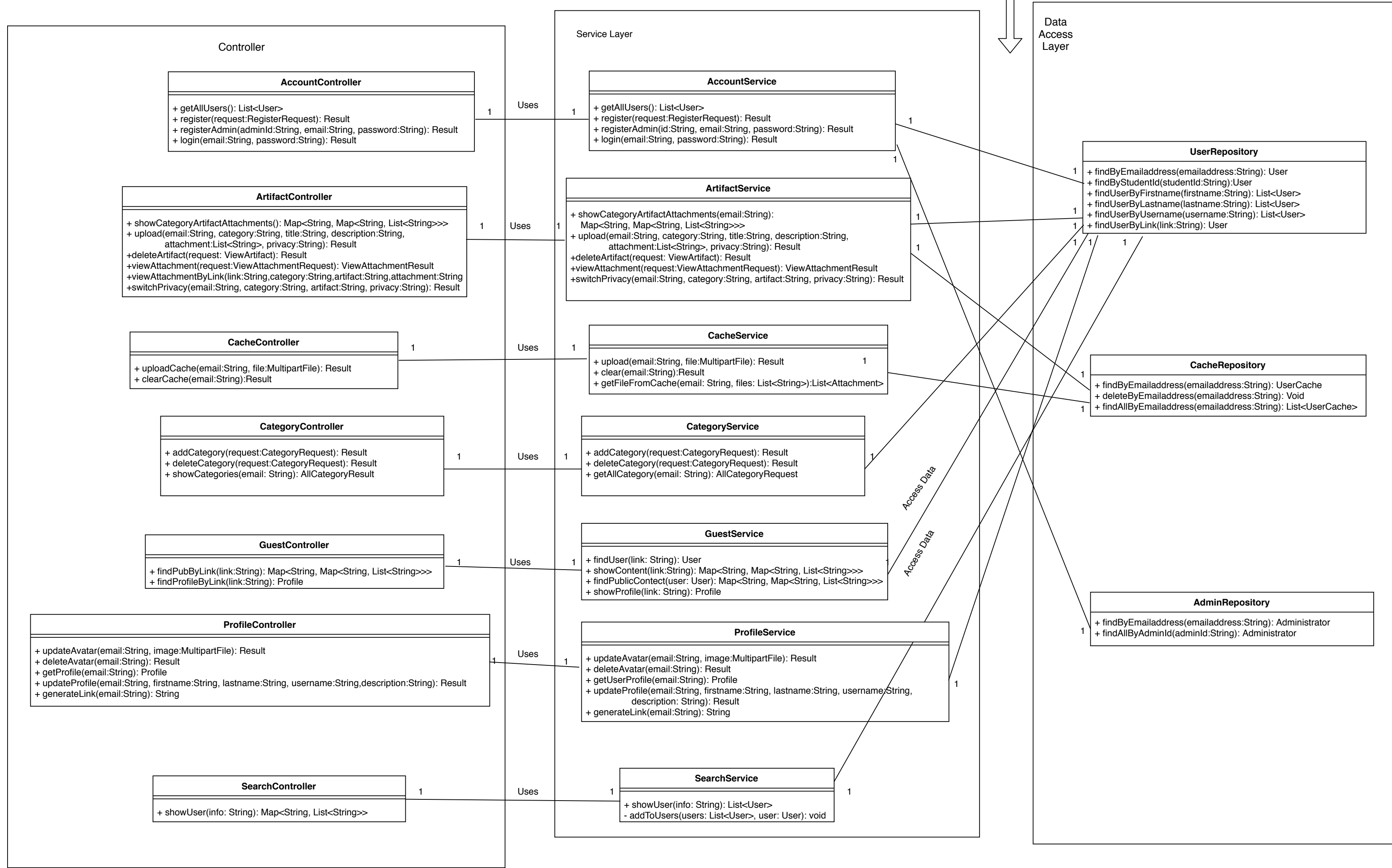


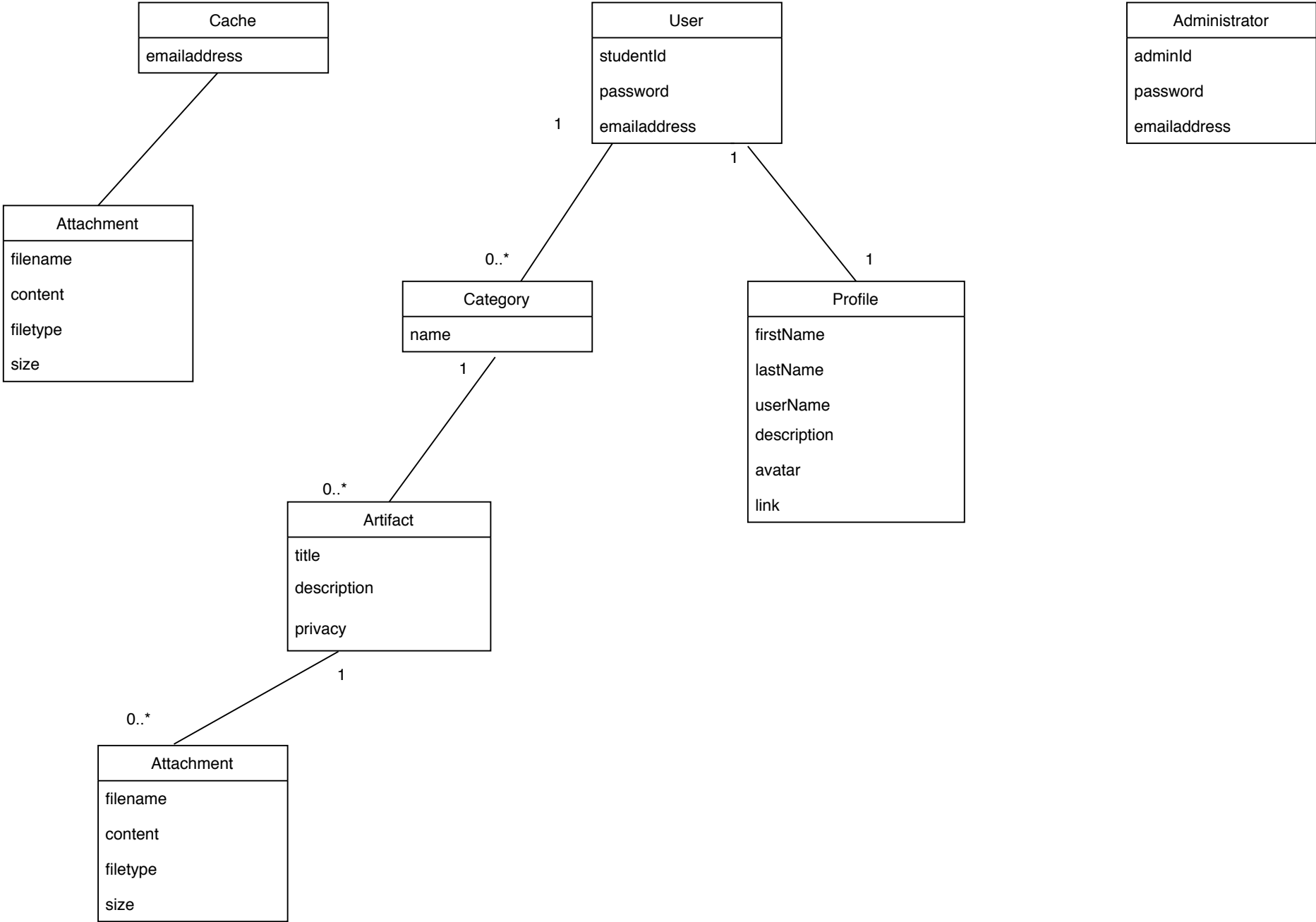
Spring MVC 3-level architecture

Note: Each class in this architecture is a singleton and the