

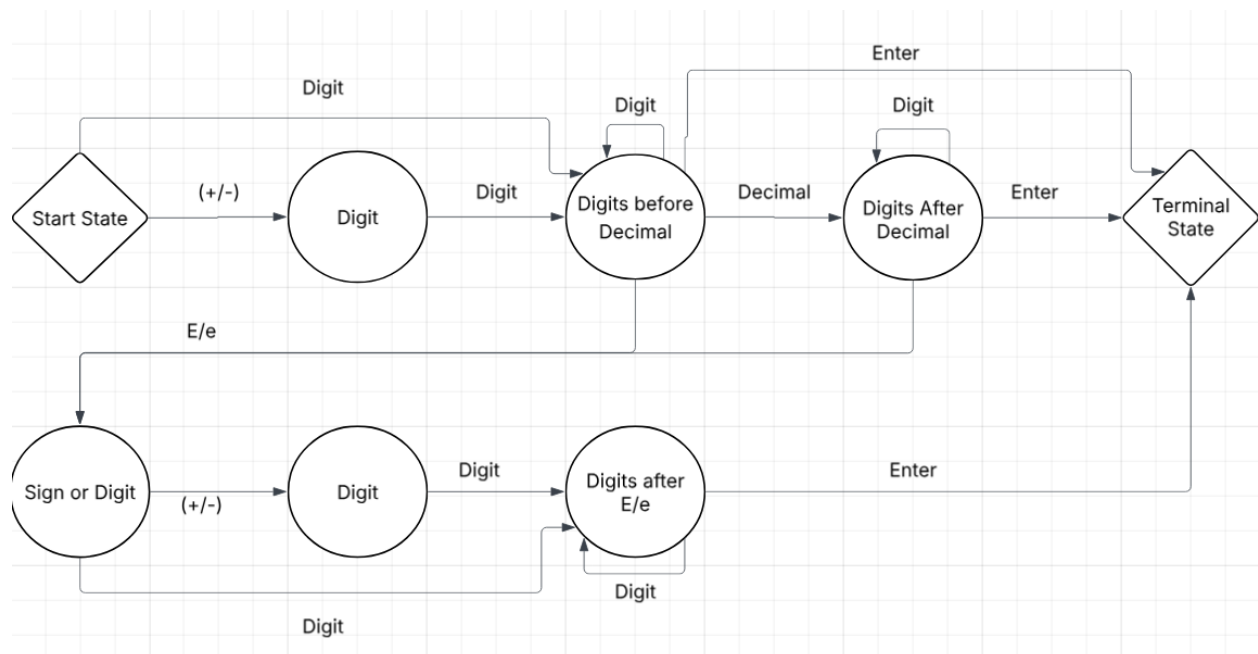
5.1 Component-based architecture, the system is separated into different components that provide service to each other. A service-oriented architecture is similar, but instead of components, the program is separated into different services. The pieces in a service-oriented architecture is more separated.

5.2 Since the program is relatively small and doesn't require remote services or database, using monolithic architecture would suffice. It can also be combined with rule-based architecture as tic-tac-toe follows well defined rules that must be followed. It will act as a guard rail for the program.

5.4 A client-service architecture would be suitable for a chess game that lets you play each other over an internet connection because the program would require to connect to a network in order to pass data between clients. Like tic-tac-toe, a combination with rule-based architecture will help implement the program as chess follows rigid rules that cannot be broken.

5.6 Classy draw can save each drawing as its own file within the operating system, allowing the user to take advantage of operating system tools to manage its files. As for maintenance, Classy draw could create a temporary file every few minutes while the user is drawing to prevent data loss from accidents. The temporary files will be removed when a restore is initiated.

5.8



6.1

- a) All of these classes share color, width, height, and position properties.
- b) Only text would have font and string.
- c) Rectangle, ellipse, star, line shares line style and thickness properties, but text does not.
- d) The shared properties should be implemented on the parent class, whereas the non-shared properties should be implemented on the child/individual class.

6.2

