**BMI Calculator**

**Abstract:**

BMI is a measure of relative weight based on an individual's mass and height. Nowadays the BMI is commonly used to classify underweight, overweight and obesity. Moreover, it is adopted by the British government in an effort to promote healthy eating. BMI is not an appropriate indicator for assessing weight in athletes with great sports experience in sports which require physical strength. It is very likely that in child athletes with greater muscle mass, BMI is again not an adequate indicator (Kolimechkov, 2013). In these cases, more anthropometric data (% fat, skin folds) should be taken, as well as strength indicators (data for muscle hypertrophy and dynamometers). Body-mass index (BMI) is a measurement model health-care professionals use to determine whether a person is overweight, and if so, by how much. To compute BMI, you need a person’s weight in kilograms and height in meters. The BMI is simply weight/ height2, converted to a unitless value. The **BMI** was invented by Belgian polymath Adolphe Quetelet in the 1800s, and consequently is sometimes known as the Quetelet index. The **BMI** is calculated by dividing your weight in kilograms (kg) by your height in metres squared (m2). It is expressed as kg/m2. The BMI Calculator App 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. This app gives us all the information in both the standards which is not given in existing app.The main scope is to maintain the health. The BMI App gives us all the information ie it gives suggestion for our health and tells us what should we eat and what to avoid. When we enter the height and weight we get all the information ie are we overweight or underweight etc.Then this project included some BMI related youtube links are added.Because users reference o f this links.

**Existing system:**

The existing system is somewhat time consuming and hard to calculate. Calculators are small, portable electronic devices used to perform simple as well as complex calculations in a fraction of second. The idea of a calculator came from Abacus used long back in 2000 BC; after that there we are various inventions and mechanical calculators came in use . Scientific calculators were made to solve the scientific calculations. But in the 21st century where people have started using laptops, tablets, smartphones etc.then why would they carry such calculators.So in this research paper I am introducing a web application known as the All in one calculator, where inall sorts of calculations from simple arithmetic calculations to long scientific calculations can be done in just aclick on the smartphone screen. The users of this application will have a tool to do all sorts of calculations withease.

**DISADVANTAGES:**

The following are the disadvantages of the existing system –

1.It is very time consuming

2. Lot of energy and effort is wasted.

3. Wastage of Pages.

4. Hard to maintain old records.

5. Queries are hard apply.

**PROPOSED SYSTEM :**

The BMI Calculator App is software applications which avoids more manual hours that need to spend in personally calculateand find the BMI for a particular person at a single click. This application keeps both the standard in it ie American standard and Indian standard too.This app gives us all the information in both the standards which is not given in existing app.then this application involvs only admin and general user.admin was already added category of bmi details like thin,normal,over weight and obesity and its range was added.then Diet plan was added this plan was included what meals are taken and what are the snacks are taken these informations are added only by admin.Then another important thing was added that thing was if suppose one user was wanted diet planning items .Then the user was purchased these items in the same web application.then this project was added BMI details are displayed on a single table or graph it includes description of bmi,and separate details will be provided for men and women.

**Advantages:**

1. Safe and secure

2.All are computerized work.

3.Time save

4.Then this project was used to calculate BMI,and diet plan items are purchased and related youtube links were contain and top 10 doctors for BMI specialists details were included.so this project was very useful to the users.

**Modules:**

Admin modules:

**BMI calculator:**

This module includes BMI category details of BMI calculator like thin,normal,over weight,obesity,and ragne of each category was added only by admin.Because of its security purpose.Then he was added diet plans like what type of meals and snacks are taken and what time taken these details are added.then user wanted items are purchased option was added by admin.Then some BMI related youtube links are added only by admin.then nutritionist doctors details are added.Because users reference and comfordability purpose.doctor details are only maintained by admin then these details are stored in the database because of its security purpose.

**Body fat calculator:**

This module includes age,gender,height,weight,waist and hip details are added and its range was only ccm and kg. Then he was added diet plans like what type of meals and snacks are taken and what time taken these details are added.then user wanted items are purchased option was added by admin.then these details are storedin the database. Then some BMI related youtube links are added only by admin.then body fat doctors details are added.Because users reference and comfordability purpose.top 10 doctors for BMI specialist details are only maintained by admin then these details are stored in the database because of its security purpose

**Caloric calculators:**

This module includes user’s age was (18-80),gender,height,weight,activity level means that person have regular exercise or not that person take exercise for 1 to 3 times in a week or regular exercise was taken details were included.Then calculated caloric level of the user then given some instructions to the user.

**User Modules:**

**User registration and login:**

User was registered and login to the system with unique user name and password.Registration details like user name,phone no,email id,password.

**View BMI details**:

This module user was viewed our BMI details,diet plan details,related youtube links were viewed and BMI related top 10 doctor details were also viewed.

**View Body fat details:**

This module user was viewed our body fat details,diet plan details,related youtube links were viewed and body fat related top 10 doctor details were also viewed.

**View Caloric details:**

This module user was viewed our caloric details,diet plan details,related youtube links were viewed and caloric related top 10 doctor details were also viewed.