



# SOFTWARE ENGINEERING PROJECT (1) SUBMITTED BY:

(2) Mariam Moustafa Moustafa 15P6022

Mennatullah Mohammed Mohammed kame15P6009

Yehia Abdelhady 156036

**Project Domain:** Health care system.

**Problem definition:** The customer needs a system to check his health and inform him about his health status and nutrition needs. The system guides him about what he should do if there was a problem.

**Functional Requirements:**

- (1) Measuring weight and height.
- (2) Calculating BMI ( Body Mass Index)
- (3) Measuring blood pressure.
- (4) Categorizing the user according to his body weight (normal, underweight, overweight, obese).
- (5) Calculating body fat percentage.
- (6) Providing calories intake per day.
- (7) Providing suggested diet.
- (8) Print output info in a receipt.

**Non-functional Requirements:**

- (1) Response time: data processing and calculations should not take more than 3 seconds.

- (2) Reliability: the result of the calculations of BMI and body fat percentage should be accurate and reliable.
- (3) Efficiency: the system should be efficient.
- (4) Ease of use: the system should have a user-friendly interface.

### **Suggested Risks:**

1. Technology Risks: errors in the calculations and measurements may occur.
2. Tools Risks: -The code generated by CASE tools is inefficient. - CASE tools cannot be integrated.
3. Estimation Risks: The rate of defect repair is underestimated.

### **Inputs:**

- Patient age
- Patient gender

### **Outputs:**

- Suggested diet
- Receipt of patient info