System Sequence Diagrams - Assignment 2

+ Jordan | - branch2 | Add...

⊙ Volume   Start : 2016-02-20
○ Count   end : 2016-02-21

Files | Authors | Branches

Scm16/CodeHistoryVisualizer

file1
file2
file3

Export...

file1.py	2016-02-21	John...
file2.txt	2016-01-23	John...
file3.cpp	1992-04-17	Brian...

Added Something   2016 8
- Initial Commit   2016-02

Initial Commit | META
commit message | DATA
...
+ ...
+ ...
- ...
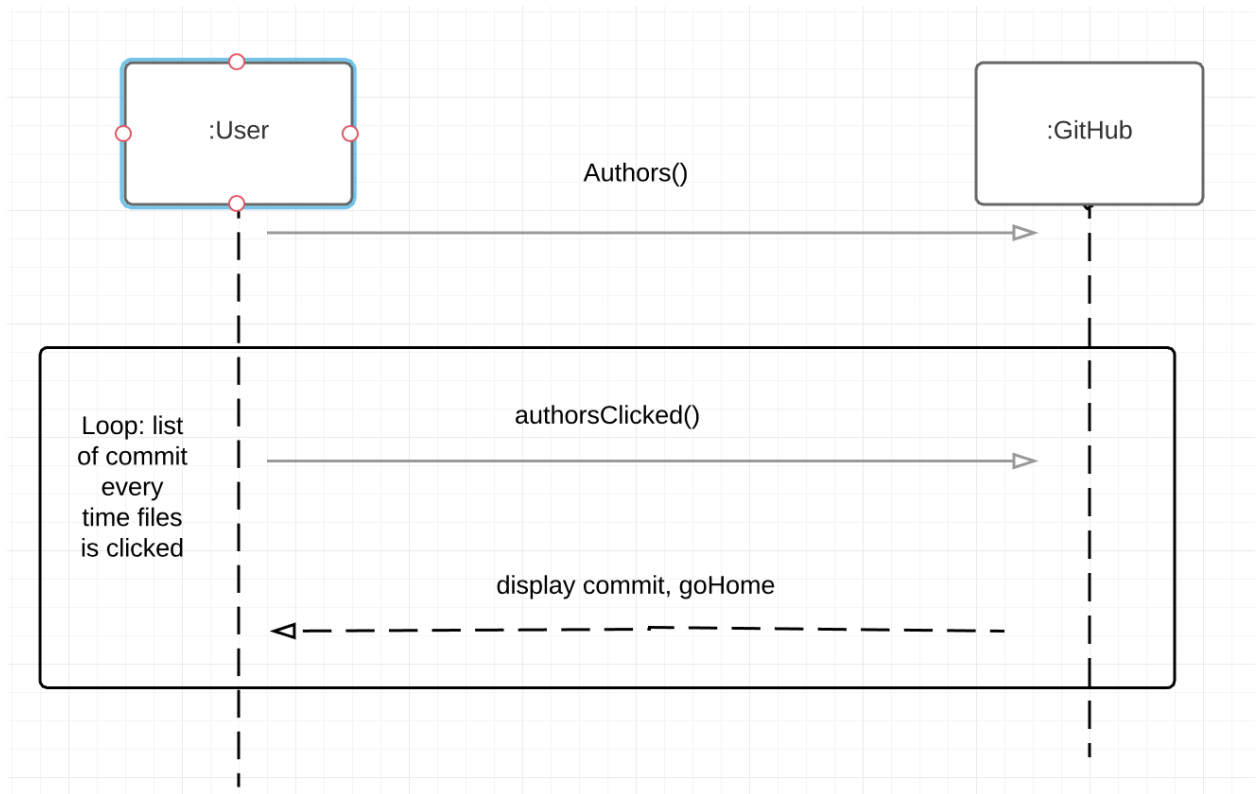- . . .
