## Interface

## Storage

Storage extends File.

Storage child classes contain information about the contents of its corresponding directory. Once initialized, any storage will know about all of its academic contents—PDF files and additional folders.

Storage child classes have searching and sorting features for all forms of metadata: search and sort alphabetically by title, author, publisher, and so forth. These searches will return a collection of relevant items to the calling class.

Storage child classes have the ability to automatically load the most basic information for all files and folders their directory contains. It will initialize only the name and location of these items, and will mark each item as “new” for the interface to iterate through to gather information.

Storage child classes have the ability to manually add new folders and items into its own contents. When a folder is manually added it is physically created in its directory, if not already present. New items it adds will be from an outside source

Storage child classes will have the ability to display all of its own contents. They will also have the ability to display an exploded view of its contents, and all of its sub-contents. Storage child classes will have the ability to “get” to any of its subcontents through a recursive “get” method.

Storage child classes will have the ability to return a specific folder when requested by name, the contents of which the interface will then display for the user to navigate through

## Cabinet

There will be a cabinet class, which the interface creates directly. Inside the cabinet class will be a file called “.ACAMEDIA” which contains the library’s data, to allow quicker loading. Otherwise, the cabinet will be the same as its abstract parent, Storage.

## Folder

Folders behave as Storage classes and are subordinate to Cabinet classes.

## Item

Items extend File.

Items store information about its corresponding file and provide basic operations on that file, such as copying to a new location, editing, and deleting. When created, subclasses of Item with specific filetype associations (such as Text, which is always a PDF) will attempt to pull relevant data to populate its information database.

Items will have a Boolean “new” which declares whether the item’s data has been manipulated any time in the past, or whether it was automatically loaded for the first time.

Items will have a Boolean “modified,” which declares whether the items’ data has been changed since it was loaded, speeding up the saving process.

Items will be able to save updates to their data, such as additional metadata, new names, and so forth.