A Report on

"BMI Calculator

Course Title: App Development Sessional

Course Code: CSE 252

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CERTIFICATE

This is certify that Md Masum Rana, Al Mahmud Siam and Hasi Rani Roy submit this project work entitled "BMI Calculator" is carried out in partial fulfillment for the award of the degree of bachelor of science (engineering) in computer science and engineering. This is a record of their own work carried out by them under of supervision and guidance.

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Supervisor

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Associate Professor

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Acknowledgment

We would like to express our thanks of gratitude to Masud Ibn Afjal, Lecturer, department of computer science and engineering who gave us a golden opportunity to do this project and also provided support in completing in our project. His heartiest & kind Cooperation during our project work makes the dream real & we succeed to complete our project.

While we were preparing this project file, various information that we found helped us in chapter of profile adding and we are glad that we were able to complete this project and understand many things. Through preparation of BMI Calculator project was an immense learning experience and we inculcated many personal qualities during this process like responsibility, punctuality, confidence and others.

We would like to thank to our supervisor who supported us all the time, cleared our doubts and to our parents who also played a big role in finalization of our project file. We are taking this opportunity to acknowledge their support and we wish that they keep supporting us like this in the future.

A project is a bridge between theoretical and practical learning and with this thinking we worked on the project and made it successful due to timely support and efforts of all who helped us.

Once again, we would like to thank our classmates and friends also for their encouragement and help in designing and making our project creative. We are in debt of all these. Only because of them we were able to create our project and make it good and enjoyable experience.

Abstract

Overweight and obesity are significant public health issues in developed and developing countries, not only for adults but also increasingly for children. The issue of body weight as a risk factor for chronic diseases such as diabetes, heart disease, stroke and cancer has increased dramatically over the last decade in Malaysia. In our study, a system has been developed to calculate a person's BMI. In this study, we have developed the system using the java concept in the phase of Graphical user interface programming (GUI). The aims for this study are to learn and understand programming with Graphical User Interface (GUI). From this study, the outcomes from this learn more about how to construct object-oriented program using (GUI). The conclusion, system equipment need out achieve the objective the system development using Graphical user interface (GUI).

Table of contents --- Page No.

Chapter 1

Introduction

1. **INTRODUCTION:**

The overweight (Body mass index [BMI] for age and sex from the 85th percentile to the 95th percentile) and obesity (BMI for age and sex greater than or adequate to the 95th percentile) are related to the present and future health of youth also as their academic success. Youth classified as overweight or obese are more likely to be diagnosed with prediabetes (impaired fasting glucose or impaired glucose tolerance) and have more cardio metabolic risk factors than normal weight youth. Various methods for assessing body composition, used for children and adolescents in research settings (for example, hydrodensitometry, plethysmography of air displacement, isotope dilution, two-energy X-ray absorptiometry). The use of these methods in a community setting is limited. As a result, measuring height and weight to calculate body mass index is recommended for overweight/obese people in screening for the younger generation. (BMI? body weight (kg) / height (square meters).

Android is used in over 190 countries and powers hundreds of millions of mobile devices. It has the largest installed base of any mobile platform and is rapidly expanding—every day, a million new Android users turn on their devices for the first time and begin searching for apps, games, and other digital content. Android provides you with a world-class platform for developing apps and games for Android users around the world, as well as an open marketplace for quickly distributing them. This Android application has handy tools for arithmetic, scientific, and converting calculations. It would be particularly useful for students, as they account for the bulk of smartphone users in today's world, and they require tools to help them with the lengthy calculations they must perform in their studies.

Chapter 2

Existing System

2.1 EXISTING SYSTEM:

The existing system is very time-consuming and complex to calculate. Calculators are small electrical devices that can perform basic and advanced calculations in a fraction of a second. The concept of a unit is created using a Franchise, which was first used in 2000 BC; after a number of inventions and mechanical counting machines were developed. The scientific calculators were created to assist in performing scientific calculations. However, in the 21th century, when people started using with personal computers, tablets, mobile phones and other electronic devices, so what to wear such as calculators?

2.2 DISADVANTAGES:

The existing system has the following disadvantages:
- It takes a long time.
- A great deal of time and effort is squandered.
- There is a waste of pages.
- It's difficult to keep outdated records up to date.
- Queries are difficult to implement .