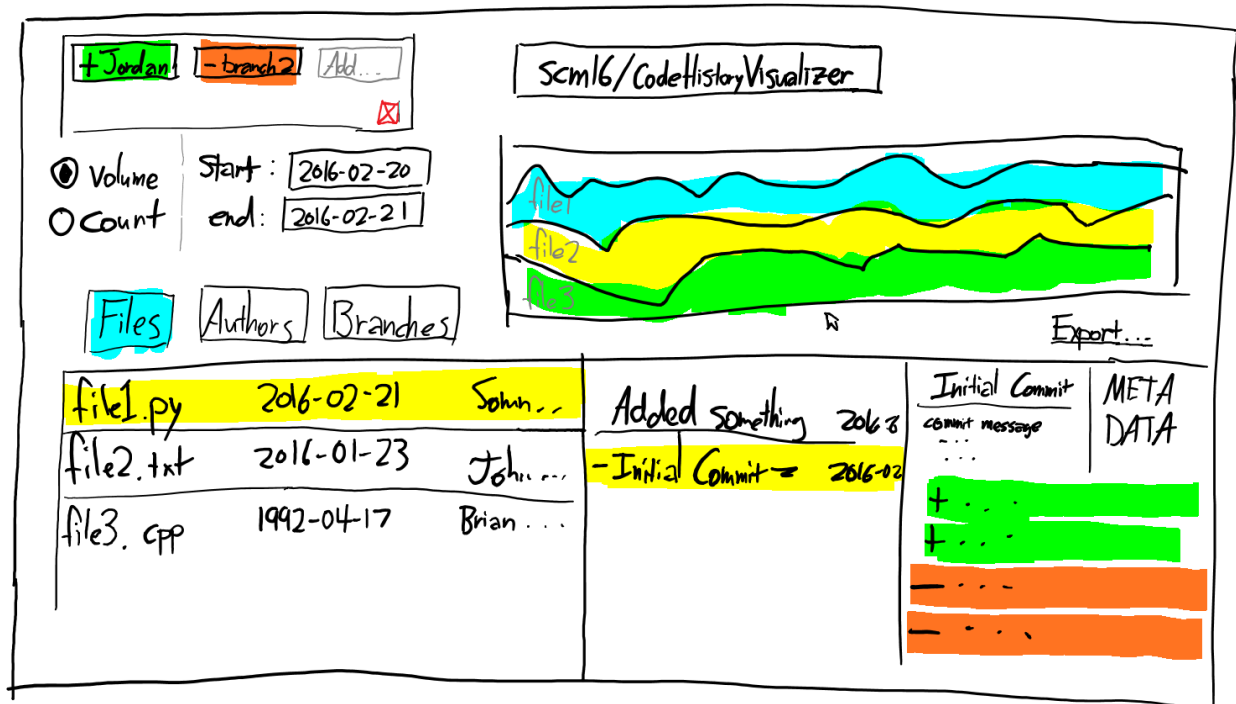
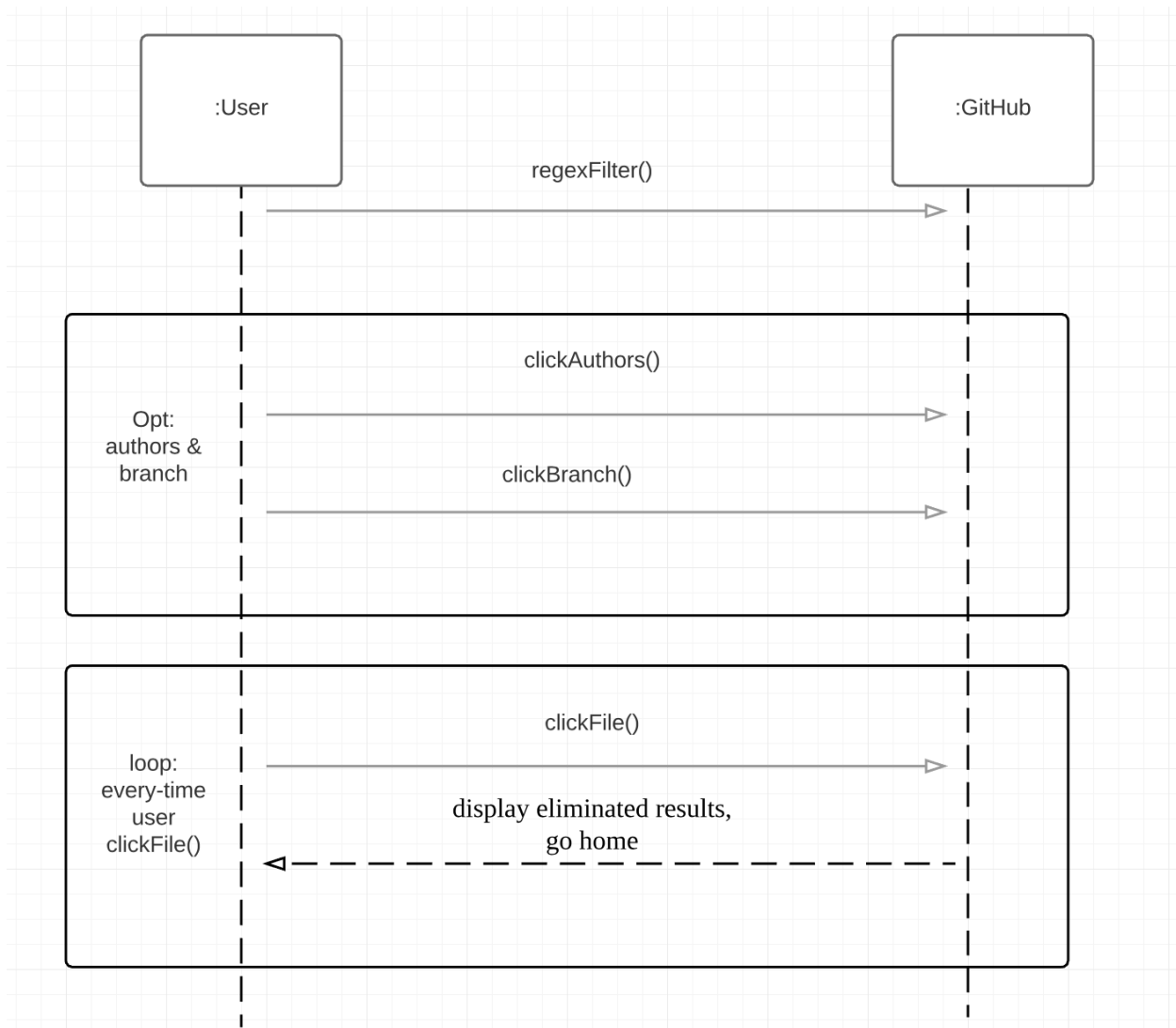**Use Case 1: User searches for a public repository (top right)**
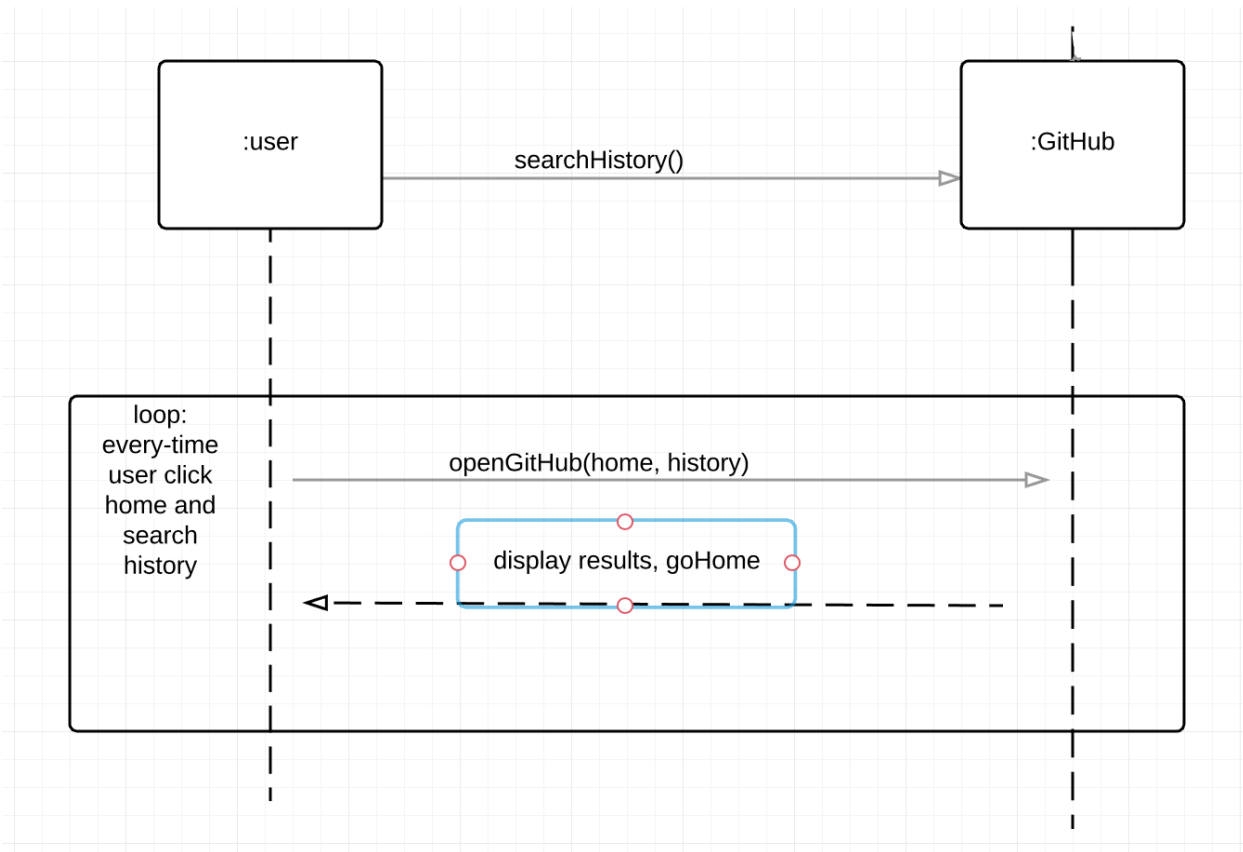
Use Case 2: Clicking on a repository, user gets lists of files and commits, and a graph of commits by file
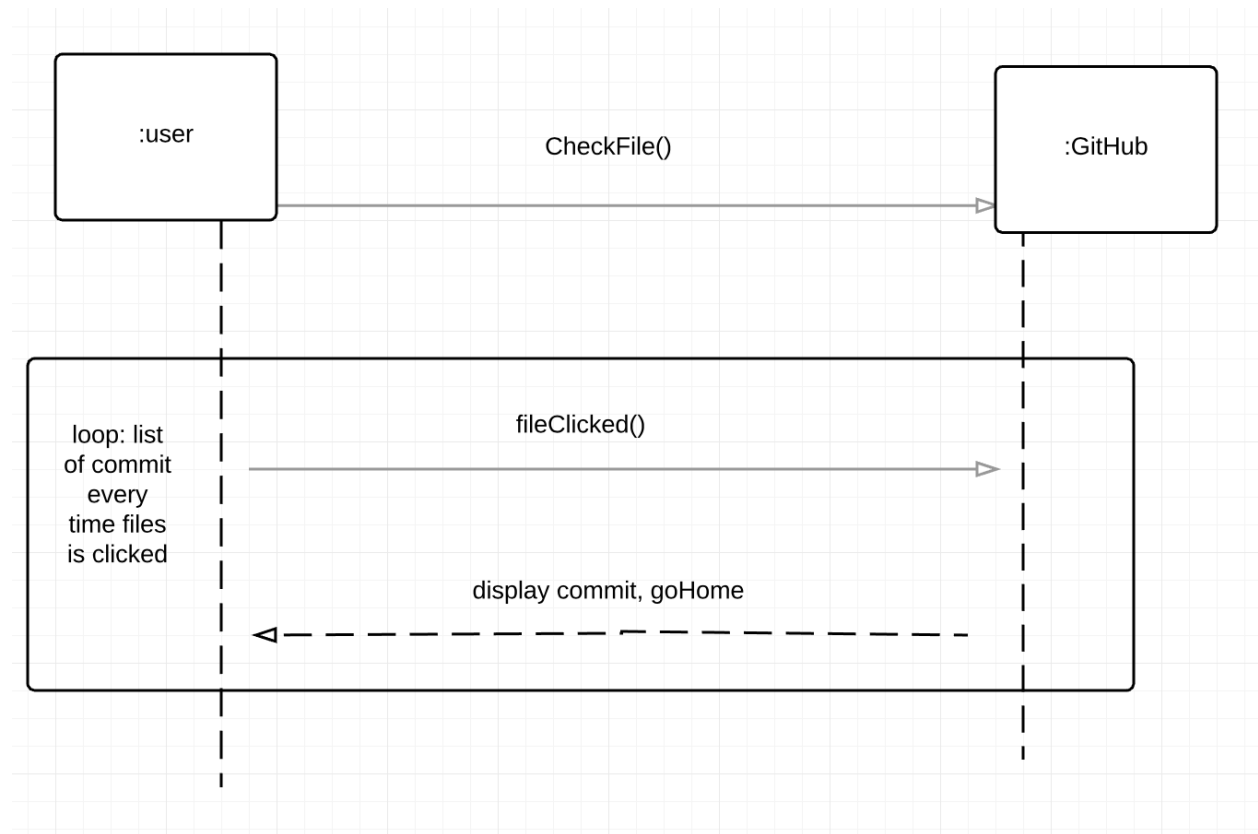
Use Case 3: Once in a repository, user changes what parameters the commits are grouped by (authors or branches)

