Main

- OS : OpartingSystem
- listView : ListView<Directory>
- name : TextField
- root : Directory

+ Main()
+ start(Stage primaryStage) : void
- view() : void
- mergeDir() : void
- createDir() : void
- viewLog() : void
- delDir() : void
viewTags() : void

UserInterFace

DirectoryView

- model: Directory
+ image : Image
- scene1 : Scene
- scene2 : Scene
- listView1 : ListView
- dirView : ListView
- listView2 : ListView
- multTags : ListView
+ images : ArrayList<BufferedImage>
- dbox : TestField
- version : TextField
- new_window : Stage
- reopen : ObservableList<Directory>
- OS : OperatingSystem
- comboBox : ComboBox<String>
- deleteBox: ComboBox<String>
- directoryBox : ComboBox<String>
- root : RootDirectory

+ DirectoryView(ObservableList<Directory> selected, OperatingSystem new_os)
- deleteImage() : void
- viewDir() : void
- viewImage() : void
- renameImage() : void
- addTag() : void
- delTag() : void
- reverseName() : void
- viewHistory() : void
- moveImageFile() : void

AlertBox

+ AlertBox()
+ displayText(String title, String message) : void
- display(String title, ArrayList<String> tags) : void
+ displayTags(String title, ArrayList<String> tags) : void
+ displayLog(String title, ArrayList<ArrayList<String>> tags) : void

OperatingSystem

- log : ArrayList
+ tags : ArrayList<String>
- directories : ArrayList

+ OperatingSystem(ArrayList<Directory> list_dir)
+ search(String file_name) : Directory
+ createDirectory(String directory_name, ArrayList<ImageFile> files) : void
+ deleteDirectory(ObservableList<Directory> directory_name) : void
- move(Directory directory_name, ImageFile file_name, Directory new_directory):void
+ addLog(String oldName, String newName, String time)
+ get_log() : ArrayList<ArrayList<String>>
+ addTag(String newTag) : void
- textRead() : void
- testWrite(String tag) : void
- create() : void
+ viewDirectory() : ArrayList
- getDirectories() : ArrayList
+ merge(Directory d1, Directory d2) : void

Backend

ImageFile

- image : Image
- name : String
- tags : ArrayList<String>
- history: ArrayList<String>
- nametags : String
- path : String
- OS : OperatingSystem

+ ImageFile(String Name, String dirName, OperatingSystem new_os)
+ toSrc() : void
+ moveBack() : void
+ viewImage() : Image
+ getName() : String
- delFolder(String name) : void
- changeDir(String newDir) : void
- deleteFolder(File folder) : void
+ addTag(String tag) : void
+ deleteTag(String tag) : void
+ history() : ArrayList
+ reverse(int i) : void
- getImage(String name) : Image
+ reanme(String newName) : void

Directory

- imageFileList : ArrayList<ImageFile>
- name : String
- oldName : String
directoryList : ArrayList<Directory>

+ Directory(String name, ArrayList<ImageFile> imageList, ArrayList<Directory> directories
+ getDirList() : ArrayList<Directory>
- allImages() : ArrayList<ImageFile>
+ toString() : String
+ getName() :String
+ isEmpty() : boolean
+ viewImageFiles() : ArrayList
+ createFolder() : void
+ delFolder() : void
- deleteFolder(File folder) : void
+ addImageFile(ImageFile imagefile, OperatingSystem OS) : void
+ deleteImage(ImageFile imagefile, OperatingSystem OS) : void
+ moveImageFile(ImageFile, file, Directory new_directory, OperatingSystem OS) : void
+ nextImage(ImageFile currImg) : int

RootDirectory

- directoryList : ArrayList<Directory>

- RootDirectory(Directory directories)
- addAbsentTags() : void
- moveFile(ImageFile file_under_root, Directory from, Directory new_directory) : void
- allImages() : ArrayList<ImageFile>