Design Document
CSCE247
Group: “A”

System Overview

This software will be a console application that will allow students to connect with employers looking for interns. The software will use JSON files to store the necessary information about jobs, students, employers, and the jobs they post. Data will be handled by a database manager that can make updates to stored files and read in saved files. Permissions to access each will be managed by the interface manager so that user data will be shared only with the necessary parties. The software will hold certain records about each student so employers can view their applicants in an effective way.

References

System Requirements Specification for CSCE247 Software Project, By Titan Kennett, Jack Faust, O'darrius Caldwell, Kyler Spell.
https://drive.google.com/file/d/1PtNH13c5oirxEw0J3U2L5kvk-1PgUqSn/view?usp=sharing

UML Design Diagram Outline By Titan Kennett, Jack Faust, O'darrius Caldwell, Kyler Spell.

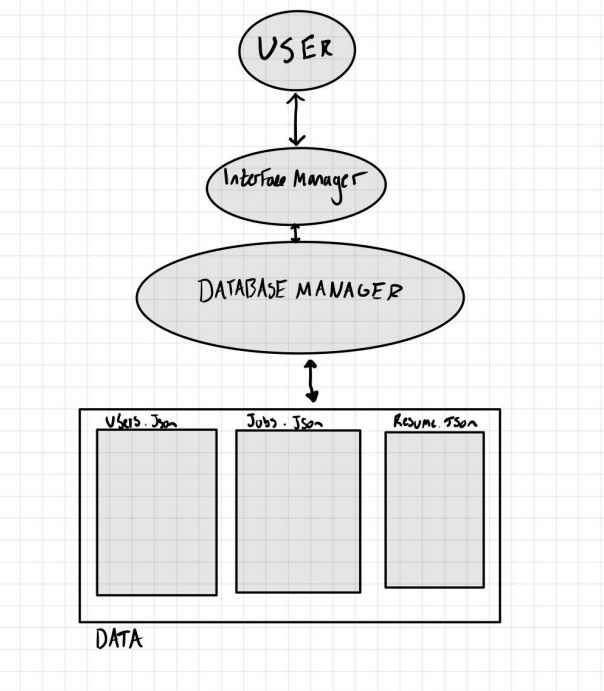
https://docs.google.com/document/d/1sieEJz52wOwE6ok_xNTJAaYrFSwgXAuRgNKrIeLvQ-k/edit?usp=sharing

Formatted Requirements Spreadsheet By Titan Kennett, Jack Faust, O'darrius Caldwell, Kyler Spell.

https://docs.google.com/spreadsheets/d/1RixS3X21HdmrQNqNZbq54EJSKelmrT34UvHhoIlhPEs/edit?usp=sharing

Environment Overview

This application will be a console application that will run on a computer. The data will be stored in json files. These Json files will be parsed by the database manager class. Returning the relevant information and also creating additions to existing files. That data will then be released to the user when they request it by the interface manager. This class ensures the user has the correct permissions then passes the request on to the database manager. When it receives that data, it formats it and returns it to the user.



User Interface

Specific Interface	Everyone
Login	Student Specific
Sign Up	Employer Specific
Student Home	Admin Specific
Employer Home	
Admin Home	
Create Resume	
Edit Resume	
List Jobs	
Veiw Job	
Apply to Job	
View Applied Jobs	
Retract Application	
Create Job	
Edit Job	
Veiw Applicants	
Veiw Applicant Resume	
Rate Student	
Remove Job	
Remove Student	

//LIST JOB/HOME SCREEN

Welcome to our Internship Seeker
-Enter keyword and or location to begin-
[User Input]
You can view internships by inputting it's corresponding number or apply these filters:
01-Paid/Nonpaid(Toggle), 02-Wage, 03-Remote, 04-Sector 05-New Search
[List of Internships]
01
[List of paid Internships]
01
[List of nonpaid internships]
02
Error, no possible wage for nonpaid internships. Filter to paid or start new search.

