**Feasibility Study**

1.What –Main aim of BMI calculator is to calculate the Body Mass Index in order to rate the fitness of an individual.

2.Why – In earlier days, it was quite tough to say whether a person was healthy or not. Hence in order to resolve that issue Adolphe Quetelet came up with BMI.

3.Who –All the users possible can get benefit out of it. They can track their health status accordingly.

4.When –This project mostly requires no post testing procedures. In the initial phase itself developer has to ensure pre testing.

5.How –Developer will need few data that needs to be entered by the user like height, weight, D.O.B etc. And the program will automatically calculate the BMI and will tell whether person is healthy or not. Along with that It will also suggest , how much more or less calories to be consumed by an individual in order to be fit.

**SWOT Analysis**

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| STRENGTHS | WEAKNESS | OPPURTUNITY | THREATS |
| It helps in measuring the fitness of an individual. | It won’t define the source of weight whether it is from lean tissue or fat. | An individual can take certain steps to prevent health risks caused by obesity. | High BMI can lead to serious health  Problems in future. |
| By calculating BMI for large number of individuals that can be used to examine their fitness. | Sometimes, an average weight individual can also fall in obesity category. | Hospitals can use it as  a service provider and advise patients how to get saved from it. | Can mislead an individual because it won’t define the type of fat. |
| It helps in determining the dietary of an individual that results in unhealthy body. | BMI does not distinguish between the type of fat one carries whether it is subcutaneous or visceral fat. |  |  |

**Requirements**

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| High Level Requirements | Low Level Requirements |
| BMI can help determine a person that weather it is unhealthy or healthy weight.  These are the data on which BMI is categorised:  Below 18.5 is underweight.  Between 18.5 and 24.9 is Normal  Between 25 and 29.9 is an overweight BMI.  The formula for calculating the BMI, weight is divided by the square of the height. Here the weight is in kilograms and height is in meters.  BMI=kg/(m)^2 | In this project we use GitHub repository to store the project and Visual Studio code for debugging the code.  Some other tools are used for making the UML diagrams. |
| To fulfil the requirement of finding the age by using the date of birth, this age calculator is made. | The CPP programming language is used in this entire project. |
| Basal Metabolic Rate is the number of calories required to keep your body functioning at rest. BMR is also known as your body’s metabolism; therefore any increase to your metabolic weight such as exercise will increase your BMR.  BMR for Men: 66.47 + (13.75 \* weight [kg]) + (5.003 \* height [cm]) − (6.755 \* age [years])  BMR for Women: 655.1 + (9.563 \* weight [kg]) + (1.85 \* height[cm]) − (4.676 \* age [years]) | In this project we use GitHub repository to store the project and Visual Studio code for debugging the code.  Some other tools are used for making the UML diagrams. |