Creating BMI index widget using Qt

This article demonstrates how to create a BMI index widget using Qt. BMI Index can be use to check your health and if you are a over weight or under weight. This article is intended to teach a beginner to code a basic application in Qt. Concepts like Signal, slots and data handling are used in this application.

Header File

```
#ifndef BMI_H
#define BMI_H

#include <QMainWindow>

namespace Ui {
  class BMI;
}

class BMI : public QMainWindow {
  Q_OBJECT
public:
  BMI(QWidget *parent = 0);
  ~BMI();

protected:
  void changeEvent(QEvent *e);

private:
  Ui::BMI *ui;

private slots:
  void on_lineEdit_2_returnPressed();
  void on_lineEdit_returnPressed();
  void on_actionCalculate_triggered();
  void on_actionExit_triggered();
};

#endif // BMI_H
```

Source file

```
#include "QMessageBox"
#include "bmi.h"
#include "ui_bmi.h"

  BMI::BMI(QWidget *parent) :
    QMainWindow(parent),
    ui(new Ui::BMI)
  {
    ui->setupUi(this);
    QValidator *validator = new QIntValidator(1, 1000, this);
     // the edit lineedit will only accept integers between 1 and 1000
    ui->lineEdit->setValidator(validator);
    ui->lineEdit_2->setValidator(validator);

  }
   BMI::~BMI()
  {
    delete ui;
  }
  void BMI::changeEvent(QEvent *e)
  {
    QMainWindow::changeEvent(e);
    switch (e->type()) {
    case QEvent::LanguageChange:
        ui->retranslateUi(this);
        break;
    default:
        break;
    }
  }
  void BMI::on_actionExit_triggered()
  {
    BMI::close();
  }
  void BMI::on_actionCalculate_triggered()
  {
     if(ui->lineEdit->text().compare("")!=0 && ui->lineEdit_2->text().compare("")!=0)
     {
        QString height = ui->lineEdit->text();
        QString weight = ui->lineEdit_2->text();
        int h = height.toInt();
        int w = weight.toInt();
        int index;
        index = (10000 * w) / (h * h);
        ui->lcdNumber->display(index);
     }
     else
     {
        QMessageBox msgBox;
        msgBox.setText("Please enter height & weight");
        msgBox.exec();
     }
  }

  void BMI::on_lineEdit_returnPressed()
  {
    BMI::on_actionCalculate_triggered();
  }
  void BMI::on_lineEdit_2_returnPressed()
  {
```


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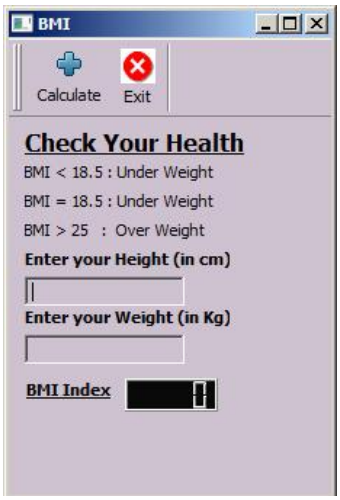
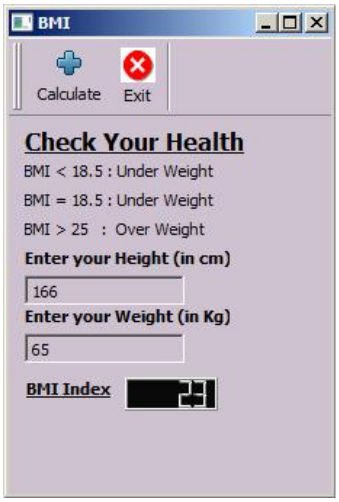
```
    BMI::on_actionCalculate_triggered();
}
```

Output

If your BMindex is less than 18.5 you are considered to be underweight. If it is a greater than 25 you are over weight. And in between this two you are having a normal weight.





Reference

BMI widget using web runtime

Source Code

The full source code can be downloaded from here : Media:BMICalculator.zip

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