//VIEW JOB

You can view internships by inputting it's corresponding number or apply these filters:
01-Paid/Nonpaid(Toggle), 02-Wage, 03-Remote, 04-Sector 05-New Search
[List of Internships]
1 (Chooses first internship in list)
[Internship title, rating
info]

Press B to go back or A to apply

//APPLY JOB

[Internship title, rating
info]

Press B to go back or A to apply
c
Error, please press B or A
A
[list of resumes]
Choose resume to send to company by pressing corresponding number
1 (First resume in list)
Resume has been sent

//IOGIN

Welcome to our Internship Seeker
Enter username
[User Input]
Enter password
[User Input]
Incorrect combination, try again
Enter username
[User Input]
Enter password
[User Input]
[Home Screen]

//CREATE RESUME
Please answer the prompts with the appropriate information to create a new resume.
Full name:
[user input]
Email:
[user input]
Phone Number:
[user input]
Address:
[user input]
Education (please format and input as you'd like to see it on the resume):

[user input]
Skils (please format and input as you'd like to see it on the resume):
[user input]
Experience(please format and input as you'd like to see it on the resume):
[user input]
Thank you, generating resume!

//EDIT RESUME

Pick a resume to edit:
[user input]
What field would you like to edit?
Enter 1 for email, 2 for Phone number, 3 for Adress,
4 for Education, 5 for Skills, 6 for Experience
[user input]
Enter new text for this field:
[user input]
Thank you, generating edited resume!

//SIGN UP STUDENT

Register here for first time users
Account type: (S)tudent or (E)mployer?
A
Invalid choice, try again
S
Type Username (.edu email)
[User Input]
Type Password, Must be at least six character with one capital and one lowercase letter
[User Input]
Repeat Password
[User Input]
Passwords don't match try again
Type Password, Must be at least six character with one capital and one lowercase letter
[User Input]
Repeat Password
[User Input]
Password not strong enough (See password requirements)
Type Password, Must be at least six character with one capital and one lowercase letter
[User Input]
Repeat Password
[User Input]
Registration successful

//SIGNUP EMPLOYER

Register here for first time users
Account type: (S)tudent or (E)mployer?
E

Type Username (company email)
[User Input]
Type Password, Must be at least six character with one capital and one lowercase letter
[User Input]
Repeat Password
[User Input]
Registration sucessful

//ADMIN HOME
Welcome back to the Internship Seeker
Please select option
1-View Jobs
2-View Students
3-Remove Jobs
4-Remove Students

5
Invalid Choice, please select 1-4
1

//View Job (Same as for everyone)

You can view internships by inputting it's corresponding number or apply these filters:
01-Paid/Nonpaid(Toggle), 02-Wage, 03-Remote, 04-Sector 05-New Search
[List of Internships]
1 (Chooses first internship in list)
[Internship title, rating
info]

Press B to go back or A to apply

B

Welcome back to the Internship Seeker
Please select option
1-View Jobs
2-View Students
3-Remove Jobs
4-Remove Students

2

//View Students
Please enter the name of the student
[User input]
[Lists Students info]
Would you like to return Y/N?

r

Please select Y/N
Y

Welcome back to the Internship Seeker
Please select option
1-View Jobs
2-View Students
3-Remove Jobs
4-Remove Students

3

//Remove Job

4

//Remove Student

//STUDENT HOME SCREEN
Welcome to our Internship Seeker
Your Student rating-3.5
-What do you want to do-
1-Search
2-Resume
3-Applied Internships

4
Invalid choice, try again
3

//VIEW APPLIED INTERNSHIPS
Here is your history of applied internships
You can view internships by inputting it's corresponding number
[List of internship in order of newest to oldest date]

[User Input] 205 (205th Internship in list)

[Internship title, rating
info]

Press B to go back or R to retract application

//RETRACT APPLICATION

[Internship title, rating
info]

Press B to go back or R to retract application
R

Application removed

//REMOVE STUDENT

Enter name of student to remove
[User Input]
Student must be in the system to be removed
[User Input]
Are you sure you want to remove this student?
[User Input]
Student has been removed

