CMPE 230 Systems Programming

Homework 3 (due June. 15th)

(This project can be done in groups of at most two students)

In this project, you will implement a game known as "Card Match" or "Pairs" using QT. The objective of the game is to turn over pairs of matching cards. The game will be developed for a single person. The GUI may look like the following:

| Card Match Game | | | | | | |
|-----------------|----------|---|---|----------|------|--|
| Time (secs): 50 | Score: 2 | | | New Game | Quit | |
| | | | | | | |
| ? | ? | ? | ? | ? | | |
| | mouse | ? | ? | ? | ? | |
| ? | ? | | ? | ? | ? | |
| ? | ? | ? | ? | cat | ? | |
| ? | | ? | ? | ? | ? | |

The button widgets (shown in blue) are:

- New game: starts a new game
- Quit button terminates the application.
- The 6 x 5 array of cards which can be clicked to turn over.

The score field will display the number of matchings. The time field will display the cumulative time (no. of seconds passed) since the start of the game. The maximum time is 3 minutes (180 seconds).

You can implement the project using words (texts) as cards.

Grading

Your project will be graded according to the following criteria:

| Documentation (written document describing how you implemented your project) | | |
|--|--|--|
| Comments in your code | | |
| Implementation and tests | | |

Late Submission

If the project is submitted late, the following penalties will be applied:

0 < hours late <= 24 : 25%
24 < hours late <= 48 : 50%
hours late > 48 : 100%

Timestamping

Project file should include your names in it. Please timestamp your project file using https://opentimestamps.org/ before you submit it. Keep the project file and its corresponding timestamp .ots file.