property is set automatically by Spring framework

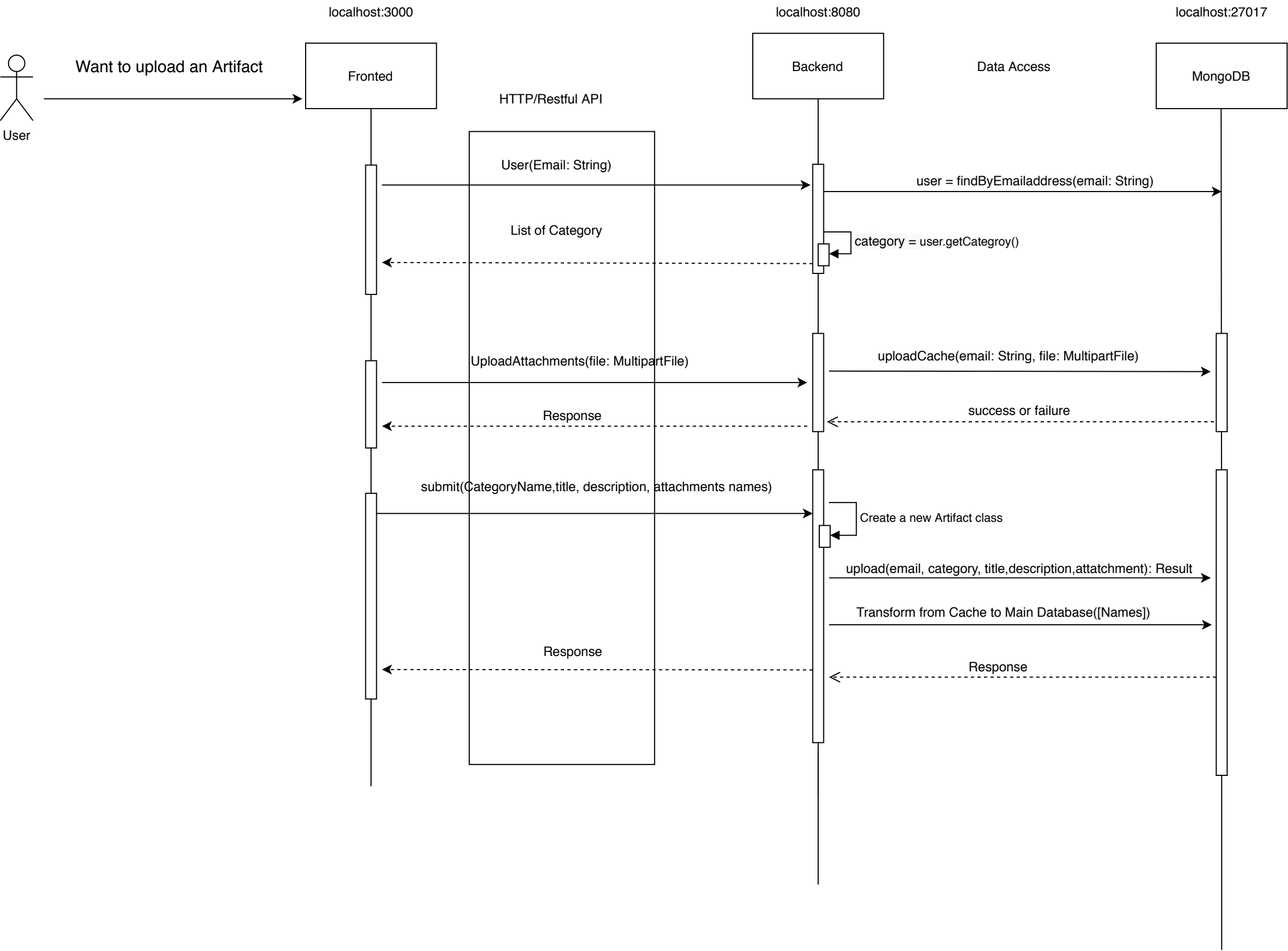
Note: Every dependency without label here is : Manage Data(Service -> Data Access)