//CREATE JOB

Enter the name of the job:
[User Input]
Enter the description of the job:
[User Input]
Enter the visibility of the job: (V)isible or (H)idden
[User Input]
visibility must be either (V)isible or (H)idden
[User Input]
Enter the Availibility of the job: (A)vailable or (U)navailable
[User Input]
Availibility must be either (A)vailable or (U)navailable
[User Input]
Job has been created

//EDIT JOB

Enter name of job to edit
[User Input]
Job must be in the system to be edited
[User Input]
What would you like to edit? (N)ame, (D)escription, (V)isibility, (A)vailability
[User Input]
Invalid choice, try again
[User Input]
What would like to change the value to?
[User Input]
Invalid choice, try again
[User Input]
Job has been edited

//VIEW APPLICANTS
Enter name of job to view applicants
[User Input]
Job must be in the system to be viewed
[User Input]

List of applicants:
1 (First applicant in list)
Applicant name, rating
(V)eiw applicant resume
(R)ate student
(N)ext
[User Input]

//VIEW APPLICANT Resume
Applicant name, rating
[Resume]
(R)ate Student
(E)xit
[User Input]
Invalid choice, try again
[User Input]

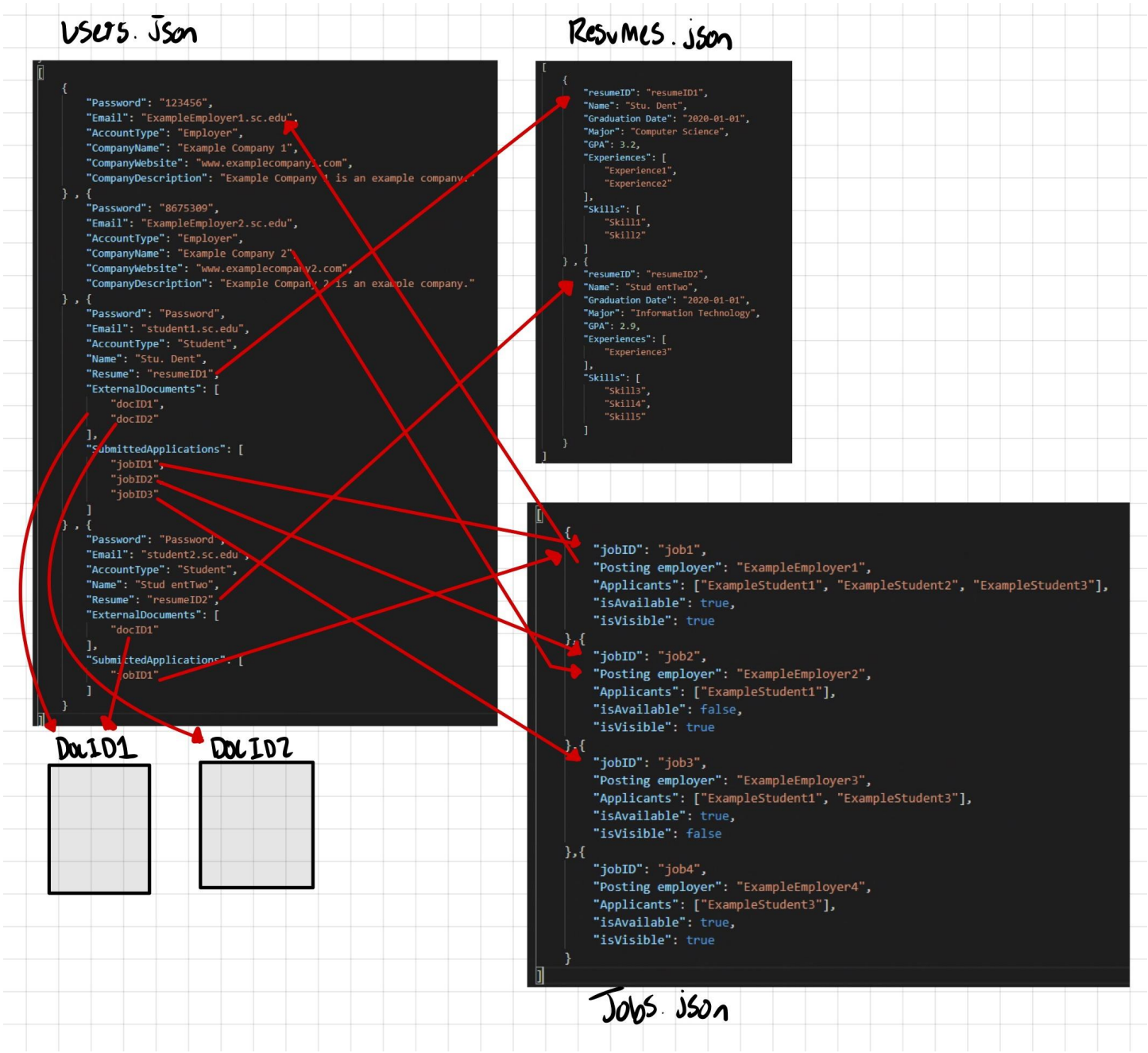
//RATE STUDENT

Enter name of student to rate
[User Input]
User must exist in database
[Repeat Input]
Enter rating (1-5)
[User Input]
Rating must be between 1 and 5
[Repeat Input]
Student has been rated

//REMOVE JOB

Enter name of job to remove
[User Input]
User must exist in database
[Repeat Input]
Are you sure you want to remove this job? (Y or N)
[User Input]
Answer must be Y or N
[User Input]
Job has been removed

