Architecture Diagrams

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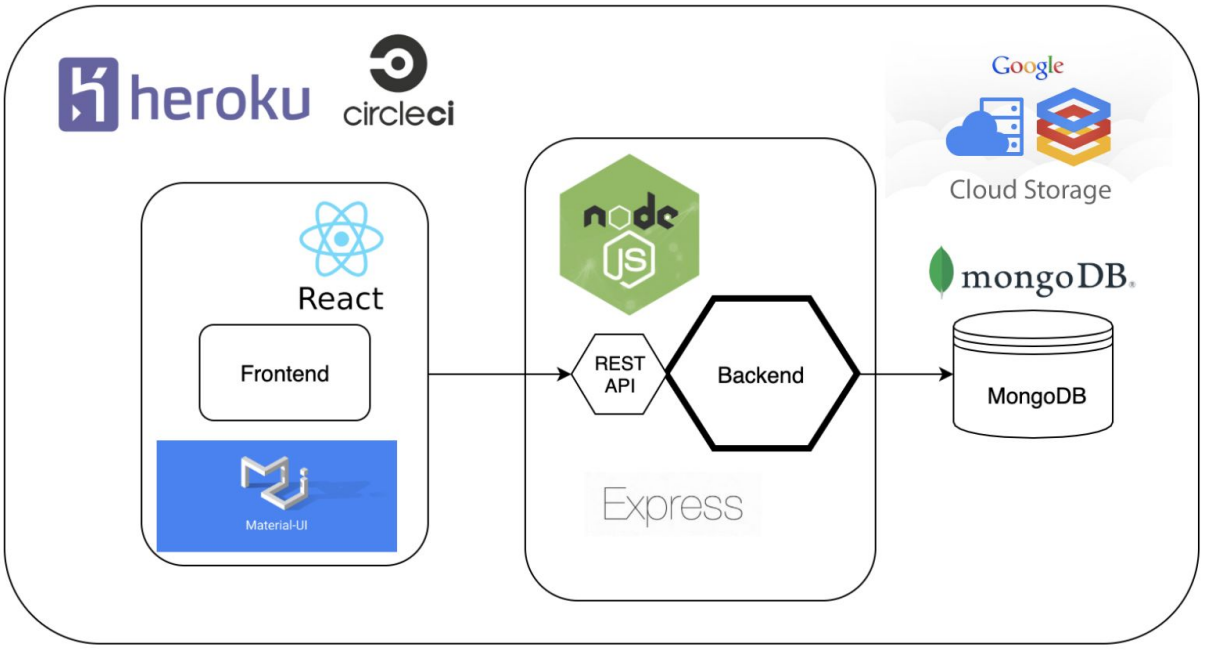
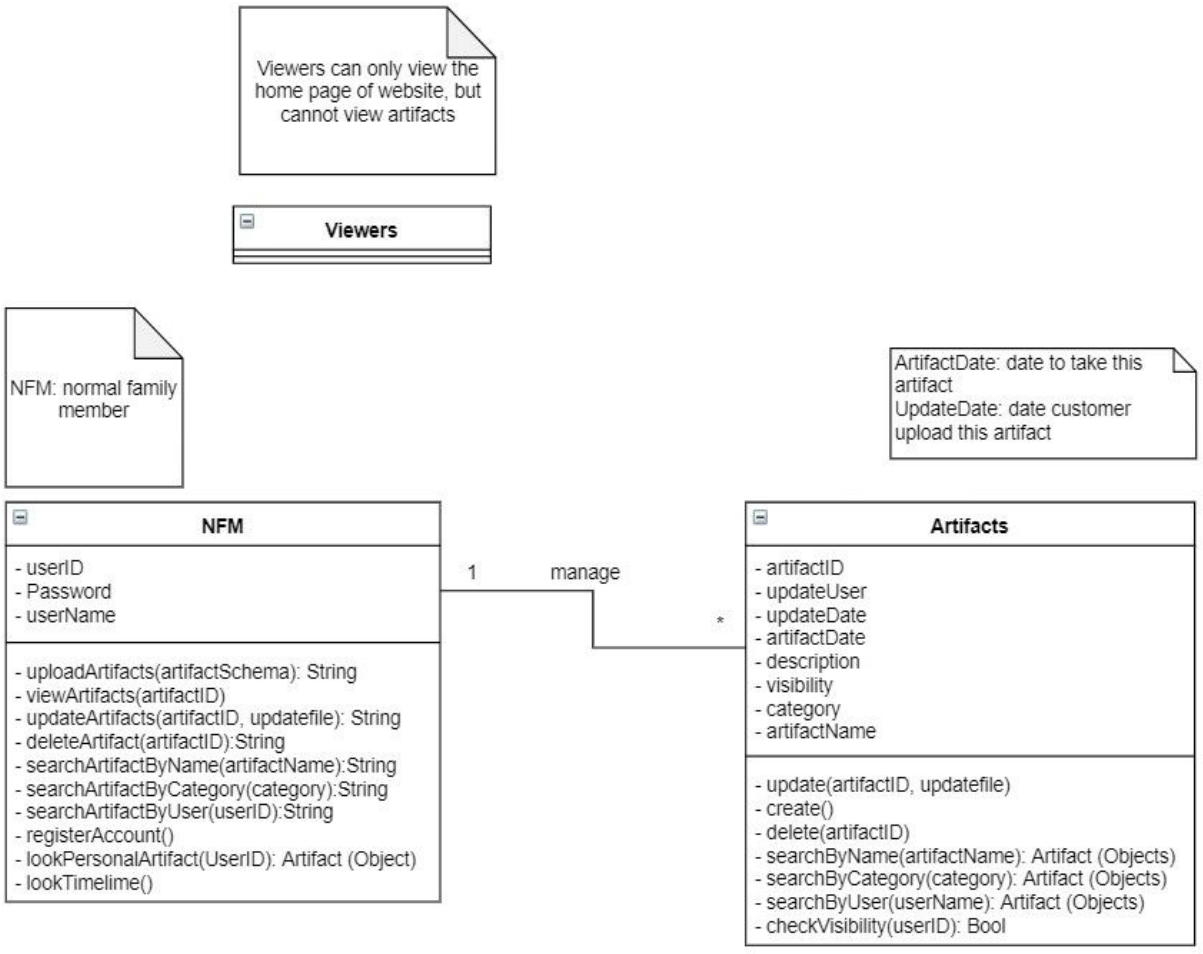
1 High-Level Diagram



