

Architecture & Design Decisions

Smart Collections is designed as a modular JavaFX application. The architecture separates the UI, da

Data Structure Choices & Complexity Trade-offs

Appropriate data structures were chosen for each feature. ObservableList is used for the library to sup

I/O Format & Serialization Plan

Object I/O is used for saving and loading the library, indices, and tasks. A versioned file header ensur

Testing Strategy & Known Limitations

Manual testing was conducted to verify all features, including recursive folder import, undo functionality

Future Work

Future improvements include adding automated tests, optimizing performance for large libraries, and s