Chapter 3

Proposed System

3.1 PROPOSED SYSTEM:

      The BMI Calculator Application is a software programme that eliminates the need for more manual hours to calculate and locate the BMI for a specific person with a single click. This application incorporates both American and Indian standards. This application provides all of the information in both standards that is not available in any other application. BMI is calculated the same way for both adults and children. The calculation is based on the following formulas:

Measurement Units	Formula and Calculation
Kilograms and meters (or centimetres)	**Formula:** weight (kg) / [height (m)]^2 With the metric system, the formula for BMI is weight in kilograms divided by height in meters squared. Because height is commonly measured in centimetres, divide height in centimetres by 100 to obtain height in meters. **Example:** Weight = 68 kg, Height = 165 cm (1.65 m) **Calculation:** $68 \div (1.65)^2 = 24.98$
Pounds and inches	**Formula:** weight (lb) / [height (in)]2 x 703 Calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703. **Example:** Weight = 150 lbs, Height = 5'5″ (65″) **Calculation:** [150 ÷ (65)2] x 703 = 24.96

Table 1. BMI calculation formula

BMI table for adults:

This is the World Health Organization's (WHO) recommended body weight based on BMI values for adults. It is used for both men and women, age 18 or older.

Category	BMI range - kg/m2
Severe Thinness	< 16
Moderate Thinness	16 - 17
Mild Thinness	17 – 18.5
Normal	18.5 - 25
Overweight	25 - 30
Obese Class I	30 - 35
Obese Class I	35- 40
Obese Class III	>40

Table 2. BMI table for adults

3.2 SCOPE OF THE SYSTEM:

The major goal is to keep one's health in good shape. The BMI App provides us with all of the necessary information, such as health recommendations and advice on what to eat and what to avoid. When we enter our height and weight, we are given all relevant information, such as if we are overweight or underweight.

Chapter 4

Result and discussion

4.1 Introduction:

By analyzing the characteristics, qualities and success rate, it is prominent that the BMI Calculator will services any people.

4.2 Output:

CV Manager output is shown with the help of snapshots-
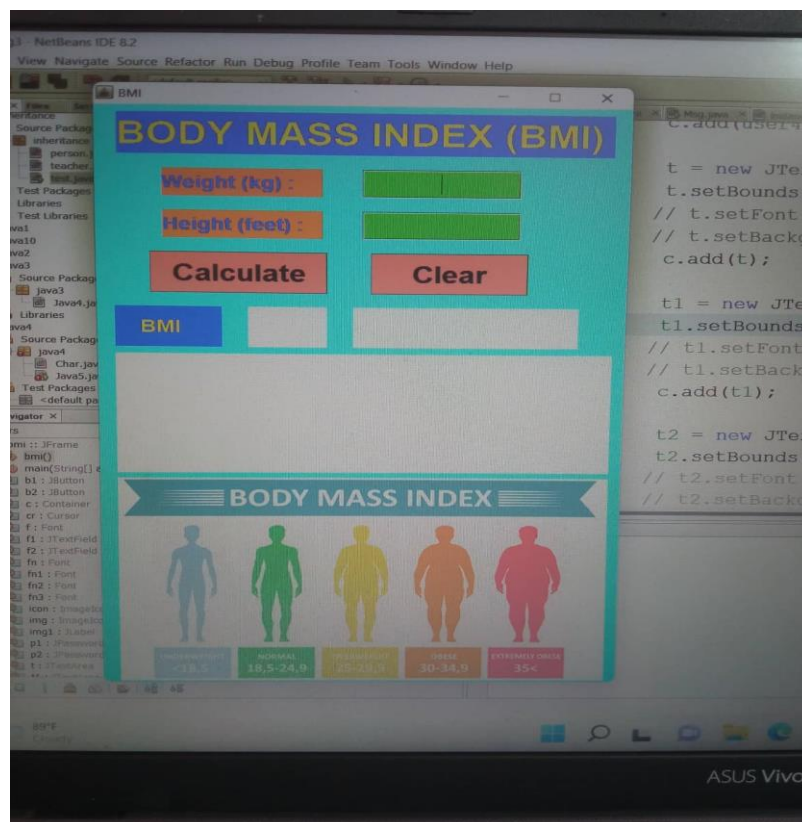
i)   **Main page:**

Fig. 1 Screenshot 1.

