

Problem Definition - Your Answer

- 1. Review the list of requirements in the project description document. Are any of them unclear? Are any of them infeasible? Try to rank them in terms of must have, nice to have, and blue sky.**

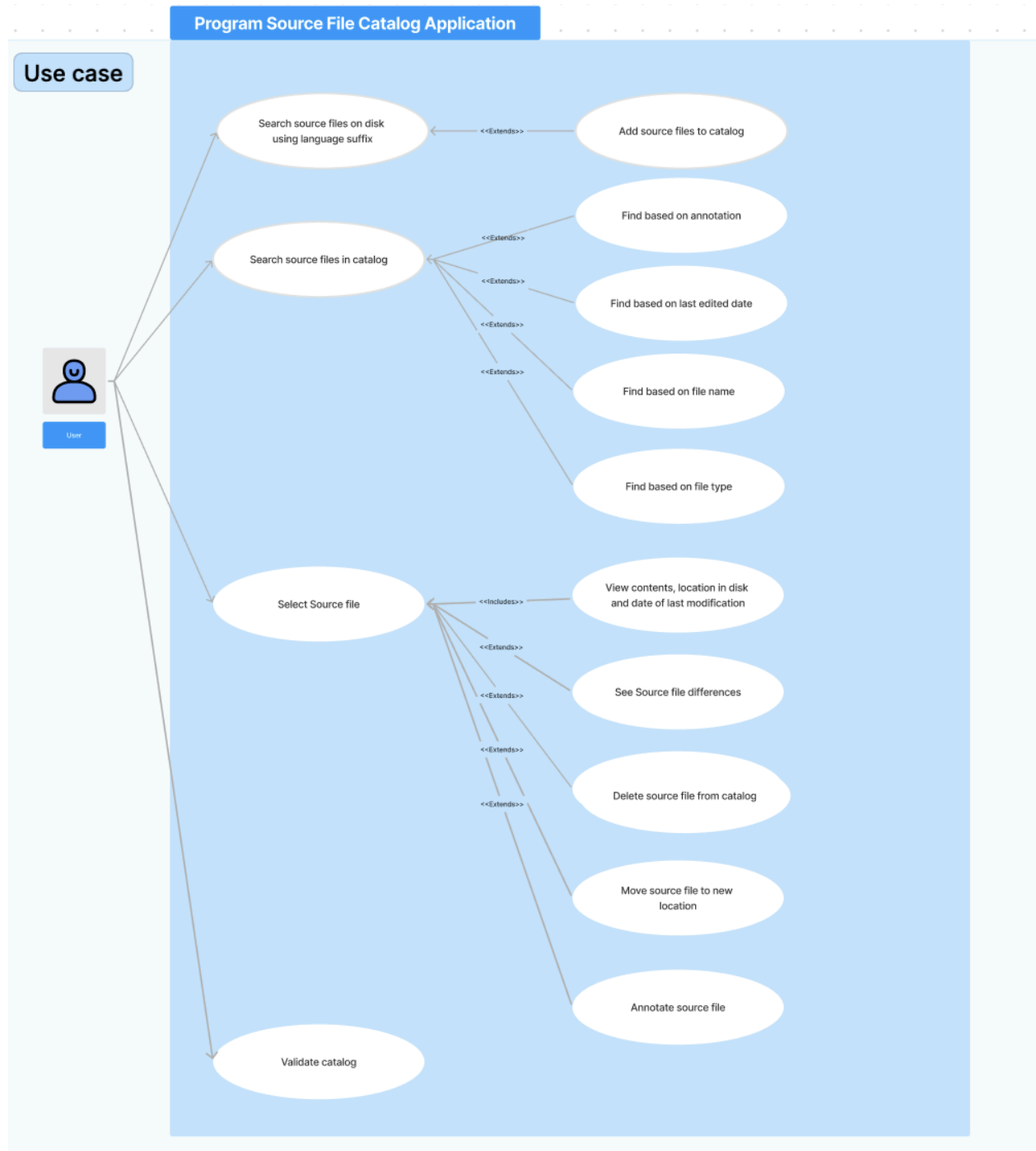
Task Requirements

- Find source files on disk based on language suffix (.c, .py, .java etc.), wildcard name match. **Must have** ▾
- View contents of selected source file, along with its location on disk, date of last modification. **Should have** ▾
- Annotate source file (and add to catalog): Add a description and tags. **Must have** ▾
 - Annotations are short descriptions that the user can write and attach to a source file
- Compare source files (diff) **Should have** ▾
 - Source file differences are highlighted and show
 - Ref: conflict resolution screen in git
- Delete a source file from the catalog. **Must have** ▾
- Move a source file to a new location and update its location attribute **Must have** ▾
- Find source files in catalog based on annotation, date range **Must have** ▾
- Validate catalog: After a source file has been added to the catalog, the original file might be modified, deleted or moved to a different location on the disk. This option will use the catalog information to check current disk contents and identify any changes. **Should have** ▾
 - Button activated function

- 2. Discuss your requirements with your stakeholder (Dr. Sally) to see if she agrees with your revisions.**

As we didn't make any major revisions and only asked for clarifications. We can safely assume that dr.Sally agrees with her own clarifications.

3. Create a use case diagram for your program. Follow the standards as discussed in class.



4. Create a use case narrative for ONE use case in your project.

Use case Name: Search source files in catalog

Actor: User

Goal: Find a source file in the catalog

Preconditions: None

Main success scenario:

1. User chooses a search type between annotations, last created date, file type, or file name
2. User inputs the appropriate data of the file they were looking for
 - 2.1 User inputs string for annotations
 - 2.2 User inputs date in the correct format for last created date
 - 2.3 User inputs string for file type
 - 2.4 User inputs string/integer for file name
3. System shows any matches in the catalog

Exception:

- Source file being searched is not found in catalog
- Invalid input format
- Catalog is empty

<i>Component</i>	<i>Responsibilities</i>	<i>Interacts with</i>
Catalog Interface	Displays search options (by annotation, date, file type, name), and file details. Collects user input for searching, file management actions (view, move, delete, add).	Catalog Logic
Curation Interface	Displays functions that enable users to search source files on disk and add to the catalog, delete source files from catalog, compare source files from disk, and validate the catalog)	Curation Logic
File Catalog	Stores metadata about files (annotations, modification date, etc.) Allows data transfer between catalog logic and curation logic	Catalog Logic, Curation Logic
Catalog Comparison	Compares the content of files based on user selection, showing differences.	Catalog Logic, File Comparison viewer
File comparison viewer	Displays differences between selected files, highlighting changes (similar to "diff" functionality)	Catalog Comparison, Disk Comparison module
Disk comparison module	Compares files in the catalog with actual files on disk to detect differences or missing files. (Possible external module)	Curation Logic, File comparison viewer, Disk

File Validation	Ensures catalog data aligns with actual files on disk (e.g., check for file changes)	Curation Logic, Disk
Curation logic	Curate and modify the catalog based on user input, allows annotations to be made, and controls the search logic for files on the disk	Disk, Curation Interface, File Catalog, Disk Comparison Module, File Validation
Catalog logic	Controls the search logic for files in catalog based on user input. Supports searching by annotation, date, file type, or file name. Also allows annotations to be edited, and allows files to be moved to a new location	File catalog, Catalog Interface, Catalog Comparison