

## George Harrison HW2

### 5.1

In a component-based architecture, a system is made up of components that interact with each other, but are all running within the same program. In a service-oriented architecture, each component is self-contained and runs on its own.

### 5.2

I think a monolithic architecture would be appropriate. This application is pretty simple and everything could be fit into one program. It doesn't require any networking or communication across many different parts. However you could also use a component-based architecture, which would still keep everything in one program, but would allow some more flexibility if you wanted to make changes to the game in the future.

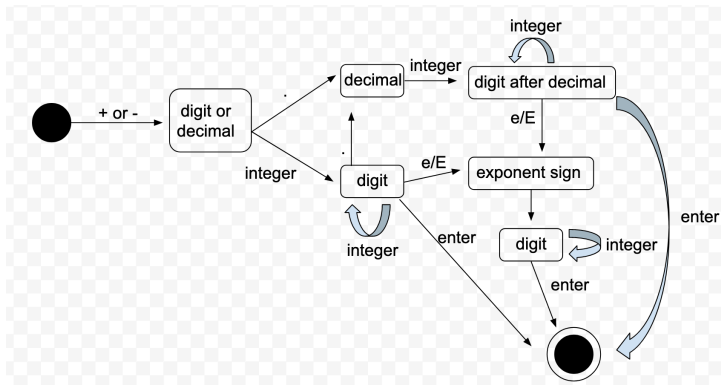
### 5.4

For this game a client/server two-tier architecture would work best. This will allow the two players to play the game over an internet connection.

### 5.6

ClassyDraw would have a very simple database structure. It may need a data structure for its auto-save functionality, to save the changes the user is making every few minutes. This could be implemented by making temporary files of the current project on a certain interval every time the application is running. Then when the application is closed or the file is saved, those temporary files could be deleted. There is definitely no need for audit trails, the program is not handling any confidential information.

### 5.8



### 6.1

These classes are all similar because they can be clicked and dragged, moved, resized, etc. These classes also have differences because for example with the text object the user can input text into it. The line has start and end points, the rectangle and ellipse have width and height, star has number of points. There could be a shape class which handles some of the shared properties like rotation or size. And the text class could be separate to handle all the text related functionality.

## 6.2