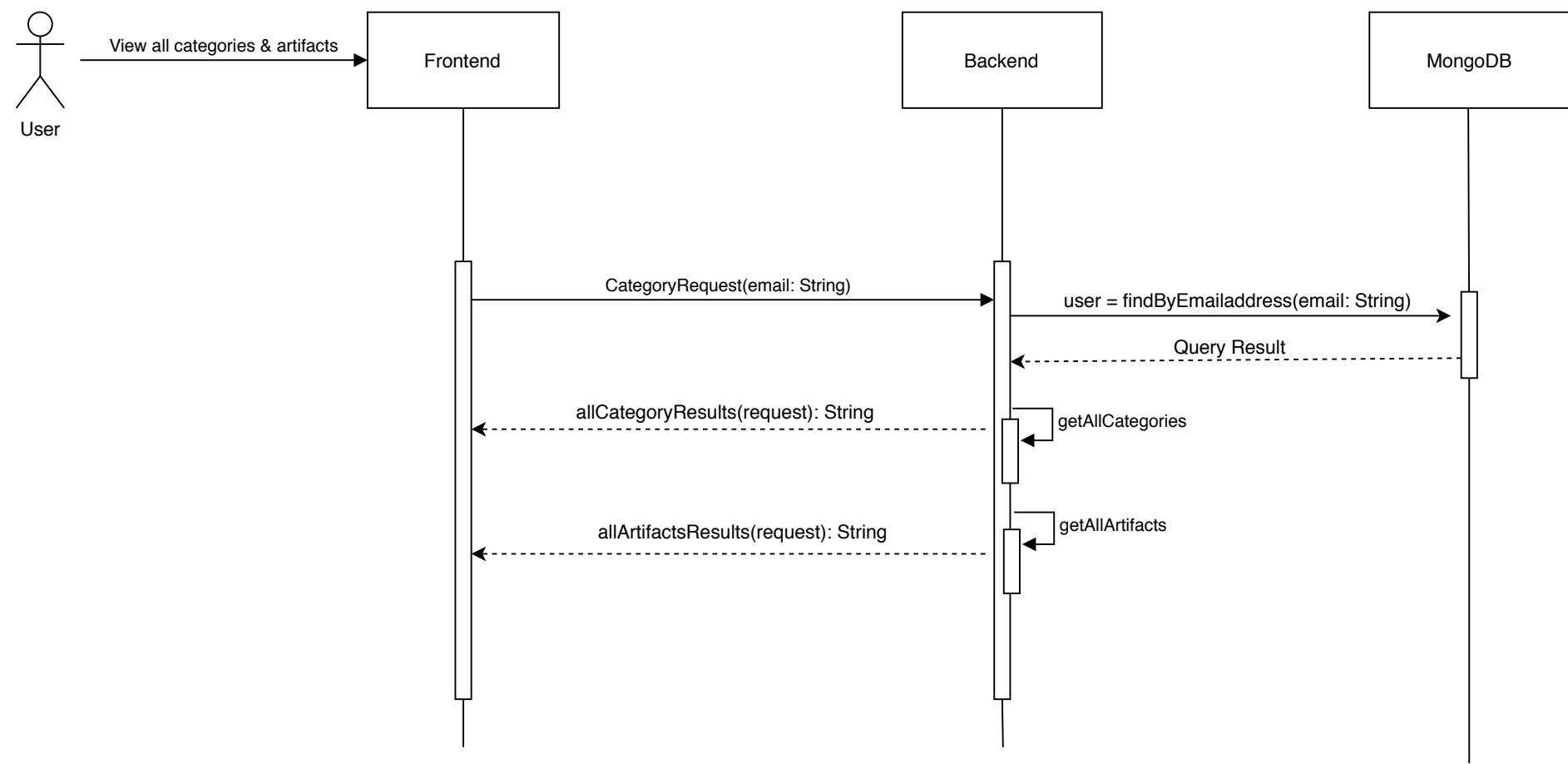
Java class used in MongoDB



