

Starting point for the assignment

Please carry out the following steps as a starting point for the assignment.

1. Create a new Qt Widgets application
2. Copy the header and code files from *CubeExample* **excluding the main.cpp file**, into the project directory.
3. Use 'Add Existing Files' to add these files to the Qt Widgets application.
4. Add the glew library and set the project folder as normal.
5. Copy the shader directory into the project directory as well as the glew32.dll file (from the bin directory of glew)
6. Go to the file `mainwindow.h` and add the following method in the public section

```
void setView(MainView* view);
```

Add the following data member in the private section

```
MainView* view;
```

#include the mainview header at the top

```
#include "mainview.h"
```

7. Go to `Mainwindow.cpp` and implement the method as follows;

```
void MainWindow::setView(MainView* view)
{
    this->view = view;
}
```

8. Replace the implementation of `main.cpp`:

```
#include "mainwindow.h"
#include <QApplication>
int main(int argc, char *argv[])
{
    QApplication a(argc, argv);
    MainWindow w;
    w.show();

    return a.exec();
}
```

with

```

#include      "mainwindow.h"
#include      <QApplication>
#include      <QWidget>
#include      <QMainWindow>
#include      <QHBoxLayout>
#include      <QVBoxLayout>
#include      <QAction>
#include      <QMenu>
#include      <QMenuBar>
#include      <QGLFormat>

int main(int argc, char *argv[])
{
    QApplication app(argc, argv);
    MainWindow *window = new MainWindow();

    // The main window
    QWidget* win = new QWidget(window);

    // The GL view
    QGLFormat format;
    format.setVersion(4,0);
    format.setProfile(QGLFormat::CoreProfile);
    MainView *glView = new MainView(format, window);
    window->setView(glView);

    QVBoxLayout *mainLayout = new QVBoxLayout(win);
    mainLayout->addWidget(glView);

    window->setCentralWidget(win);

    window->show();

    return app.exec();
}

```

9. Build and run. You should find you get the image of the cube on the screen.

You are now at a starting point for carrying out the assignment. You have the `mainwindow.ui` form with which you can create the menu items/dialogs etc. and provide the appropriate response functions in the `mainwindow.cpp` file.

