Command:

Check:

* 1. commands that doesn't exist (done)
* 2. only enter empty space (done)
* 3. If showing command list every time after a user execute a command (done)

(1) create\_patient <username> <password>

* Check:
  + 1. Only available when haven’t logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Username taken ignore cases (done)
  + 4. Strong password (done)
* Behavior:
  + 1.automatically login when creation is done successfully and print (done)

(2) create\_caregiver <username> <password>

* Check:
  + 1. Only available when haven’t logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Username taken ignore cases (done)
  + 4. Strong password (done)
* Behavior:
  + 1.automatically login when creation is done successfully and print (done)

(3) login\_patient <username> <password>

* Check:
  + 1. Only available when haven’t logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Cannot find user if username and password doesn’t match or username not exist (done)
* Behavior:
  + 1. Successfully login ignore username cases and print username (done)

(4) login\_caregiver <username> <password>

* Check:
  + 1. Only available when haven’t logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Cannot find user if username and password doesn’t match or username not exist (done)
* Behavior:
  + 1. Successfully login ignore username cases and print username (done)

(5) search\_caregiver\_schedule <date>

* Check:
  + 1. Only available when a patient or caregiver has logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Invalid date (done)
* Behavior:
  + 1. Show message if no caregiver is available that day (done)
  + 2. Show all available caregivers on that day (done)
  + 3. Show all vaccines name and numbers if there is caregiver available on that day (done)

(6) reserve <date> <vaccine>

* Check:
  + 1. Only available for patients (done)
  + 2. Wrong tokens length (done)
  + 3. Patient has an appointment (done)
  + 4. If date is valid (done)
  + 5. If caregiver available (done)
  + 6. If vaccine exists (done)
  + 7. If vaccine stock enough (done)
* Behavior:
  + 1. Randomly assign a caregiver to user (done)
  + 2. Remove caregiver from availabilities table on that day (done)
  + 3. Decrease given vaccine stock by 1 (done)
  + 4. Add new appointment (done)

(7) upload\_availability <date>

* Check:
  + 1. Only available for caregiver (done)
  + 2. Wrong tokens length (done)
  + 3. Invalid date (done)
  + 4. If there already upload (done)
  + 5. If he/she has an appointment that day (done)
* Behavior:
  + 1. Successfully upload information (done)

(8) cancel <appointment\_id>

* Check:
  + 1. Only available if logged-in (done)
  + 2. Wrong tokens length (done)
  + 3. Invalid-id (done)
  + 4. User qualified to cancel (done)
* Behavior:
  + 1. Delete from appointment table (done)
  + 2. Add caregiver back to availabilities table (done)
  + 3. Add vaccine number back to vaccines table (done)

(9) add\_doses <vaccine> <number>

* Check:
  + 1. Only available for caregiver (done)
  + 2. Wrong tokens length (done)
  + 3. Negative number/not number (done)
* Behavior:
  + 1. Create new vaccine if not exist even if negative number (done)
  + 2. Successfully add doses (done)

(10) show\_appointments

* Check:
  + 1. Only available when logged-in (done)
* Behavior:
  + 1. Output current user’s appointments (done)

(11) logout

* Check:
  + 1. Only available if patient or caregiver login (done)
* Behavior:
  + 1. Logout current account (done)

(12) quit:

* Behavior:
  + 1. End the program (done)