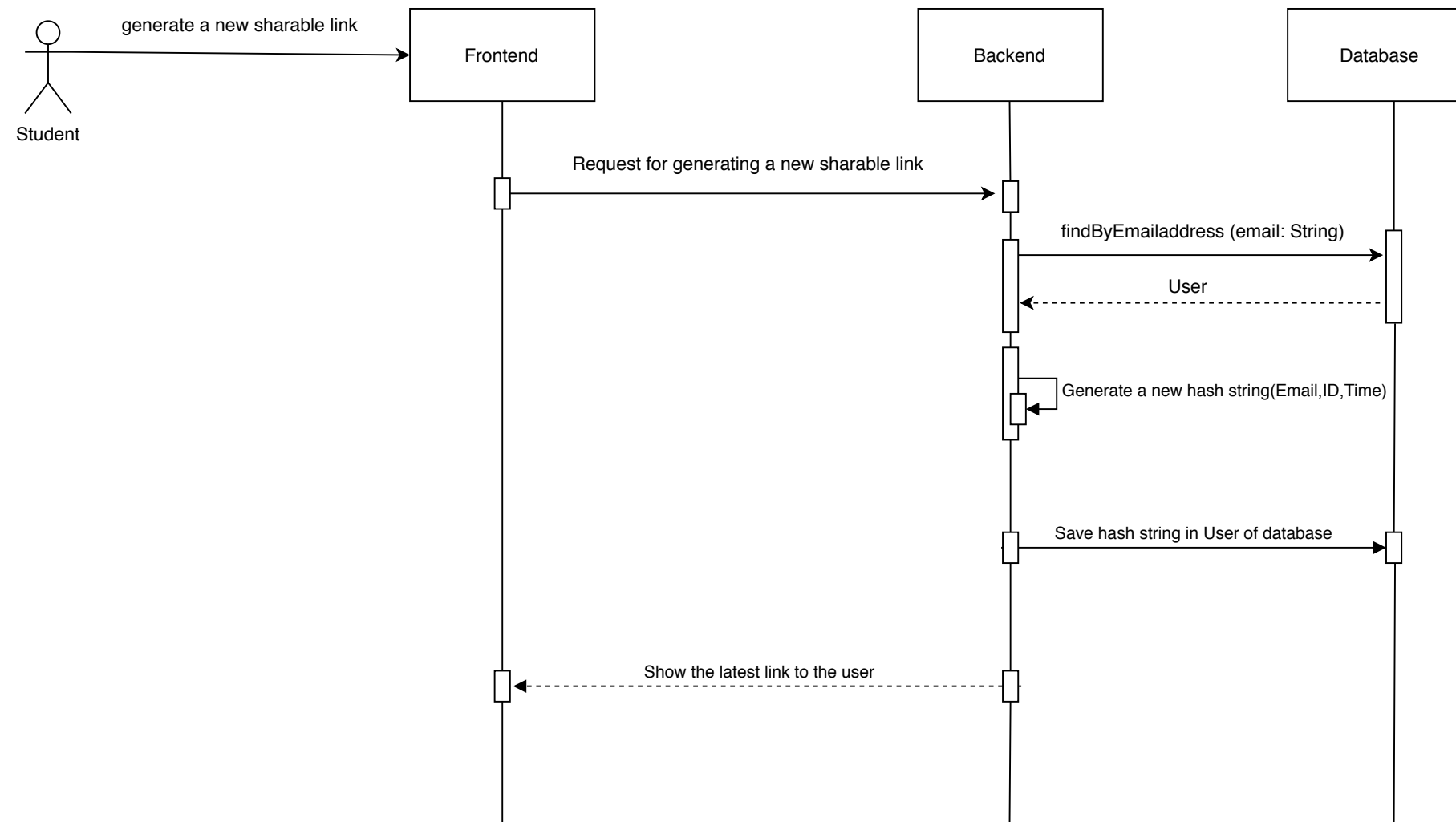
System sequence diagram: Upload an artifact