When you want to calculate BMI then you have to click on the application and open it. After opening the application then you enter weight and height screen, enter it accordingly and press calculate BMI button. (Refer fig. 1)
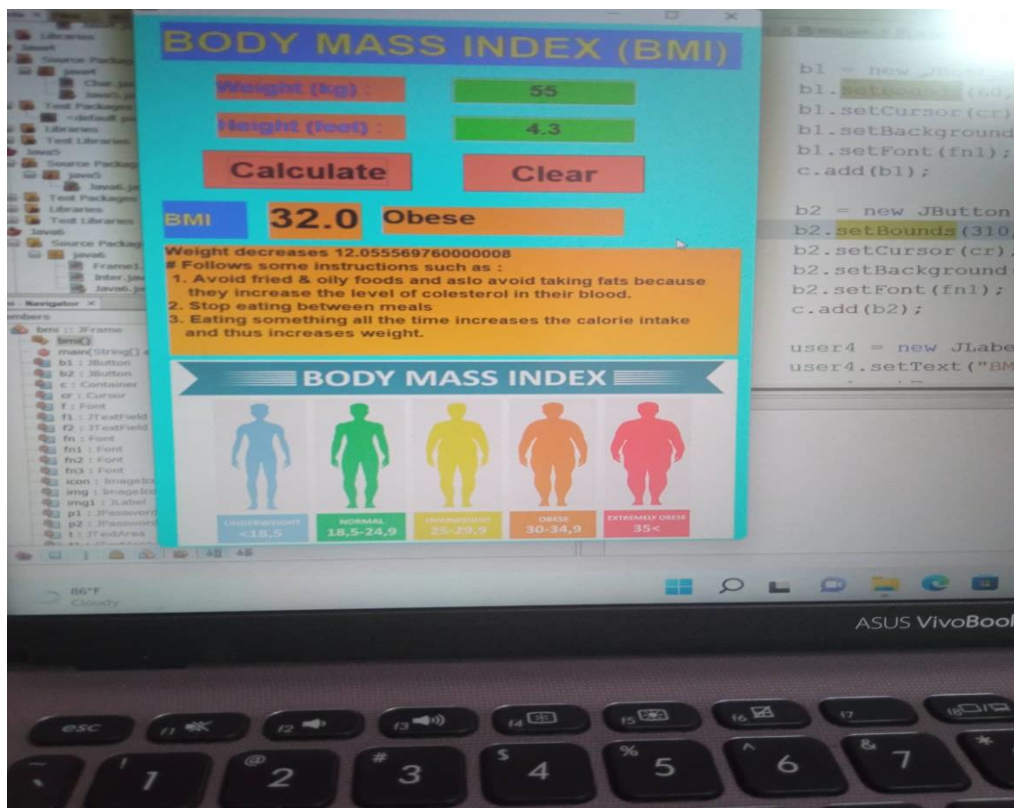
ii)   Input & Output:

Fig. 2 Screenshot 2.

In above Fig. 2 it show that when we enter weight and height, it will calculate respective BMI and it show if that person is obese.
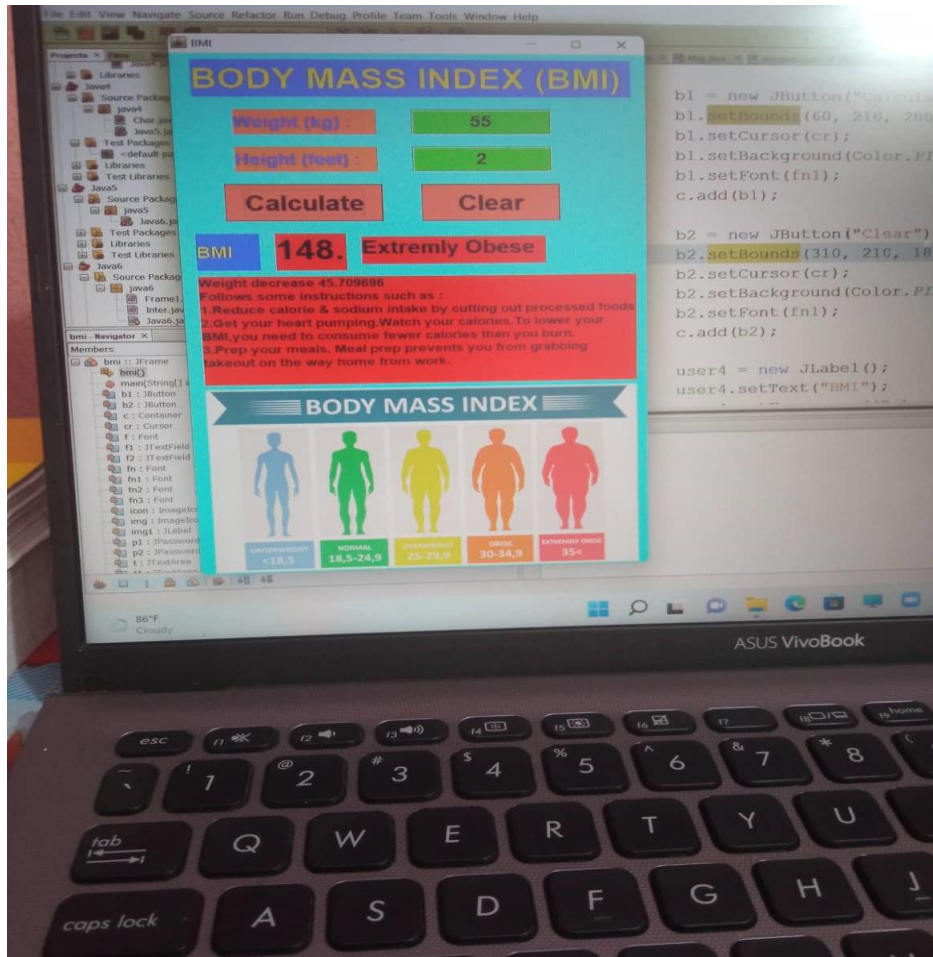
Fig. 1 Screenshot 3.