- **Frontend:** React.js framework and Material-UI library
- **Backend:** Express.js framework and Node.js runtime
- **Database:** MongoDB
    - store artefacts and users information
- **Cloud storage:** Google cloud storage
    - store the image
- **Continuous Integration:** CircleCI
- **Deployment:** Heroku

Link:https://drive.google.com/file/d/1xv04wkhmxTO6Js0qGQXu-fqcAHGO-hkW/view?usp=sharing

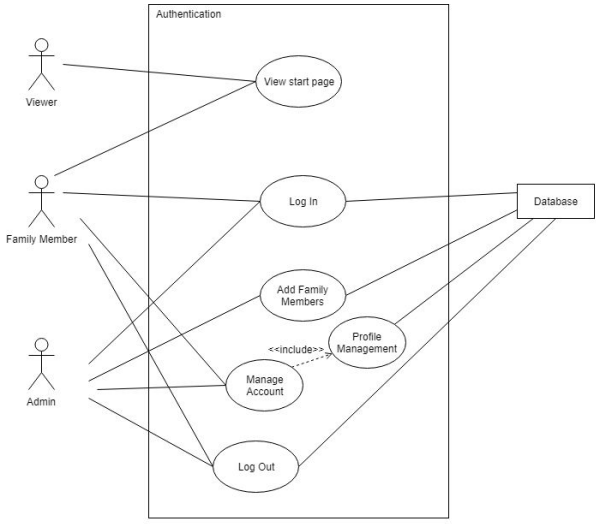
2 Domain Diagram

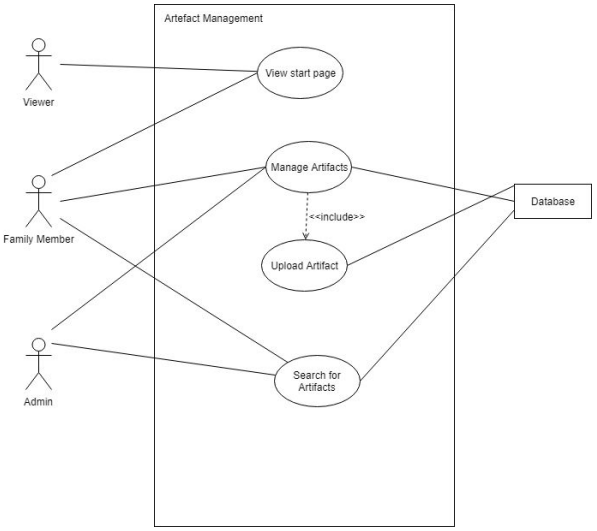


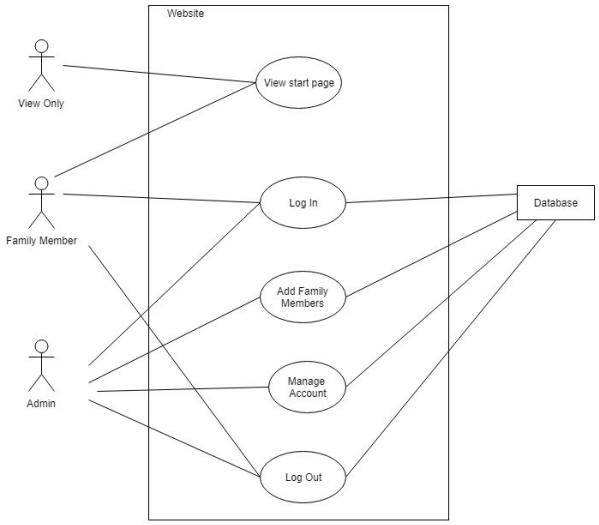
This diagram includes three main components Normal Family Member (NMF), Viewers and Artifacts. NFM module for clients to use their userName and user password to login this website and view, search, upload, update and delete artifacts and can see artifacts in timeline. Artifacts module contains the ID, name, update user, date information, and description, tag, visibility, date for this artifacts.

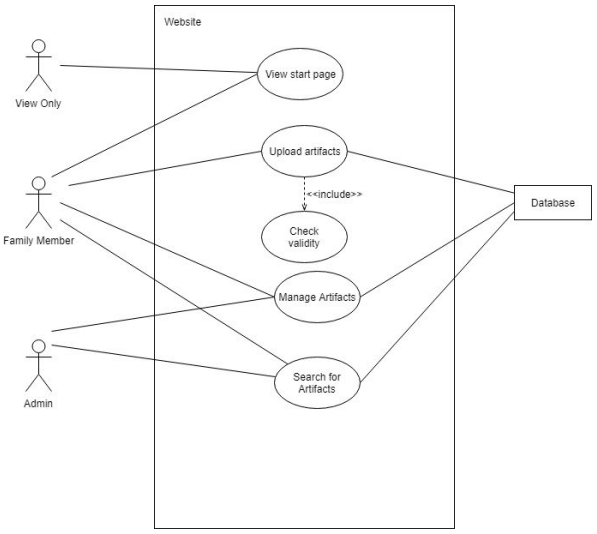
Link:
https://drive.google.com/file/d/1w7D8WbMy1EtNljxHJLEt3OACUPmkIn1P/view?usp=sharing