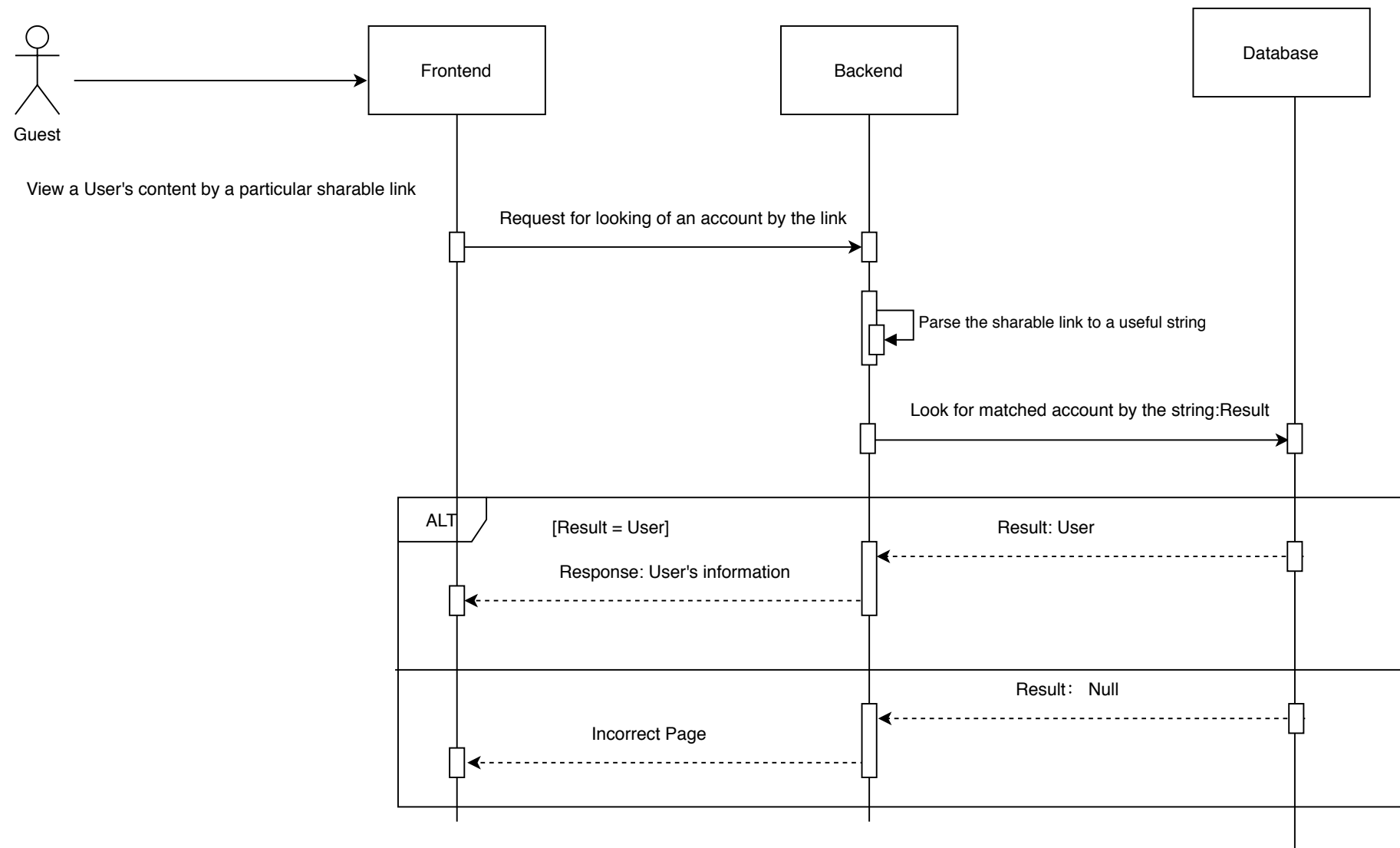
System sequence diagram: View all artifacts as Owner/Guest



