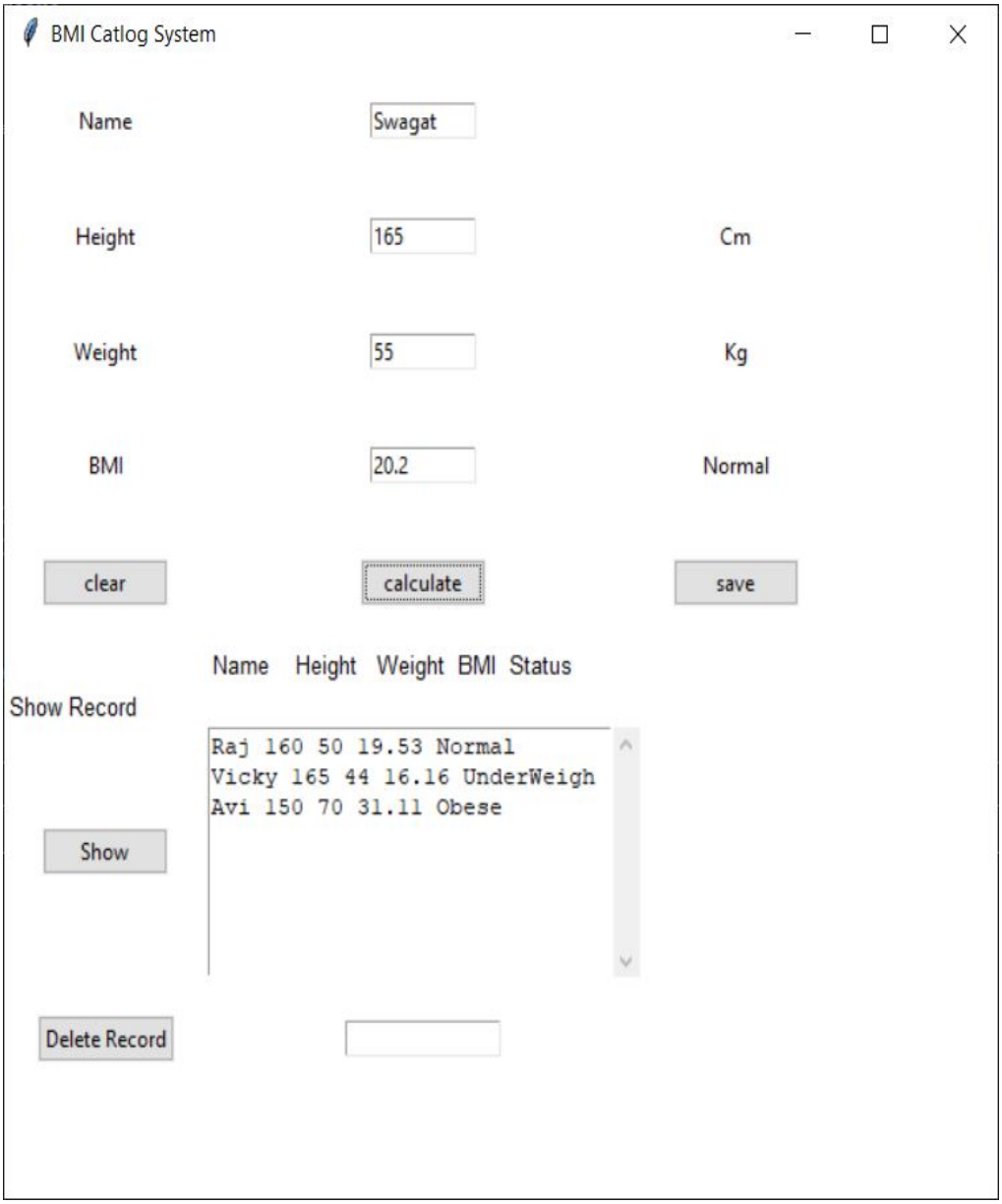

Fig:GUI

Conclusion:-

The system is free of errors and very efficient and less time consuming due to the care taken to develop it. Helpful to perform paperless work and manage all data Provide easy,accurate and faster data access and give quick response The records of current and previous can be available in prompt and an immediate.

In this BMI calculator will give a lot of benefits which consists quick relation between weight and height for peoples . This system is simple and it would make their works to become easier. The system also saves cost and time. The purpose of it to make sure that the student can maintain their health and live in healthy life. Other than that, Basal Metabolic Rate (BMR) allow student to measure the energy the student spend their energy during rest. During student's leisure time, it is important for student to calculate their BMR so that they know how much calories that have burned out to estimate their activities. Definitely, students do not have much time to do some exercise. Thus, with BMR calculator, it is easier for students to plan their activities to prevent from overtired. We really hope that this BMI calculator that we have created will bring great success to our company. We had given our best and great effort to create this BMI calculator, so that it would be the best tool that any one could ever have.

Future Work:-

- This project will need some future improvement in order to make more advanced and increase its reliability and effectiveness.
- For our future work, we want to create a file: where all the data can be stored. The data that has been mentioned earlier is regarding the record of persons BMI especially. By using only identity card index, we hope that we could create so that people can think that health is very important in one's . The creation of this data will be using Microsoft Access where all the data can be observed and printed. With this simple creation the Medical Department can have all the data of the users.
- Other than that, the data will be a big help for the Medical Department staffs to monitor the peoples daily life. They will be able to advise them on what they should do to get an ideal body as well as their daily calories requirement.
- As many know, there are a lot of health calculators. With this, we could create a perfect health calculator. We hope that we can add a lot more calculations in our BMI calculator. This will totally be a big help to the health curious people.

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