:User

:GitHub

Authors()

Loop: list
of commit
every
time files
is clicked

authorsClicked()

display commit, goHome

Use Case 4: User adds a regex filter for file, author, or branch, eliminating results

:User	:GitHub

regexFilter()

Opt:
authors &
branch

clickAuthors()

clickBranch()

loop:
every-time
user
clickFile()

clickFile()

display eliminated results,
go home

Use Case 5: User imports a saved history by uploading a file
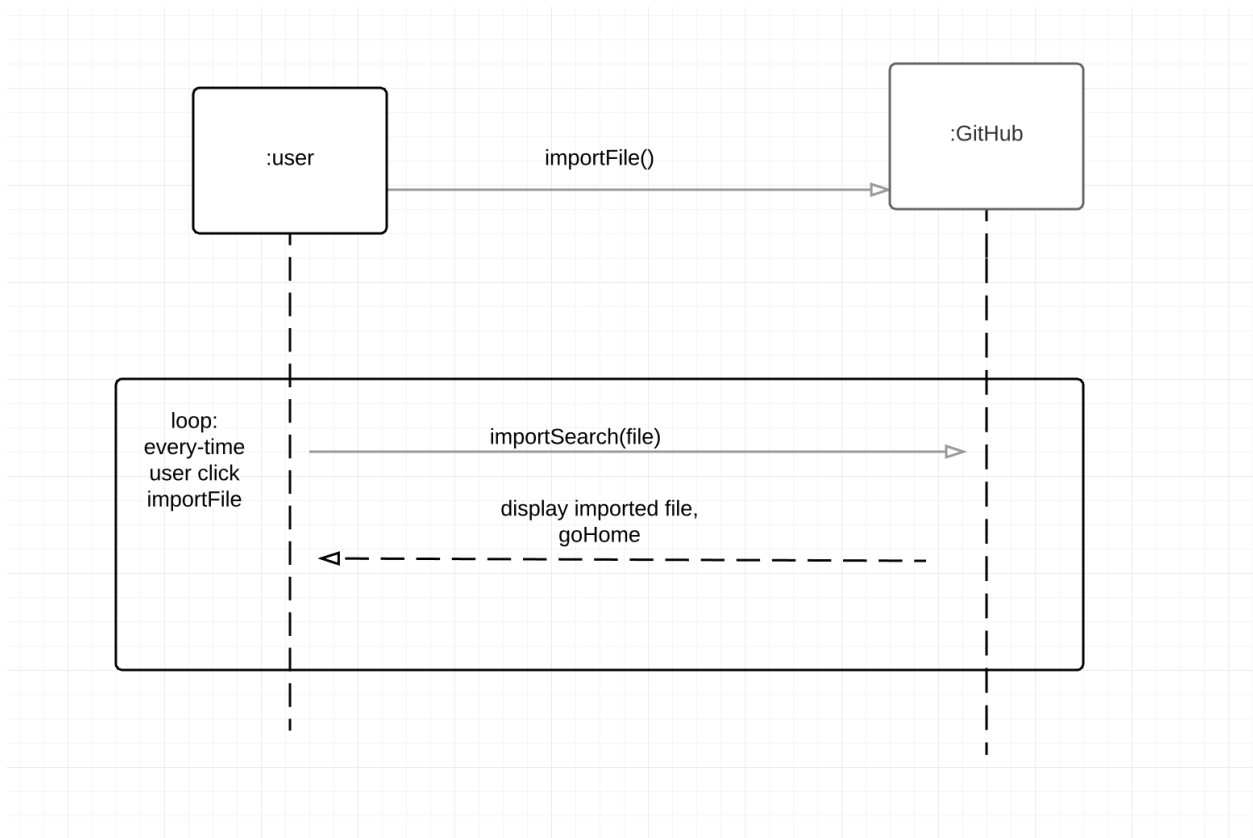
Use Case 6: User adds a date restriction, eliminating results and confining graph

:user   addRestriction()   :GitHub

loop:
update
file graph
every-time
user click
add
restriction

restriction(date, file)

update graph, go home
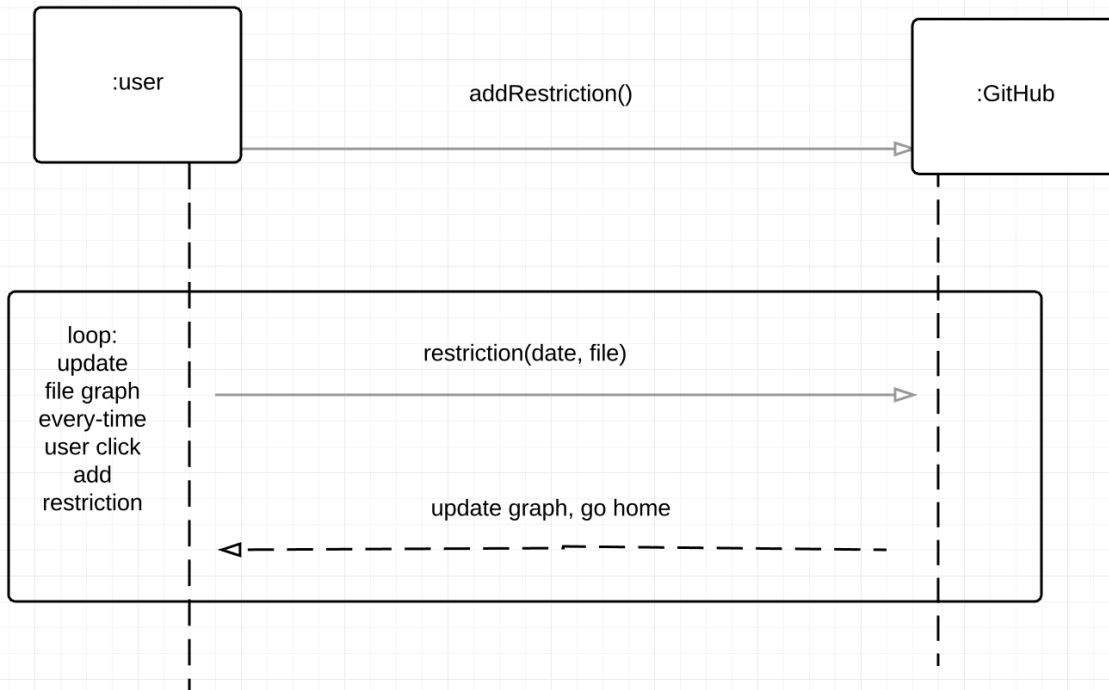
Use Case 7: User selects "volume" or "count" to change the appearance of the F/A/B graph
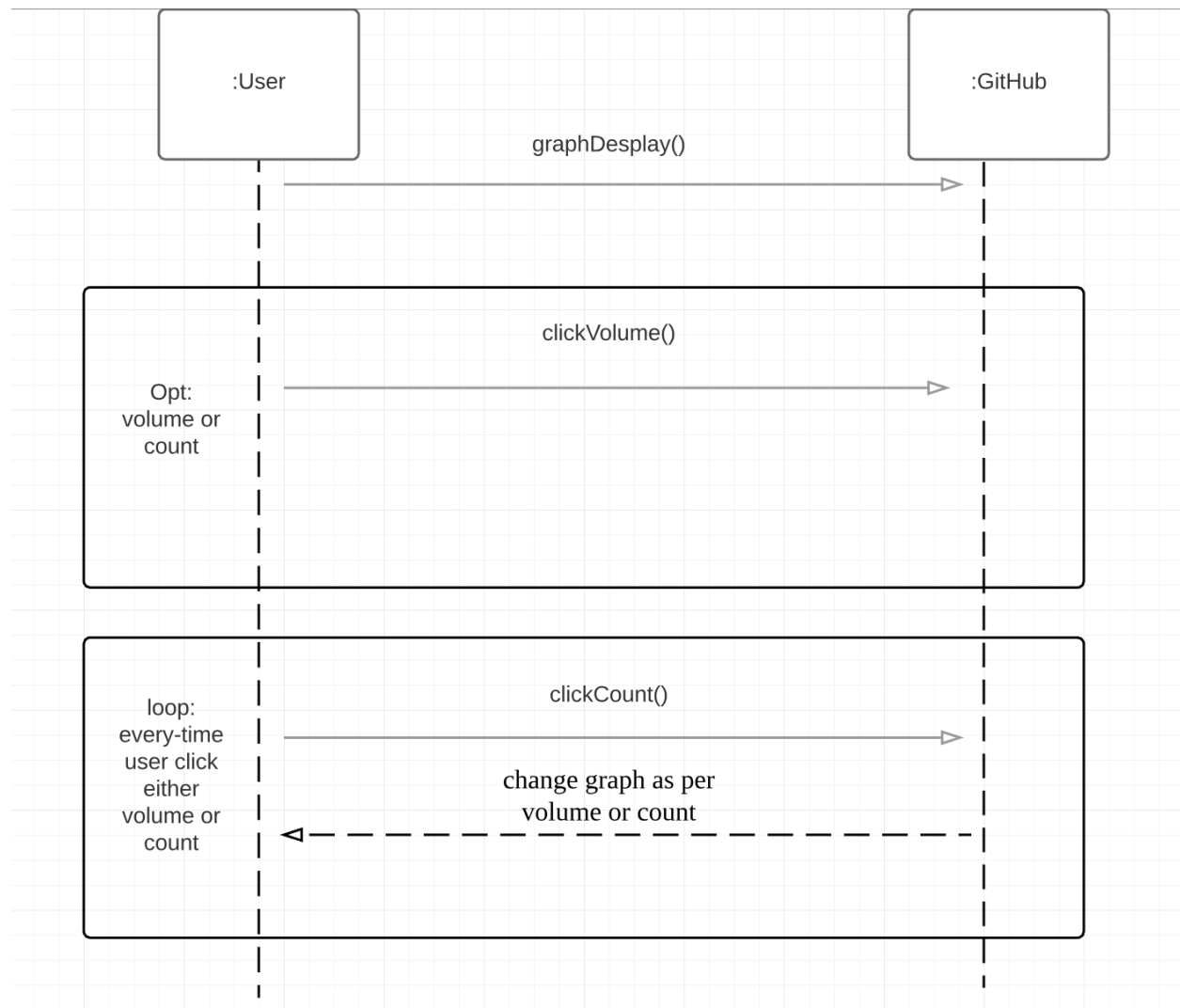
Use Case 8: User selects a file/author/branch from the list (lower left), adding/removing a filter for it
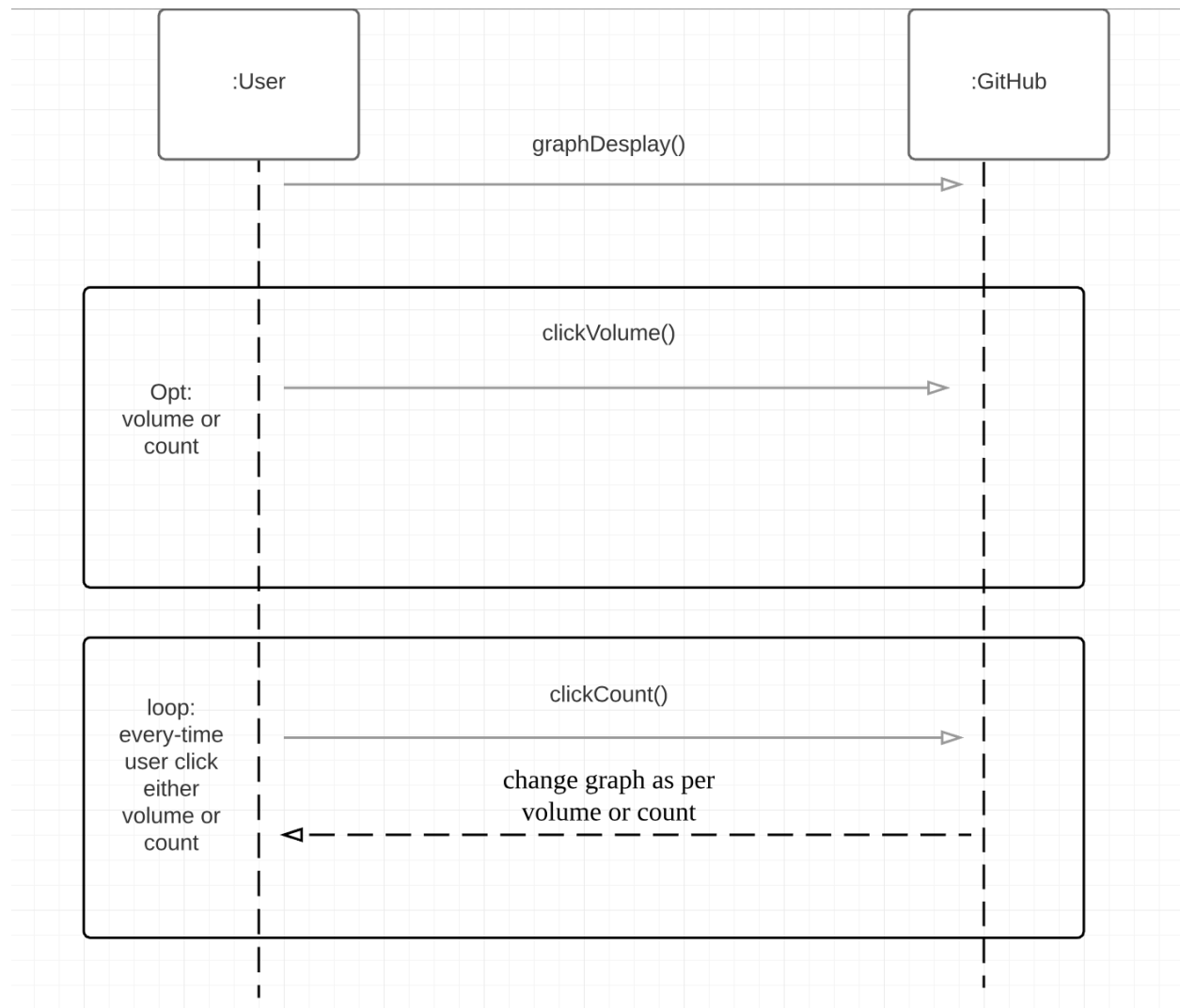
Use Case 9: User selects a commit from the list (middle left), seeing detailed commit info

```
┌──────────┐                                    ┌──────────┐
│   User   │                                    │  System  │
└──────────┘                                    └──────────┘
     │              ViewCommit()                      │
     │──────────────────────────────────────────────▷│
     │                                                │
 ┌───┼────────────────────────────────────────────────┼───┐
 │   │               selectCommit                     │   │
 │   │───────────────────────────────────────────────▷│   │
 │   │                                                │   │
 │   │           displayCommitMetadata()              │   │
 │   │◁ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─│   │
 │   │                                                │   │
 └───┼────────────────────────────────────────────────┼───┘
     │                                                │
```
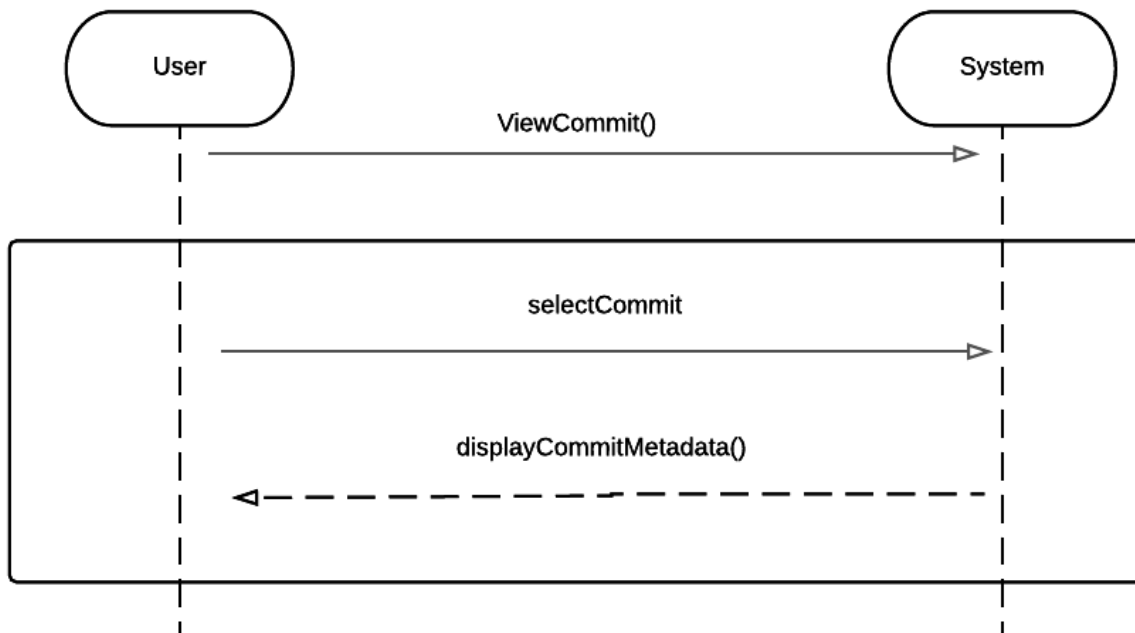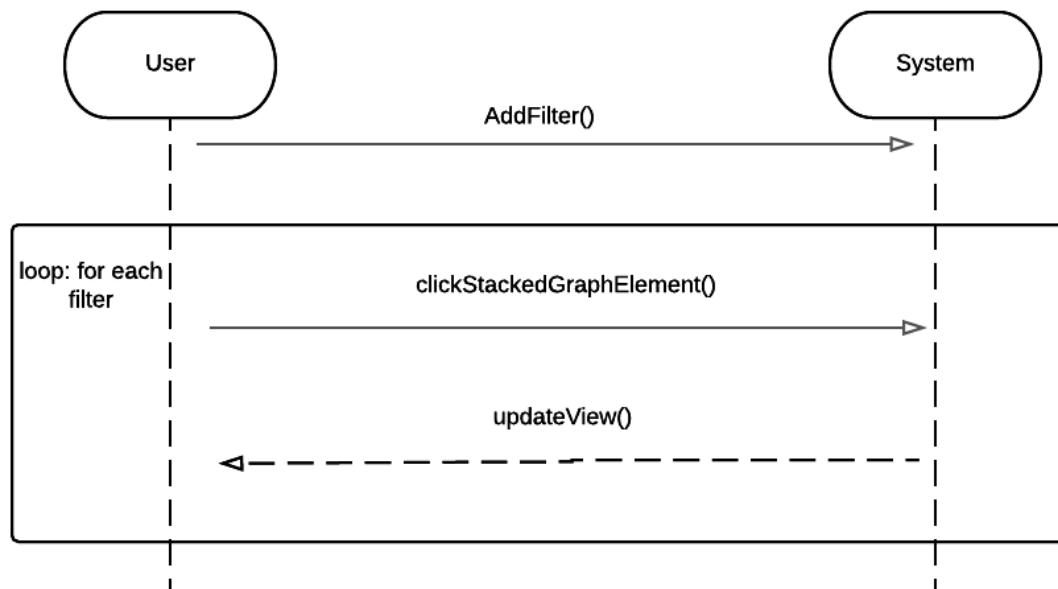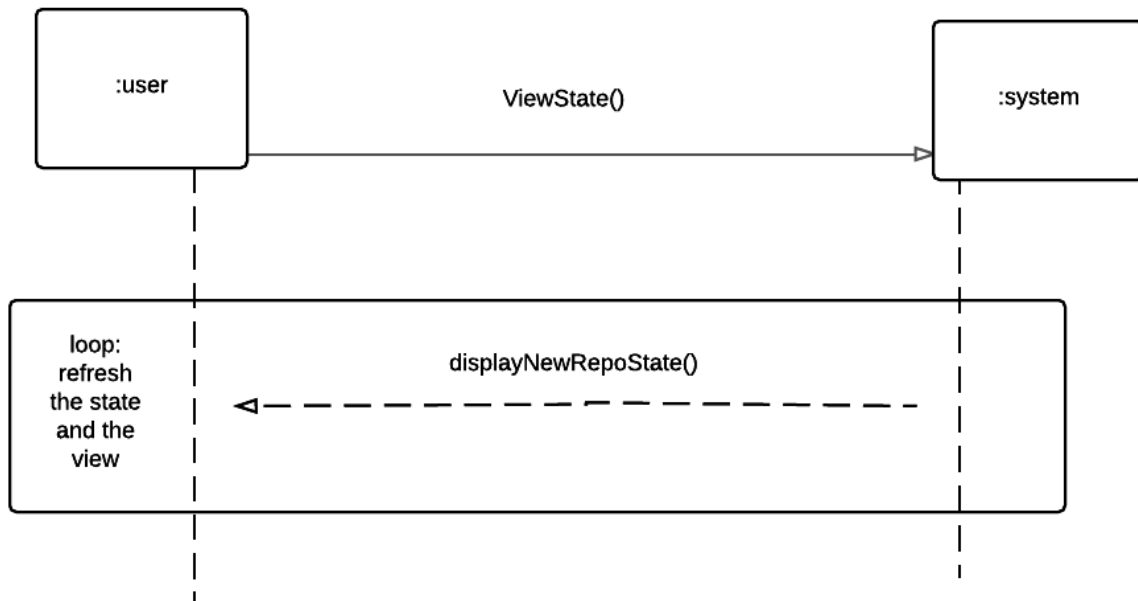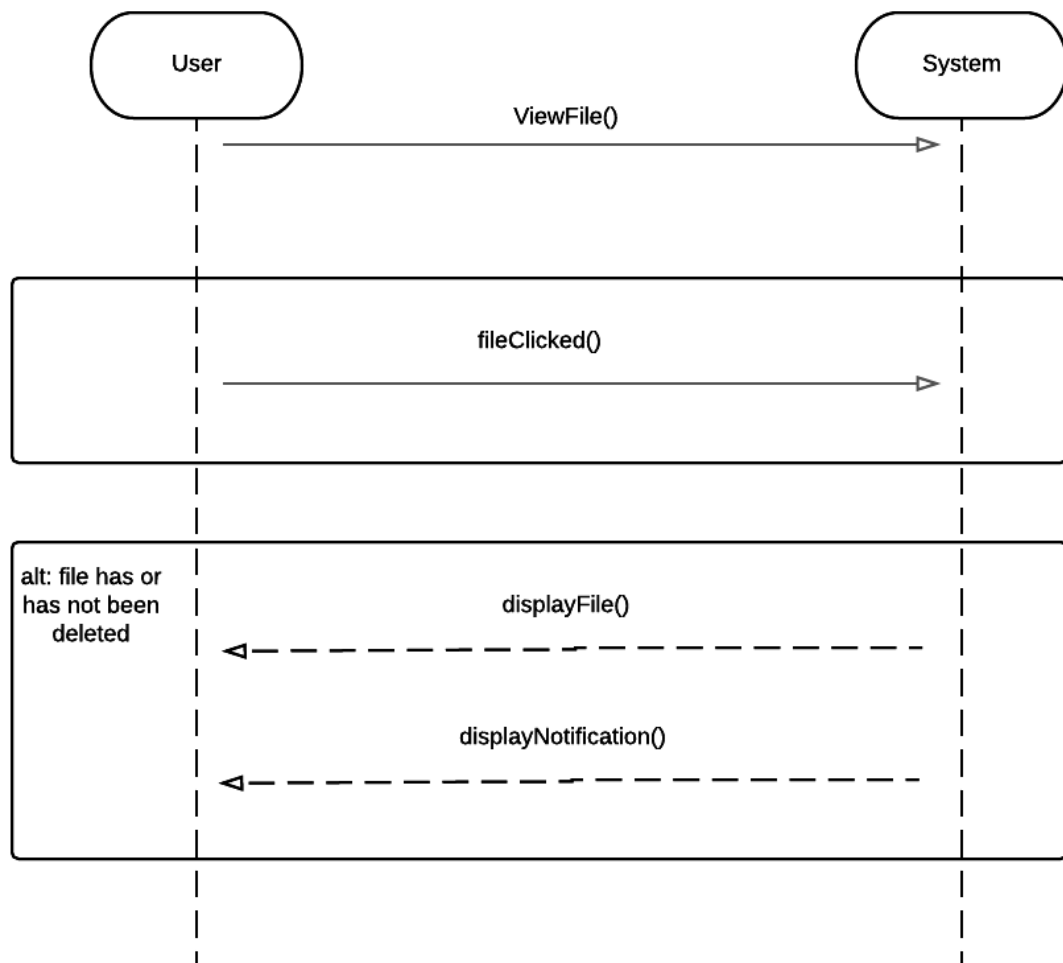
Use Case 10: User clicks one of the stacked graph elements, adding an associated filter to the box

```
┌──────────┐                                    ┌──────────┐
│   User   │                                    │  System  │
└──────────┘                                    └──────────┘
     │              AddFilter()                       │
     │──────────────────────────────────────────────▷│
     │                                                │
 ┌───┼────────────────────────────────────────────────┼───┐
 │loop: for each │      clickStackedGraphElement()    │   │