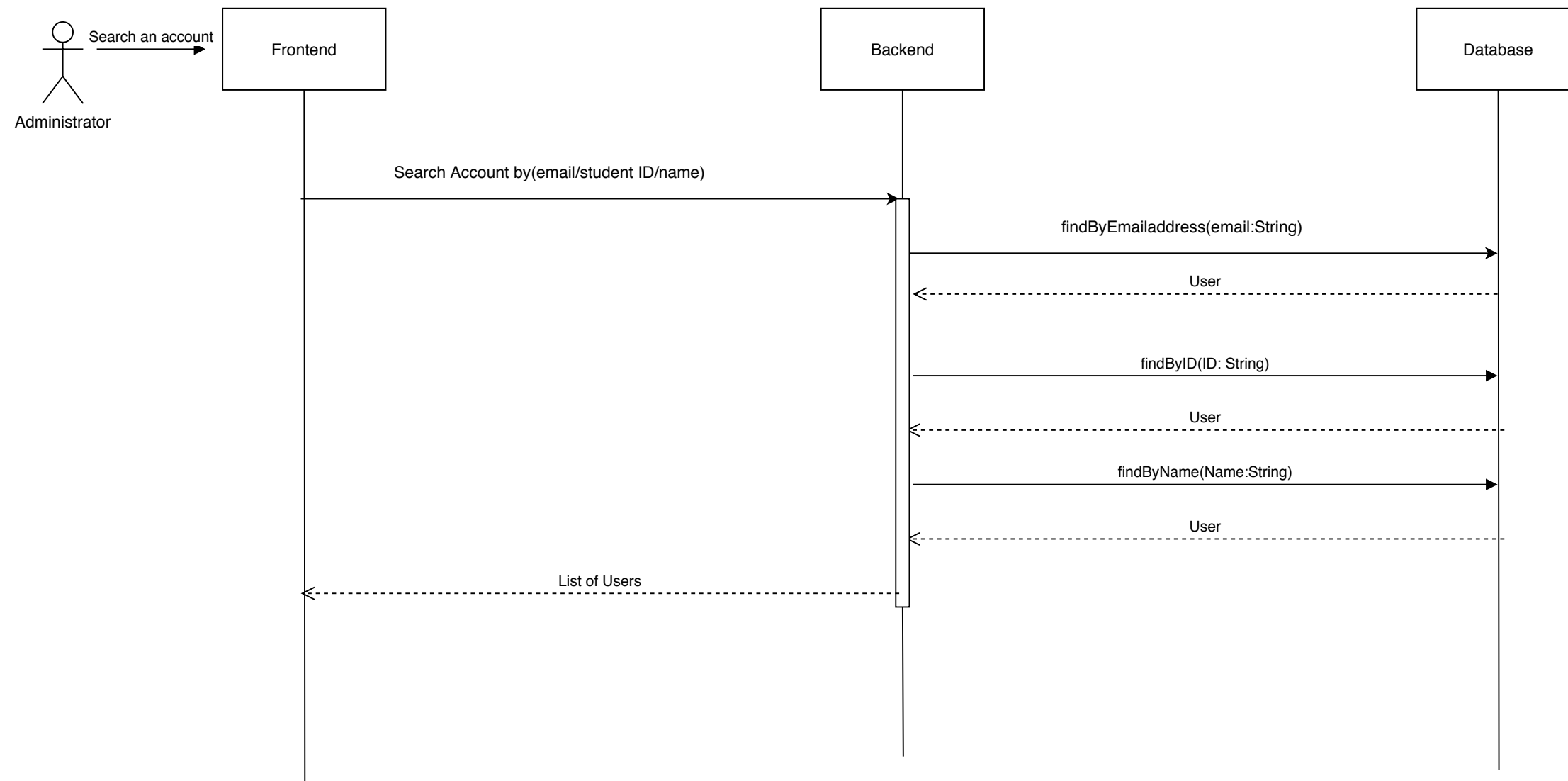
System sequence diagram: User generates a new sharable link