Data Storage

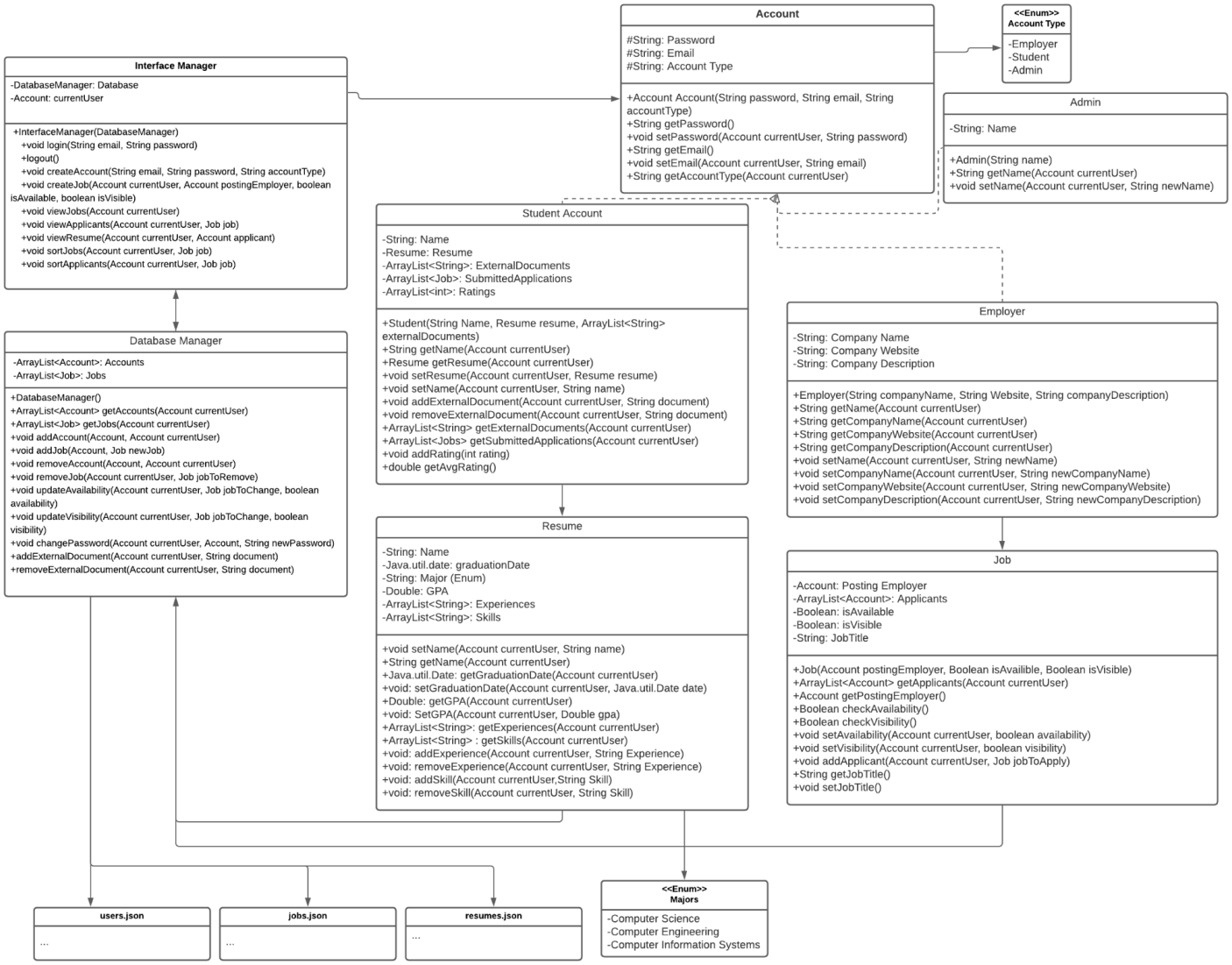



```
[
    {
        "Password": "123456",
        "Email": "ExampleEmployer1.sc.edu",
        "AccountType": "Employer",
        "CompanyName": "Example Company 1",
        "CompanyWebsite": "www.examplecompany1.com",
        "CompanyDescription": "Example Company 1 is an example company."
    } , {
        "Password": "8675309",
        "Email": "ExampleEmployer2.sc.edu",
        "AccountType": "Employer",
        "CompanyName": "Example Company 2",
        "CompanyWebsite": "www.examplecompany2.com",
        "CompanyDescription": "Example Company 2 is an example company."
    } , {
        "Password": "Password",
        "Email": "student1.sc.edu",
        "AccountType": "Student",
        "Name": "Stu. Dent",
        "Resume": "resumeID1",
        "ExternalDocuments": [
            "docID1",
            "docID2"
        ],
        "SubmittedApplications": [
            "jobID1",
            "jobID2",
            "jobID3"
        ]
    } , {
        "Password": "Password",
        "Email": "student2.sc.edu",
        "AccountType": "Student",
        "Name": "Stud entTwo",
        "Resume": "resumeID2",
        "ExternalDocuments": [
            "docID1"
        ],
        "SubmittedApplications": [
            "jobID1"
        ]
    }
]
```

```
[
    {
        "resumeID": "resumeID1",
        "Name": "Stu. Dent",
        "Graduation Date": "2020-01-01",
        "Major": "Computer Science",
        "GPA": 3.2,
        "Experiences": [
            "Experience1",
            "Experience2"
        ],
        "Skills": [
            "Skill1",
            "Skill2"
        ]
    } , {
        "resumeID": "resumeID2",
        "Name": "Stud entTwo",
        "Graduation Date": "2020-01-01",
        "Major": "Information Technology",
        "GPA": 2.9,
        "Experiences": [
            "Experience3"
        ],
        "Skills": [
            "Skill3",
            "Skill4",
            "Skill5"
        ]
    }
]
```