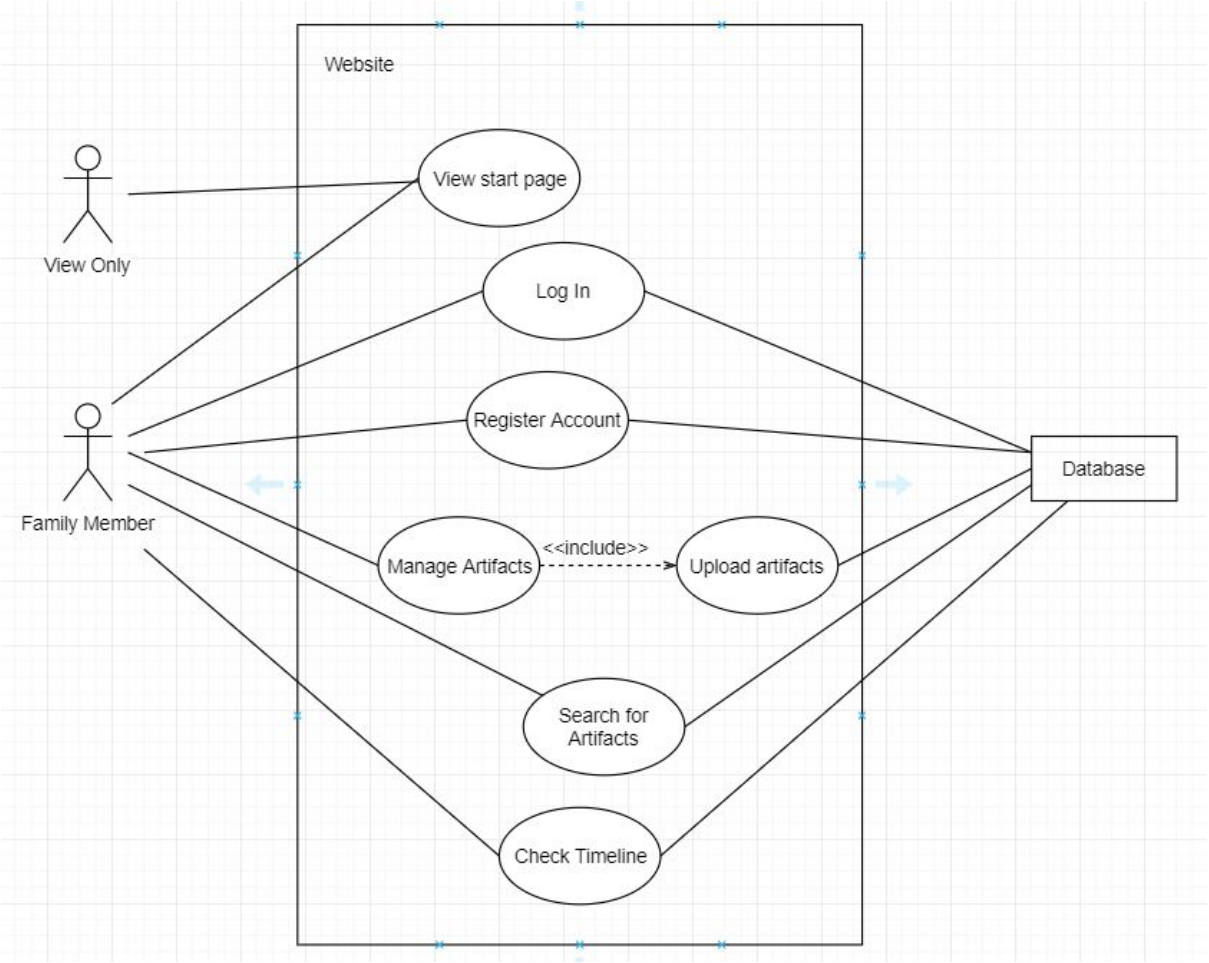
3 Use Case Diagram





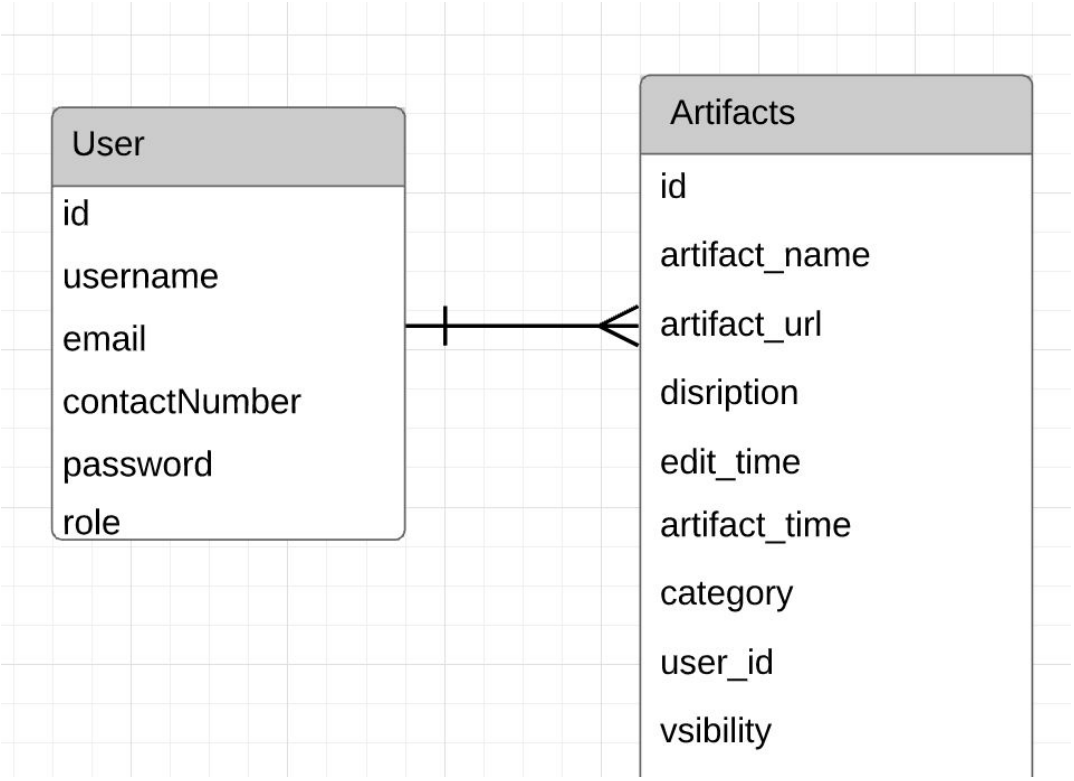






Link:
https://drive.google.com/file/d/14Bgl3VIVffjpXqtOHyd1P2jC-OsMB_6L/view?usp=sharing