In above Fig. 3 it show that when we enter weight and height, it will calculate respective BMI and it show if that person is extremely obese.
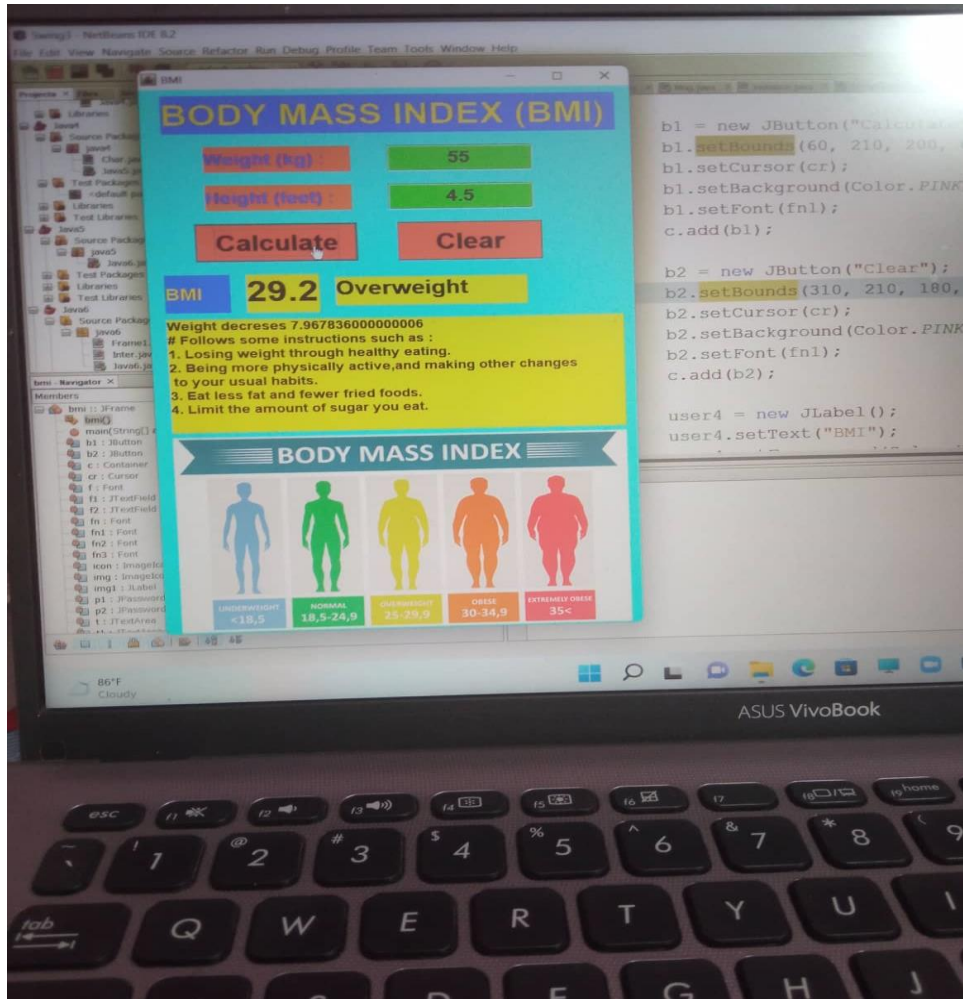
Fig. 1 Screenshot 4.

In above Fig. 4 it show that when we enter weight and height, it will calculate respective BMI and it show if that person is overweight.

Chapter 5

Conclusion

5.1 CONCLUSION:

The package was created in such a way that future changes are simple to implement. The following conclusions can be drawn from the project's progress. The efficiency of the entire system is improved by automating it. It has a user-friendly graphical user interface that outperforms the current system. It grants authorised users appropriate access based on their permissions. It effectively solves the problem of time complexity. It has never been easier to keep information up to date. The most notable features are system security, data security, and dependability. If necessary, the System has enough flexibility to be modified in the future.

6.Reference:

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