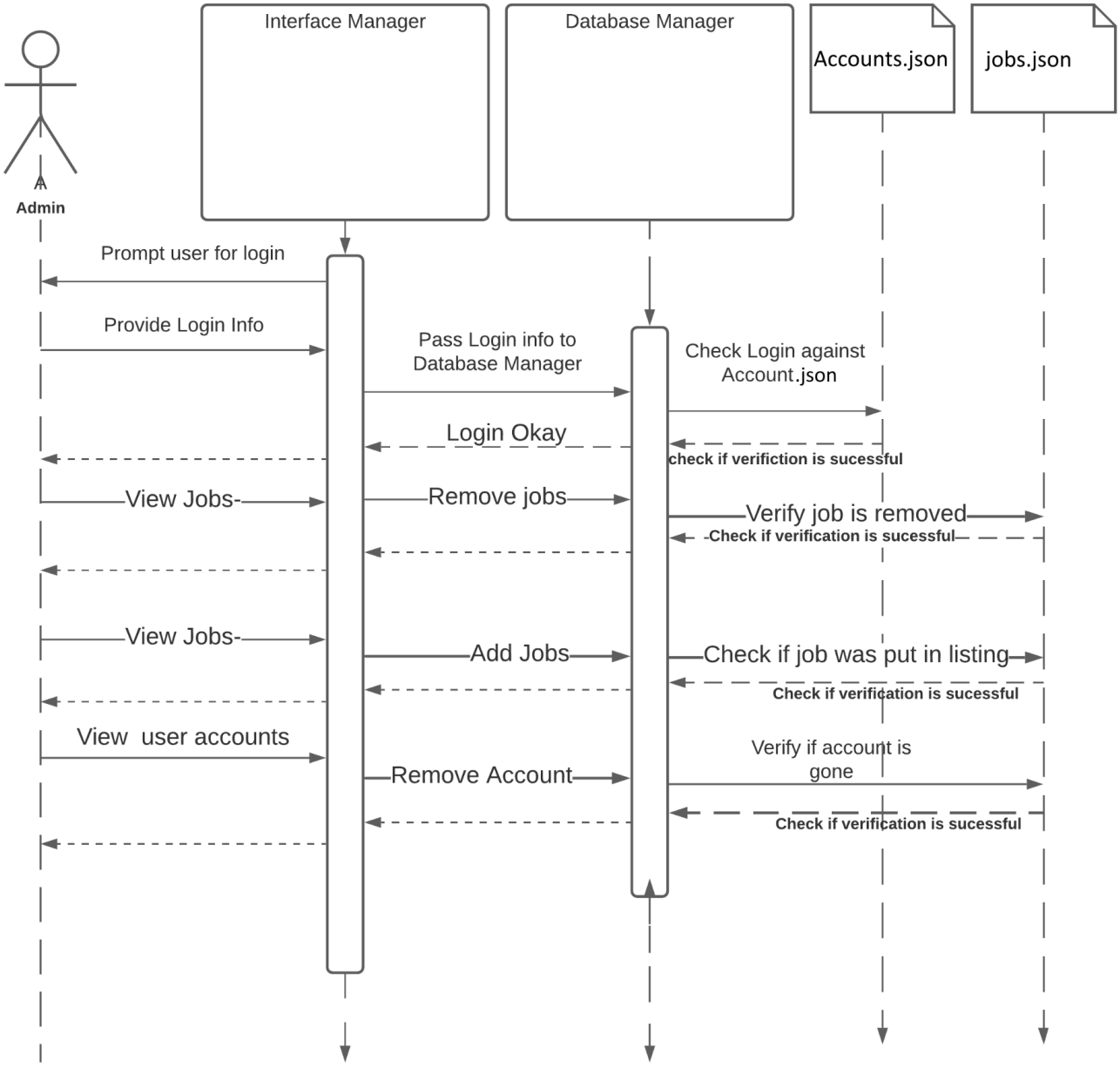
```
[
    {
        "jobID": "job1",
        "Posting employer": "ExampleEmployer1",
        "Applicants": ["ExampleStudent1", "ExampleStudent2", "ExampleStudent3"],
        "isAvailable": true,
        "isVisible": true
    },{
        "jobID": "job2",
        "Posting employer": "ExampleEmployer2",
        "Applicants": ["ExampleStudent1"],
        "isAvailable": false,
        "isVisible": true
    },{
        "jobID": "job3",
        "Posting employer": "ExampleEmployer3",
        "Applicants": ["ExampleStudent1", "ExampleStudent3"],
        "isAvailable": true,
        "isVisible": false
    },{
        "jobID": "job4",
        "Posting employer": "ExampleEmployer4",
        "Applicants": ["ExampleStudent3"],
        "isAvailable": true,
        "isVisible": true
    }
]
```