4 Database Diagram



The database mainly has 2 tables: user, artifacts

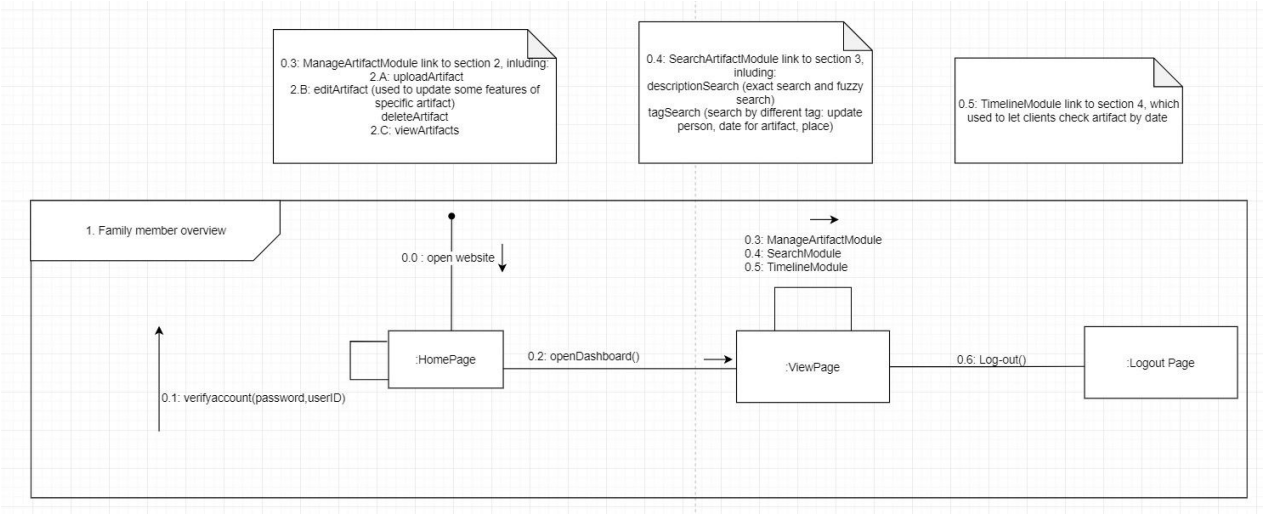
- **user:** store user information
- **artifacts:** store family artifacts information.
    - edit_time: the time user edit the artifact
    - artifact_time: the time of artifact itself (like an artifact in 1990)
    - user_id: the user who upload this artifact
    - visibility: the user who can view the artifact

Link:
https://drive.google.com/file/d/1nB9vSc2nxLK_p9g7VjyvcwZ6tSNp1Zhc/view?usp=sharing

5 Communication Diagram

Section 1: Overview process for normal family member

This diagram demonstrates the overview process for a normal family member. Firstly, family member opens our website and clicks login button, after account verification the family member can login our website and manage their artefacts, search artifacts and see artifacts in timeline after this family member log out or website by clicking the logout button.

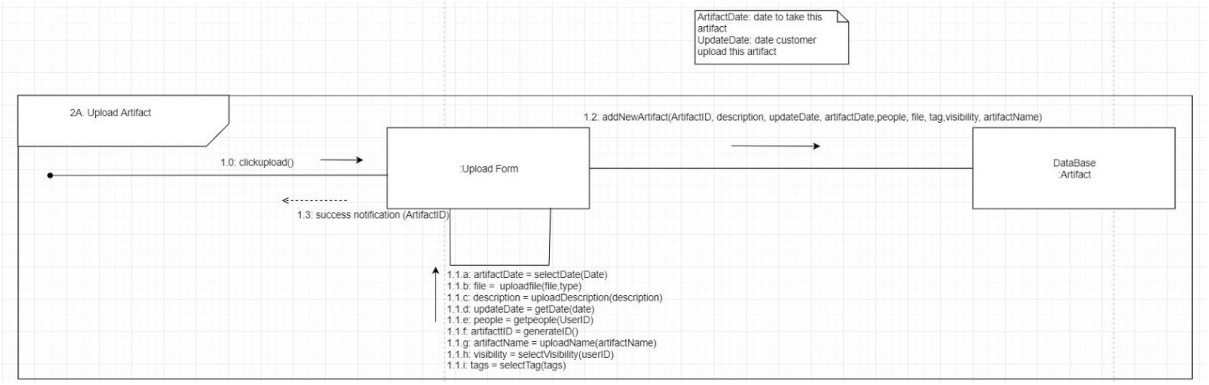


Section 2: Artifacts management section

This section contains three components, including 2.A upload artifacts, 2.B edit artifacts(update and delete artifacts) and 2.C view artifacts.

