Project proposal

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I intend to develop a paint board which could run both on Mac and Windows. It has general painting tools such as differents kinds of brushes, eraser, choosing colors, drawing line, rectangle, oval and drawing a sequence of different pictures. And moreover, it has some animation functions. I would put some objects such as sun, cloud, grass, car, and person on the board. Users could choose objects and put them on the canvas, and then could choose the area where objects will move, the moving direction and the moving speed. There are also some background pictures to be selected if users like.

Firstly, I try to use Tkinter to finish this project, and I find the anwers that how to draw line on the canvas, how to import image to the canvas, how to make a button on the canvas and how to make the objects move. But a lot of questions came up and confused me. 1. Each picture must be converted to gif. Undoubtedly, this is huge work. I must make each picture which I want to put on the canvas with specific size, specific type and specific position. 2. It is a little difficult to realize the function that after pressing the specific button, then it could work. 3. Changing the background is also an enormous challenge. 4. Searching on the website, I couldn’t find one paint board which was written with Tkinter, so it is almost impossible to write the competitive analysis. 5. The interface with Tkinter is not very beautiful. But I have tried to use Tkinter and realize some functions such as making a background(importing image to canvas), pressing a button(button with an image) and drawing lines(mouse motion events). This code is also in the file.

Then, I found pygame is better way to write the paint board. It includes many modules that I could use to finish the paint board such as the animation, the different brushes, the color palette and so on.

All modules/technologies:

Pygame

Template from the pygame tutorial

JpegSound from the pygame turoral

Simple drawing（including paint brushes)

Animation