CST 238

Puzzle 3 (Magic 8 Ball)

You have been studying abroad in the middle east for a doctorate in Computer Science. Your doctoral advisors, Dr. Chazya and Dr. Ally Rodriguez, want you to do community service…but you’re reluctant because you don’t do things for free.

Although your advisors are brilliant (i.e. Ally was recently nominated for a Nobel Prize at the age of 25 years (!) old), they struggle with budgeting money and caved in to pay you a $21,000 PhD stipend to teach the locals (Turkish girls and boys) Qt for 7 weeks. This works out well for you because you and your friends are about to go on a giant shopping spree in Istanbul come June.

The locals are obsessed with magic, so Chazya suggested you write a magic 8 ball program to introduce them what a program can do. She was nice enough to provide some starter code for you.

Cliff Notes:

1. In main.cpp, create instance of the C++ class (magic\_8\_ball). Call it anything.
2. Make that instance callable from C++ (remember from lecture or look again on GitHub). Make sure to call the instance “*Cursed\_8\_ball”, exactly spelled that way.*
3. Program should now run. Build and try to drag the eight ball.
4. In main.qml, create TextInput element that handles setting and getting questions from user.
5. When user presses enter in TextInput element
6. Set question via C++ class
7. Update txt\_question.txt via C++ class (to whatever your question was set to).
8. Make 8 ball draggable via C++ class
9. Update mouse area drag target via C++ class
10. Toggle visibility of gif\_waves depending on whether spg\_animation is running or not.
11. Add your own magic 8 ball sayings to linked list of strings in the magic 8 ball C++ class.
12. Make sure these actually saying actually pop up (hint: you might want Ctrl + F for Math.Random in main.qml and edit the maximum number of saying it will generate).

Extra Credit: Add your own stuff, call a TA over and wow us. Make sure to put in the submission what you did extra credit wise (i.e. could be something as simple as sound effects occurring when the 8 ball is oscillating).

This week’s lecture techniques you will use to complete puzzle:

* Drag
* Text Input
* Key Press events
* Call C++ class from QML

Screenshots of what solution might look like:

