

Journal Client

Asheq Ahmed ara47

1. Project description:

Journal that maintains to-do list items, calendar events and personal notes Written in java to make use of classes and objects because that's so much easier in java than to make an object equivalent with C++ (which i don't really know) or with C

```
* Client.java (main method to testrun the journal. Has it's own instance of a
Journal that it updates with tasks when users enter them)
* Server.java (takes in taskid's from the socket and checks if it needs to update
it's version of the journal. If it needs to update anything, it sends back the
taskid's of the tasks it needs to the socket for the client to respond with.
Then, it takes in task data to update tasks)
* Task.java (implements a task object that contains taskid, content and taskType.
taskType is a enum of todo, notes, calendar entry)
* Journal.java (implements a queue of tasks using java ArrayList because it was
quick and I don't feel like writing an implementation of a real queue by
extending Java.util.Queue)
* TaskType.java (enum used in task.java)
```

2. Files included in .zip

3. Data structures include:

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* Queue implementation of tasks using ArrayList
* A Journal is a Queue of Tasks, implemented using ArrayList
  journal, however, is not an extension of Queue, because I honestly didn't want
  to
* Socket to share journal data, but this is a java posix socket
```

4. Demo

Extract **ara47_final.zip** open the directory in a linux shell

Use the **make** command to compile the project.

to begin, enter **java test <port>**

possible commands include: **display**, **add**, **remove**, **remove <taskid>**, **removeAll**,

populate, help, sync & exit.

enter populate to add example content to the Journal

enter display

```
user@computer$> java Client 4321
>please make a selection [display, add, remove, remove <id>, removeAll, populate,
help, sync, exit]
>populate
>display
+++++
+ TODO taskid: 7413, buy groceries
+ TODO taskid: 1604, clean room
+ TODO taskid: 9318, wash car
+ CAL_ taskid: 2772, gb meeting 12/7/16
+ NOTE taskid: 5991, locker combo is 10-20-30
+ CAL_ taskid: 6539, eecs 338 project due, 12/13/16
+++++
```

enter removeAll to clear all contents

enter remove to remove only the first task

enter display to find a task to remove, then enter remove <taskid> to select a particular task

4.1 Demo with both Client and Server Instances

This part can be easier to explain in a quicktime video Unfortunately it is several MB's large, so I made it a public file accessible here:

<https://drive.google.com/file/d/0B1aQmfAJorQ8dmtrck5zWEdEQnM/view>

Alternatively, you can find it on youtube: <https://youtu.be/He0i9tYZEUw>