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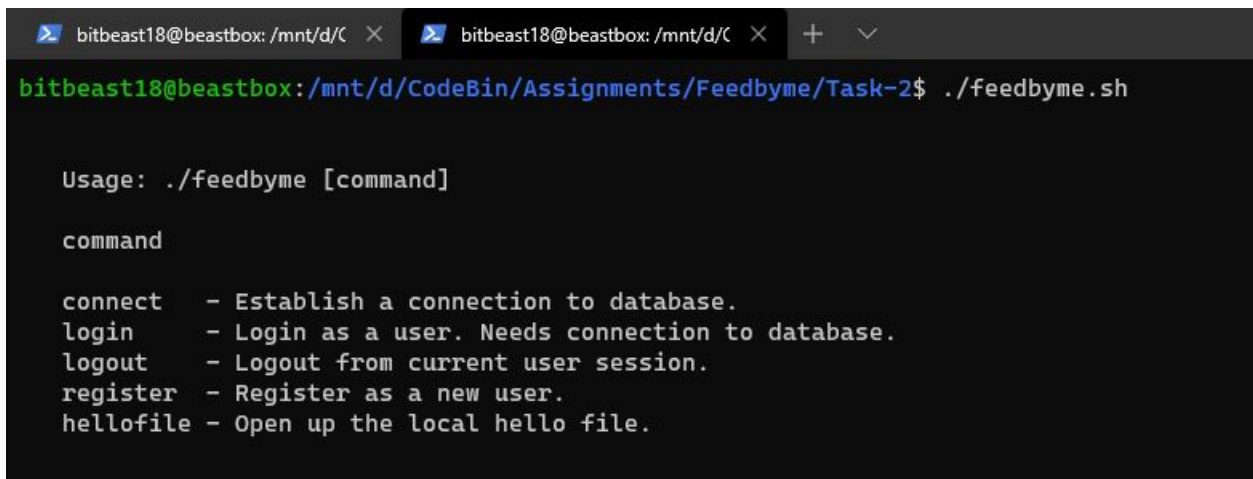
1. **Task Statement**

   Create a simple login, logout, register, hello file and connect to DB using shell scripting or bash scripting (Only perform in shell or console or terminal). After creating an account, open up a new "hello file".

2. **Tech stack**

   - **Languages:** Bash >= 4.3.
   - **DB:** Mongodb >= 4.2
   - **Required OS**: Windows WSL/Linux/MacOS/Any environment that supports bash.

3. **Solution description**

   - The access to the database is readWrite and open for all public IPs. This is to simplify the process.
   - The database is a remote cluster provided as a service (MongoDB as a Service).
   - The program uses "mongo shell" for interacting with the remote cluster. It is assumed to exist or can be downloaded along with the project files.
   - **The project files can be found at the following github repository** https://github.com/bitbeast18/feedbyme-assignment/tree/master/Task-2
   - The following are some of the screenshots of the script in action.

Usage info

Login command

Register command

● The rest of the document contains the bash script.

```bash
#!/bin/bash

MONGOSHELL='mongodb+srv://cluster0.pn5ss.mongodb.net/feedbyme'

function usage(){
    echo -e "\n
   Usage: ./feedbyme [command]

   command

   connect   - Establish a connection to the database.
   login     - Login as a user. Needs connection to database.
   logout    - Logout from current user session.
   register  - Register as a new user.
```

```bash
        hellofile - Open up the local hello file.
    \n"
}

function login(){
    read -p "Enter username: " USERNAME
    read -p "Enter password: " PASSWORD

    QUERY="db.userData.findOne({'username':'${USERNAME}',
'password':'${PASSWORD}'})"
    RES=$( mongoshell/bin/mongo "$MONGOSHELL" -u feedbyme -p feedbyme --quiet
--eval "$QUERY" )

    echo -e "\nServer output: $RES\n"

    if [ -z "$RES" ]; then
        echo "Invalid username or password. Try again!"
    else
        set MONGOUSER="$USERNAME"
        set MONGOPASS="$PASSWORD"

        echo -e "Successfully logged in!\n"
    fi
}

function logout(){
    unset MONGOUSER
    unset MONGOPASS

    echo -e "\nLogged out successfully!\n"
}

function register(){
    read -p "Enter username: " USERNAME
    read -p "Enter password: " PASSWORD

    QUERY="db.userData.insert({'username':'${USERNAME}',
'password':'${PASSWORD}'})"
```

```
    mongoshell/bin/mongo "$MONGOSHELL" -u feedbyme -p feedbyme --quiet --eval
"$QUERY" &> /dev/null

    set MONGOUSER="$USERNAME"
    set MONGOPASS="$PASSWORD"

    echo -e "\nSuccessfully registered!\n"
    hellofile
}

function hellofile(){
    echo -e "\nOpening hellofile.txt...\n"
    vi hellofile.txt
}

function connect(){
    if ! command -v "./mongoshell/bin/mongo" &> /dev/null; then
    echo -e "\nConnection request failed!\n"
        echo -e "Reason: Mongo is not installed on your system!\n"
    else
        echo -e "\nConnection to database successful!\n"
    fi
}

if [ $# = 0 ]; then
    usage
elif [ $1 = "login" ]; then
    login
elif [ $1 = "logout" ]; then
    logout
elif [ $1 = "register" ]; then
    register
elif [ $1 = "hellofile" ]; then
    hellofile
elif [ $1 = "connect" ]; then
    connect
else
    echo -e "\nInvalid Argument!"
```

```
    usage
fi
```