

ShapeDrawer File:

- import packages
- define necessary constants
- define Memory class as subclass of QWidget
 - define init function
 - init super
 - set the geometry
 - set window name
 - init timer
 - set time callback to self.callback
 - define the rect of the game
 - define the current number as -1
 - create a list of numbers 1 to $n/2$, repeated twice
 - shuffle it
 - put it in a two dimensional list
 - init visible cells as []
 - set paused and complete to false
 - self.show()
 - define callback
 - remove last two items of visible cells
 - set the current number to -1
 - set paused to false
 - stop the timer
 - update self
 - define numberFromCoord
 - return the number at the given coordinate
 - define paintEvent
 - init the painter
 - begin the painter
 - for each coordinate,
 - if the cell is in visibleCells, paint the number
 - if not, paint the image
 - if the game is done, paint the “You won!” banner
 - end the painter
 - define the mousePressEvent:
 - if the game is not paused,
 - define the coordinate from the click
 - if the coordinate is not in visible cells but in the gameRect,
 - add the cell to visible cells,
 - define the number as the number at that coordinate
 - if the current number is -1, set the current number to the number
 - else, if the current number is not the number, start the timer and pause the game
 - else, set the current number to -1
 - if the visible cells is equal to n^2 , complete the game
 - update self.
- in main loop,
 - init the application,
 - create memory window,
 - then exit app

Dazzle Point: I added images to every block to make the cards colored. These images are smiley faces and make the game more fun.