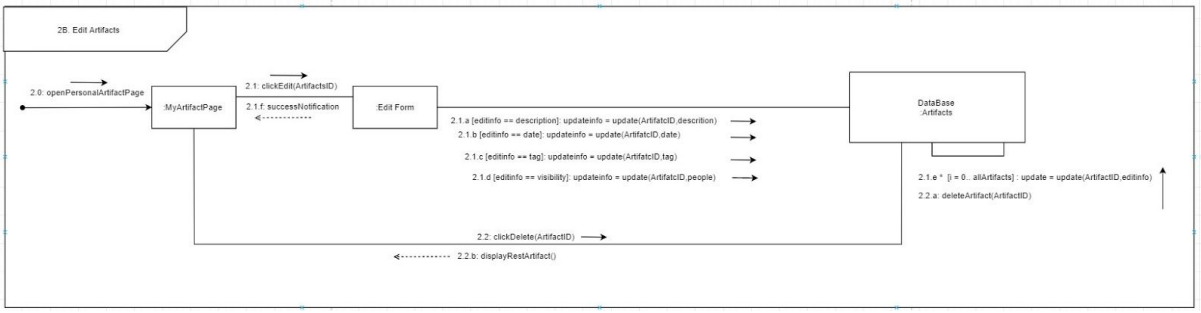
2.A : process when user upload artifacts

After user login to website, they can click upload button to open upload form. Moreover, user needs to fill all required information, such as title, date, description, tag, visibility and the photo of artifact, then they can click submit button and the system will post these to database and return a success notification.



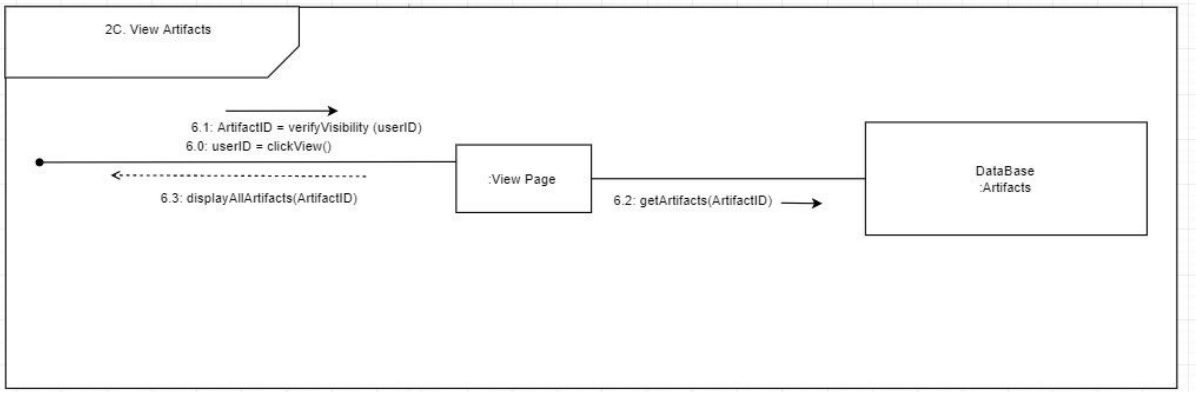
2.B: process for user updates descriptions, tags, date of artifacts related to specific artifact or delete artifact

This diagram shows the sequence that user update and delete artifacts. When user click the edit button, they need to fill update information and click the submit button, the system will update the information to database. User clicks delete button, the system will delete this artifact and relate information in database and display other images.