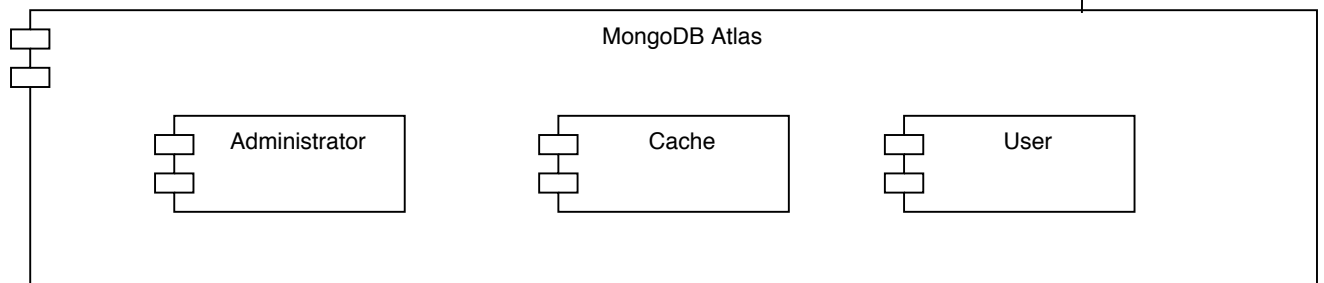
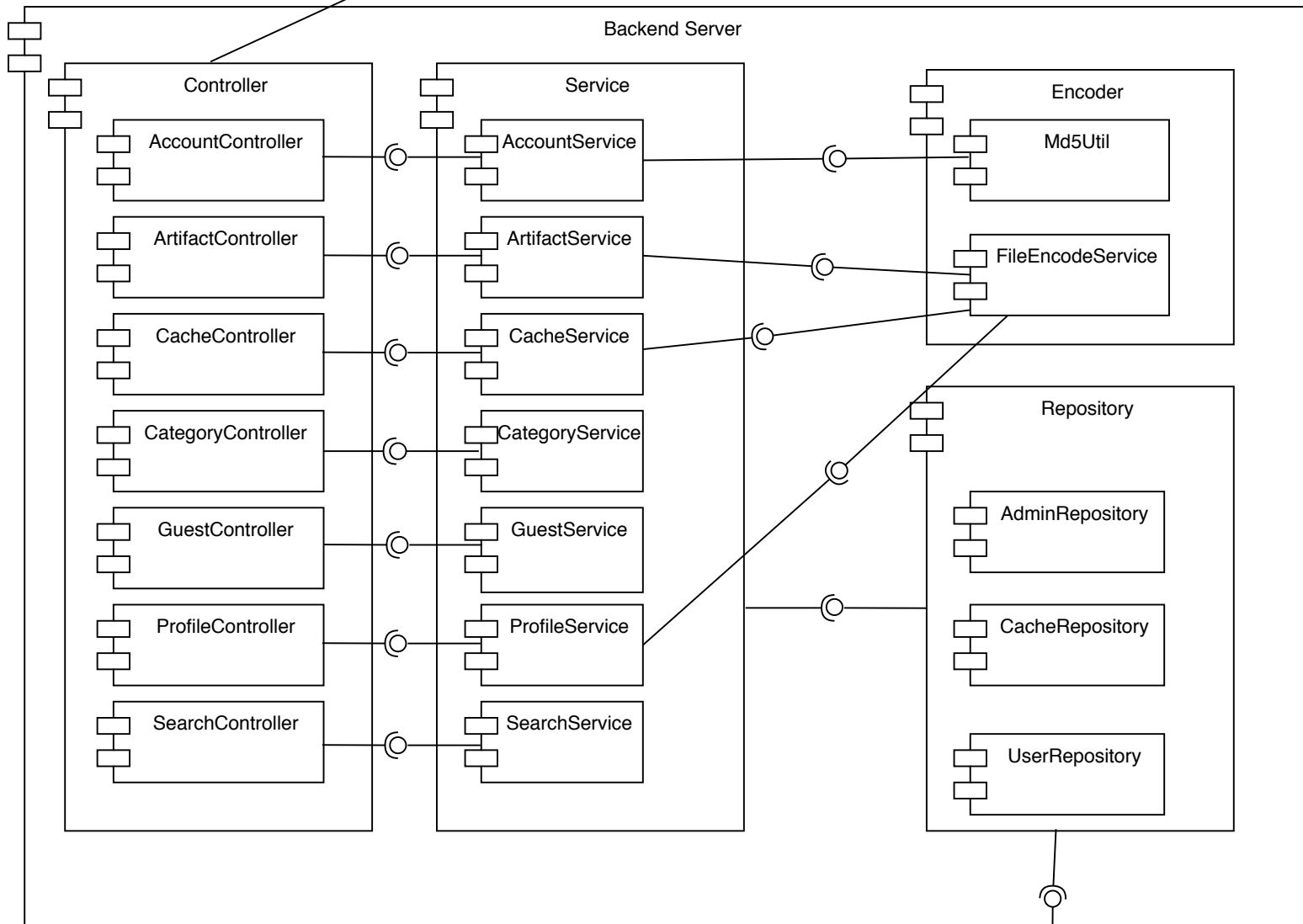
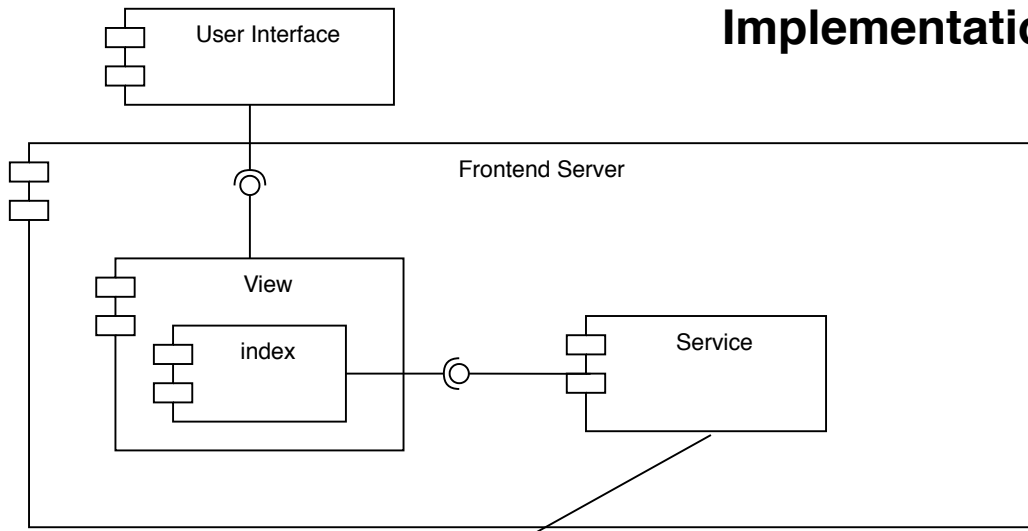
System sequence diagram: Guest view content through a sharable link



