Comp150/170 - Grade Point Average

Points: 25

Write a C++ program which calculates grade point average according to the method described below. Your program should validate input data when possible. i.e. You should not accept invalid data such as a grade of E or credit hours greater than 6. You should add appropriate user-friendly error messages for invalid data. Make certain that the program is not case-sensitive, regarding the input data. Your program dialogue should look like this: (Follow the sample as closely as possible, not counting the asterisks!)

```
****************************************************************
Number of courses? 3

For course 1:
Grade? A
Hours? 4

For course 2:
Grade? C
Hours? 2

For course 3:
Grade? B
Hours? 3

GPA is 3.22


****************************************************************
```

GPA is given by   TOTAL QUALITY POINT / TOTAL CREDIT HOURS

where QUALITY POINTS are given by GRADE MULTIPLIER * COURSE CREDIT HOURS

where the GRADE MULTIPLIERS are 4 for A, 3 for B, 2 for C, 1 for D, 0 for F

```
****************************************************************
```

Turn in GPA.CPP via Easel. Also turn in the flowchart and a printed listing of your program in class.