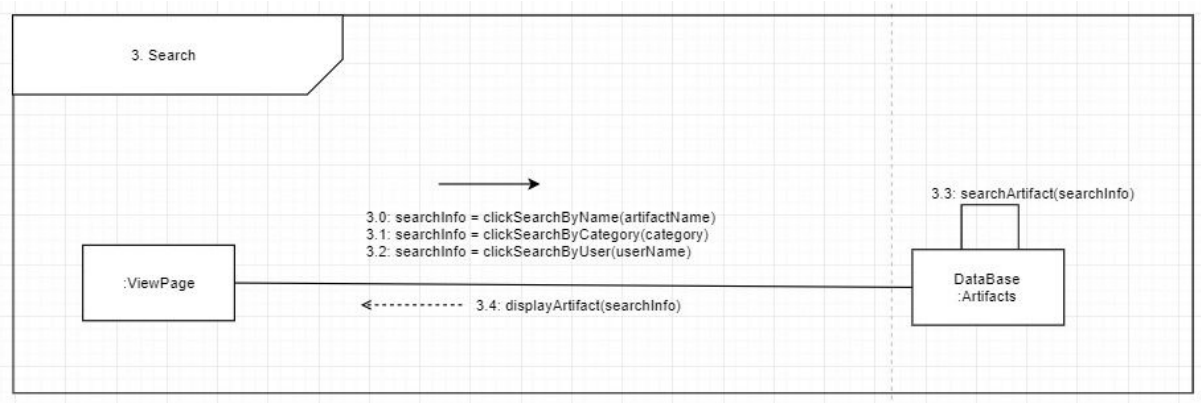
2.C: process when users view artifacts

After user log in to our website, they can view all artifacts they are allowed to access. System will display these images on the screen.



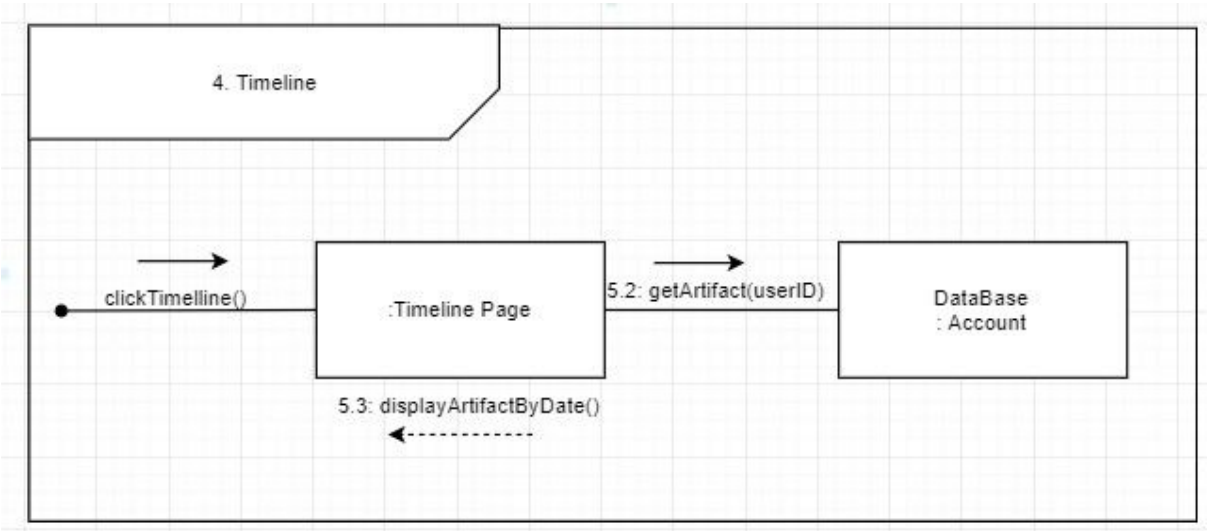
Section 3: Search functions including search by name of artifact, category and update person.

This section contains all functions relate to search. Users are able to search by clicking the search bar and type name of artifact or choose the user name or category they want to search and system will display related artifact on the view page.



Section 4: process when clients want to see artifact by date

This section demonstrates the process of timeline function. After user click timeline bar on view page, the system will display all related and visible images for client by date, the newest artifact will shows on top of timeline.


4. Timeline
clickTimelline()
:Timeline Page
5.2: getArtifact(userID)
DataBase
: Account
5.3: displayArtifactByDate()