 │   filter      │                                    │   │
 │   │───────────────────────────────────────────────▷│   │
 │   │                                                │   │
 │   │               updateView()                     │   │
 │   │◁ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─│   │
 │   │                                                │   │
 └───┼────────────────────────────────────────────────┼───┘
     │                                                │
```
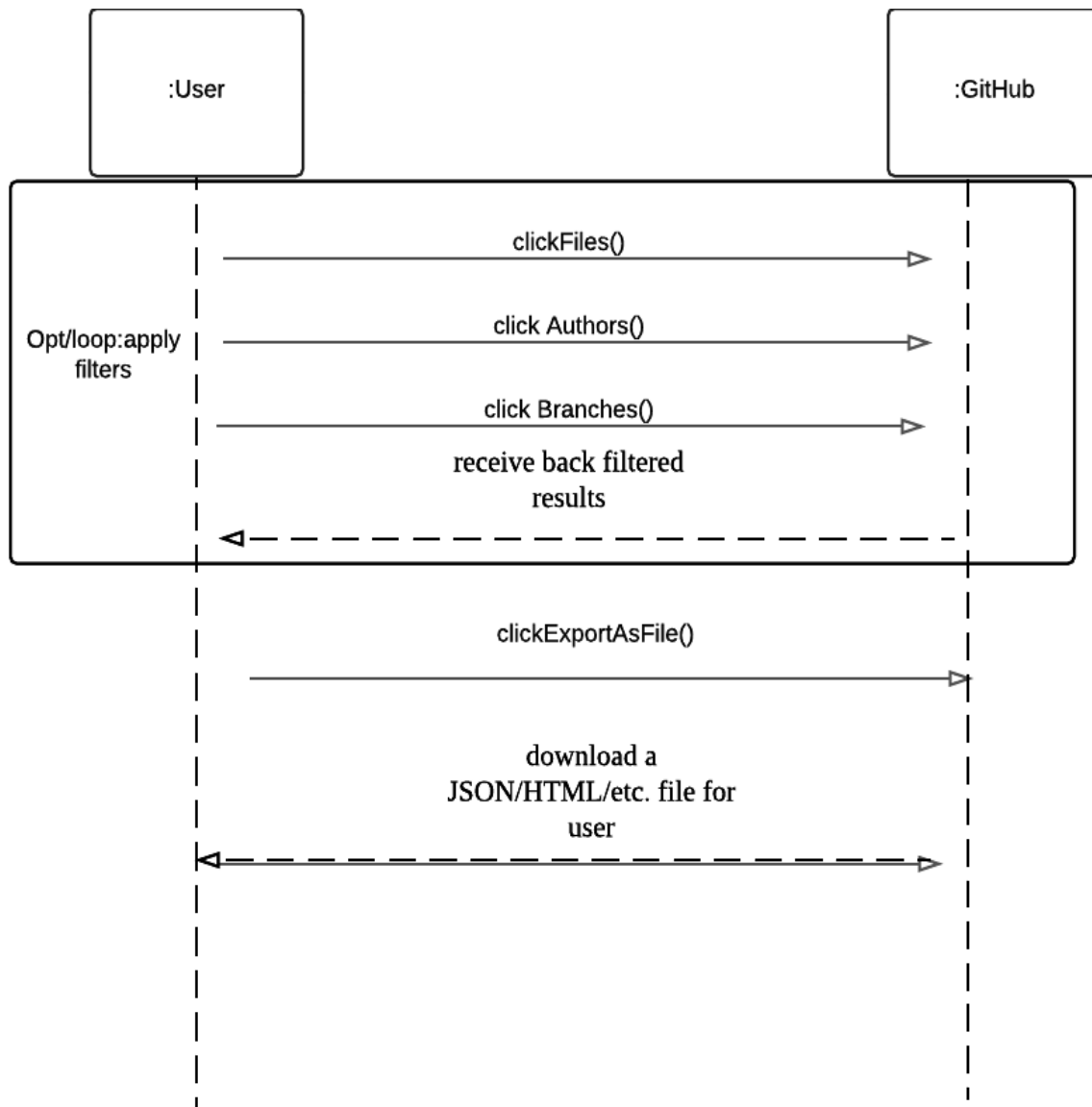
Use Case 11: Repo state changes while user is viewing something, and the view updates
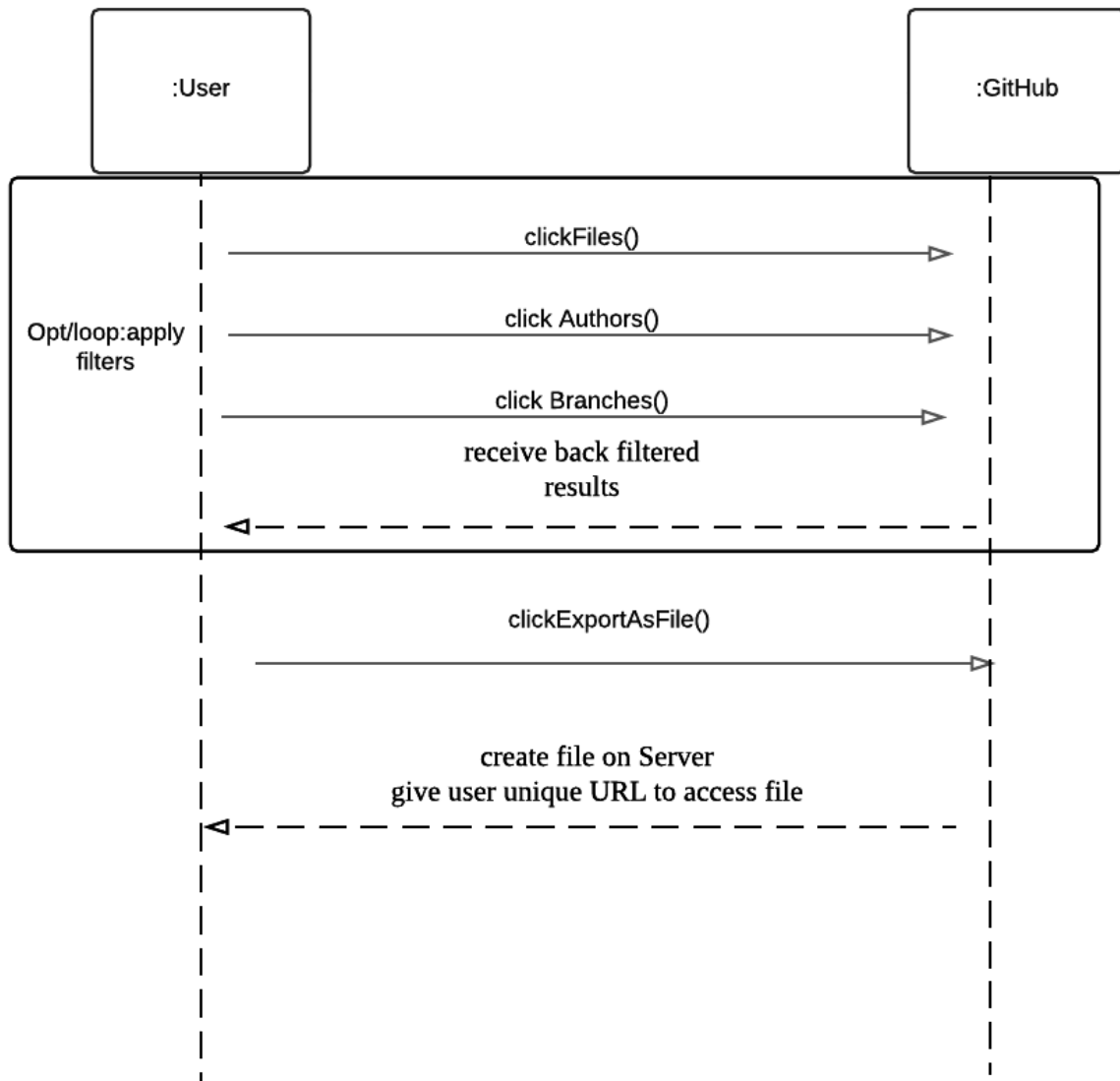
Use Case 12: User views a file/repo that's been deleted, and the view provides a notification