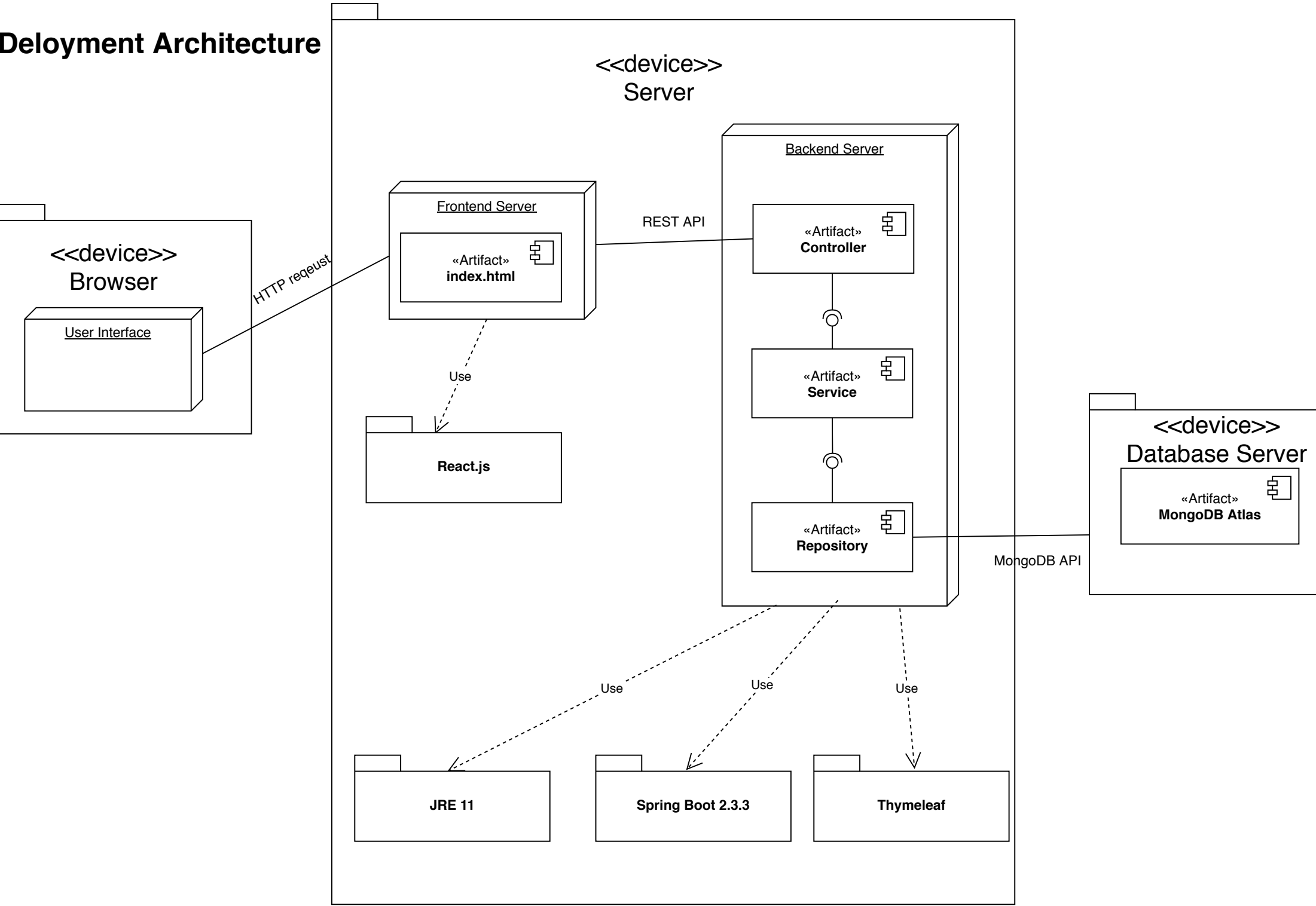
System sequence diagram: Administrator search a particular account from the system



Implementation View



Deployment Architecture



Scenarios

Use Case 1: Uploading File

Scope: ePortfolio system

Primary Actor: Student

Supporting actor: System Administrator

Offstage actor: Database

Preconditions:

The student has registered an account in the database.

Success guarantee:

The network is stable and no file is lost.

Students get verified by the system successfully.

Main successful scenarios:

1. The student has used the correct email and password to log in the system.
2. Student clicks on Artifact.
3. Student clicks or drags files to upload.
4. Files will be first loaded in a cache space to detect malicious attacks.
5. System returns success to the student.
6. The student chooses or creates a new category for this artifact.
7. The student writes a title, description and chooses privacy of the artifact.
8. Student clicks upload to confirm creating the artifact.
9. The system redirects the student to his homepage.

Alternate Scenarios :

1. Fail to login
 - a. Email is invalid
 - b. Incorrect password
2. Same category name/artifact name

Use Case 2: Accessing by guests

Scope: ePortfolio system

Primary Actor: Guest

Supporting actor: Student

Offstage actor: Database

Preconditions:

Guests have the correct and usable links from students.

Success guarantee:

The network is stable and no file is lost.

Main successful scenarios:

1. The guest enters the correct link in the browser.
2. The system will route the webpages and return the public content of the students.
3. Guests can click on the Home tab to view the profile of the student.
4. Guests can click on the Category tag to view the artifacts of the student.

Alternate Scenarios :

1. The link has already been discarded
 - a. User shares his link with the guest
 - b. The user generates a new link and discards the old one
 - c. The guest uses the old link to view the content of the user
 - d. An error page will be returned to the guest until he gets the latest link

Use Case 3: Searching by administrators

Scope: ePortfolio system

Primary Actor: Administrator

Supporting actor: Student

Offstage actor: Database/Browser

Preconditions:

The administrator has correct student's information

Success guarantee:

The network is stable and no file is lost.

Main successful scenarios:

1. The administrator logs in directly to the admin mode.
2. The administrator enters correlated information in the searching bar and clicks search
3. The browser will ask the server for any related accounts
4. All the accounts in relating to the information will be listed for the administrator