JavaFX (Apache)  
Programming using GUI:  
threads and entry points  
views and models  
declarative vs programmatic GUI construction

JavaFX built-in thread-safe components  
declarative style

GUI applications don’t have the same simplicity  
- There is a flow of creation that enables the various components to be constructed and assembled  
- After that there is no active flow of control: the application is waiting to respond to a message from the operating system  
- The responses are handled as callback methods by classes that listen to these events

Long processing operations shouldn’t be performed in the same thread as the callback method  
- If they are, then the GUI will freeze  
- Best practice is to start another thread to do the heavy lifting

Probably te most important design patter of all is the separation between  
- the viewer (and controller)

A popular trend in IDE development is the declarative GUI construction  
- extended out of proprietary

ObservableList is like a list but with extra properties that other entities can observe and tell if/when it changes

SortedList allows to return to a default order after any operations