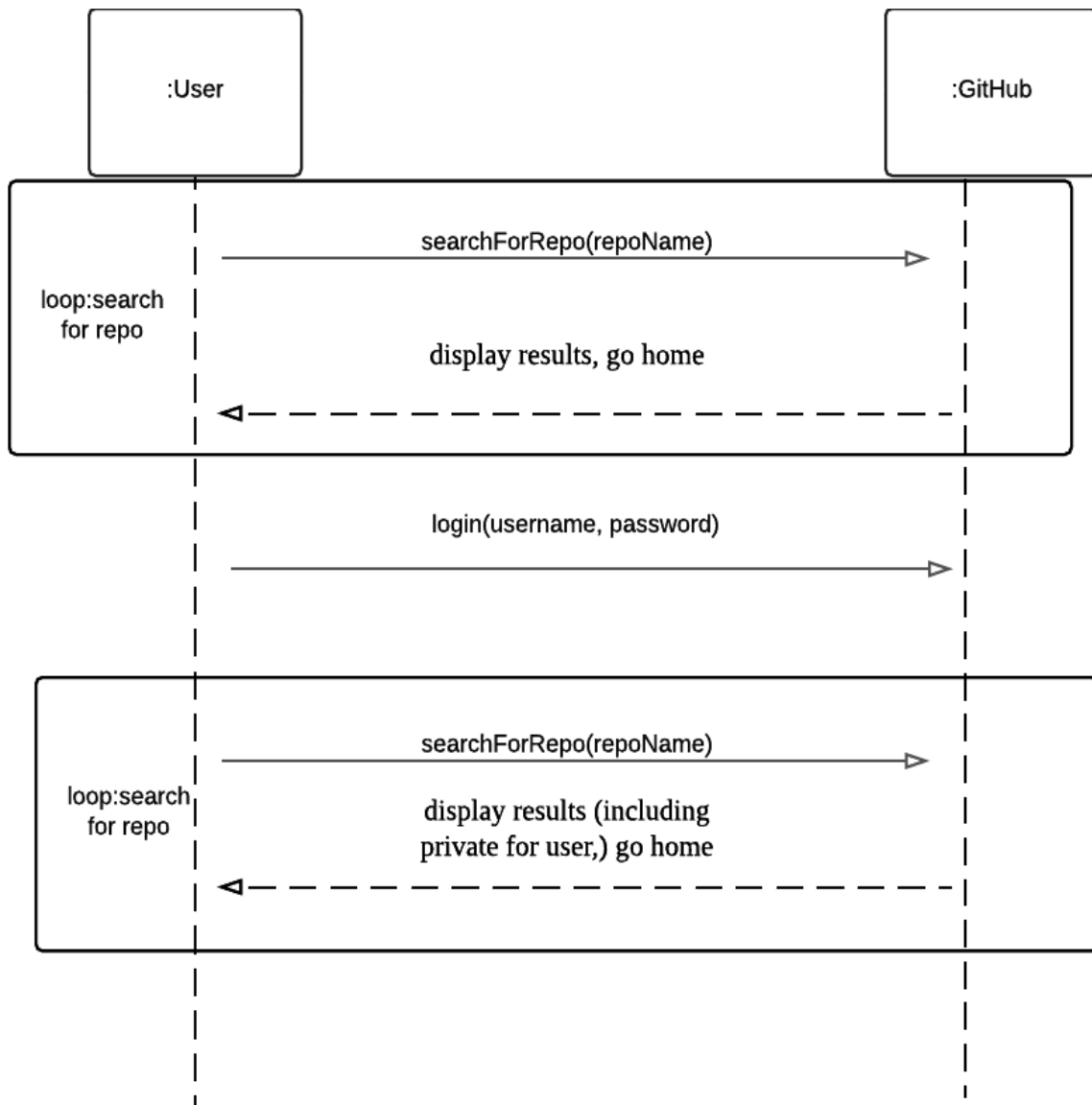**Use Case 13: Exporting the history of a file/author/branch to a file (JSON? HTML?)**

:User

:GitHub

clickFiles()

Opt/loop:apply filters

click Authors()

click Branches()

receive back filtered results

clickExportAsFile()

download a JSON/HTML/etc. file for user

Use Case 14: Exporting the history of a file/author/branch to a url

:User

:GitHub

Opt/loop:apply filters

clickFiles()

click Authors()

click Branches()

receive back filtered results

clickExportAsFile()

create file on Server
give user unique URL to access file

Use Case 15: User authenticates via username/password & selects a private repository

:User

:GitHub

loop:search for repo

searchForRepo(repoName)

display results, go home

login(username, password)

loop:search for repo

searchForRepo(repoName)

display results (including private for user,) go home

Use Case 16: Select history visualization methods (streamgraph, etc…)

:User

:GitHub

opt:add
graphs

click display____Graph()

displays ____ graph

*note:
____
graph here
acts as a
placeholder
for any
type of
graph