Class Diagram

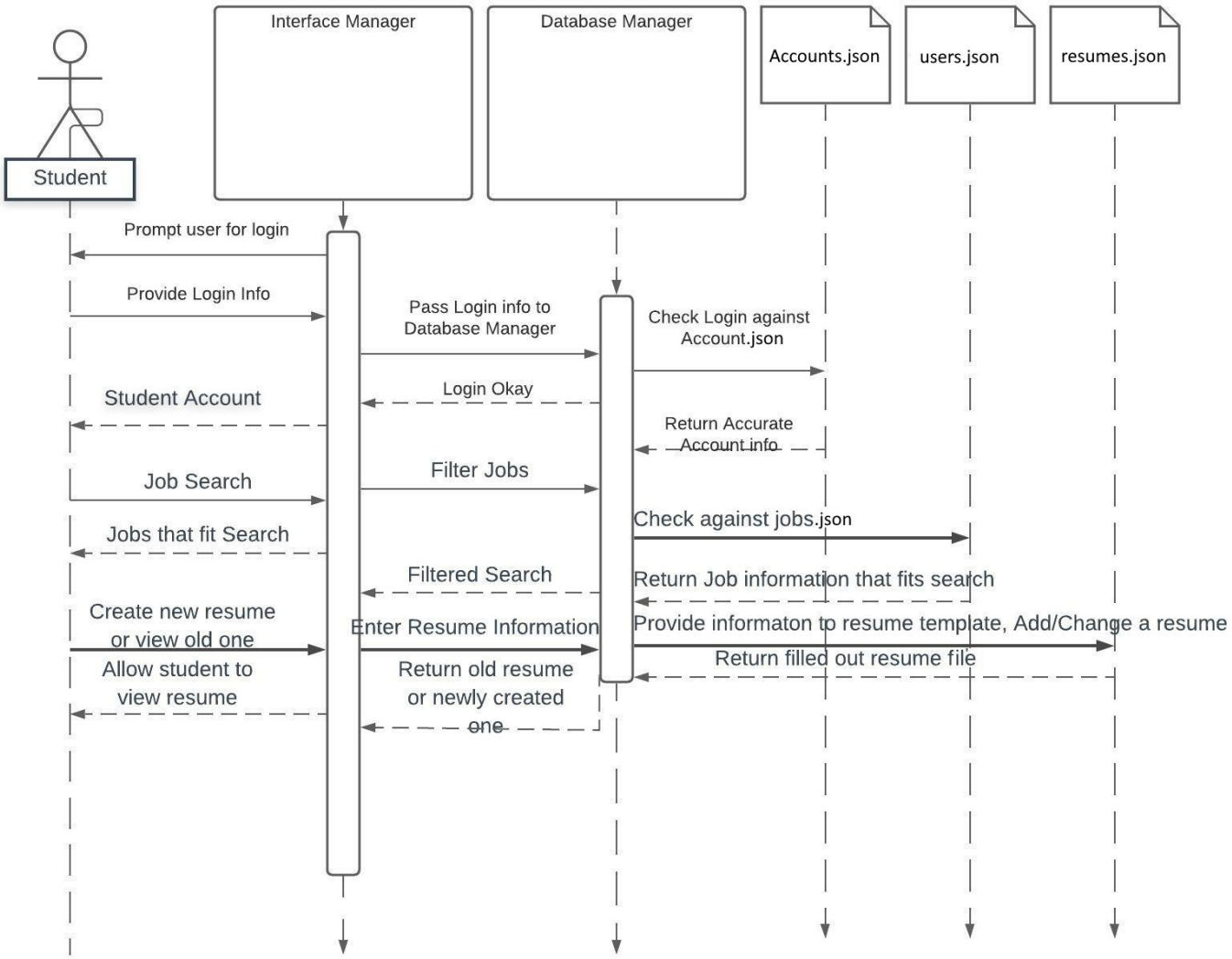
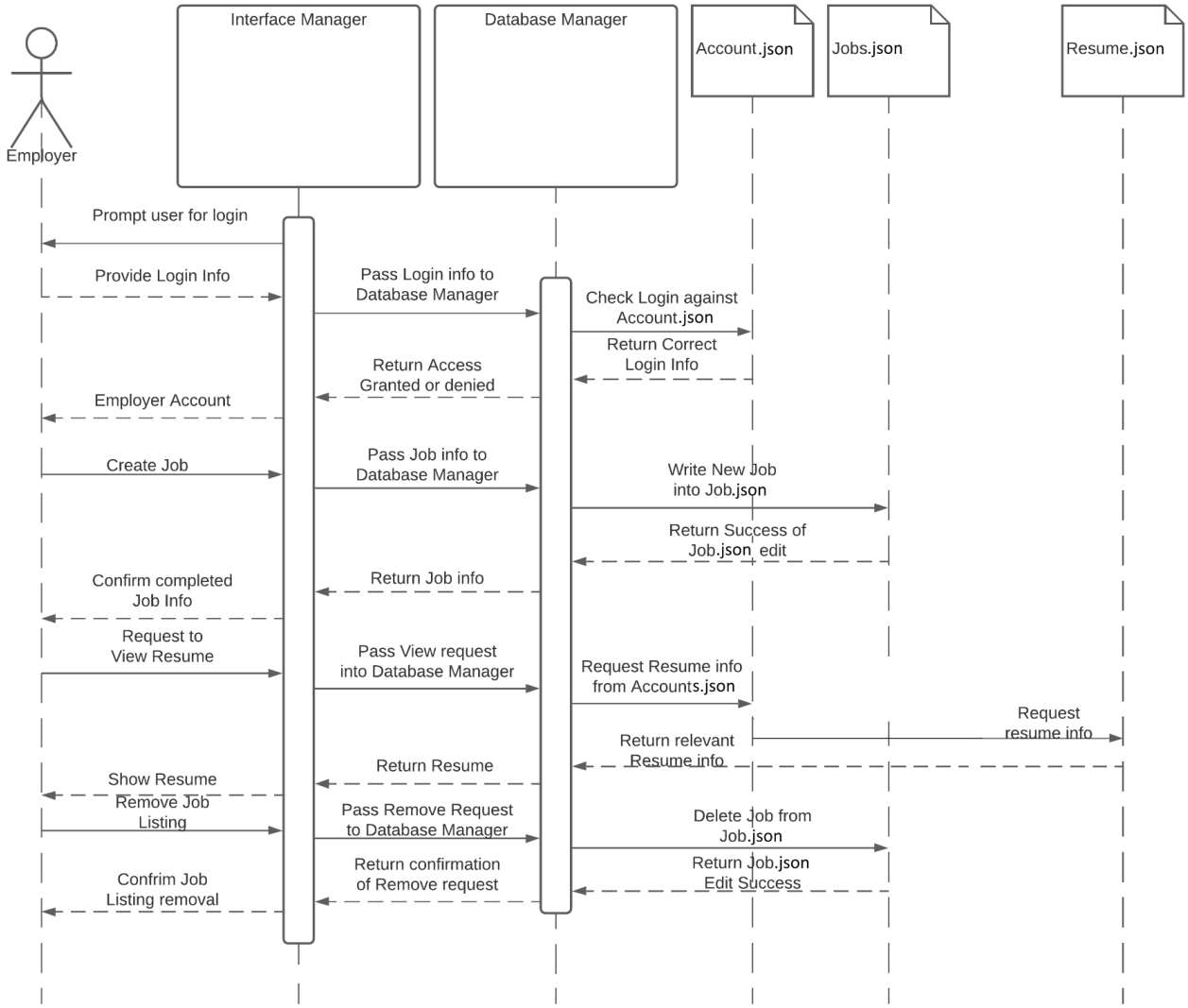


Sequence Diagrams

Admin Diagram



Student Diagram



Employer Diagram