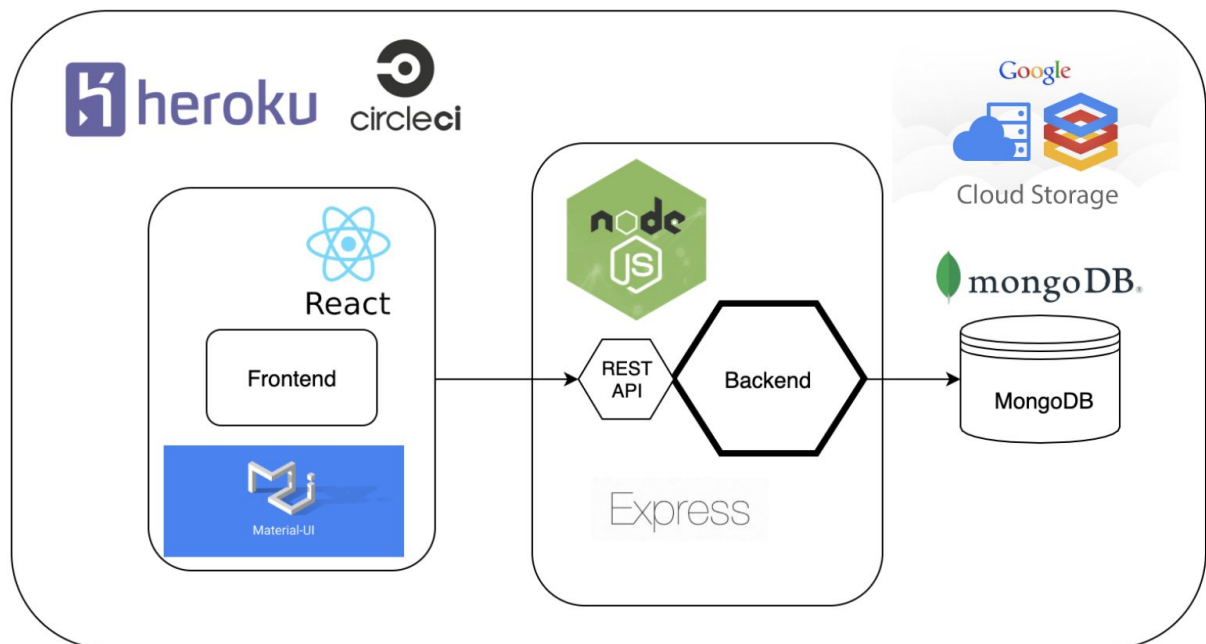


Architecture Diagrams

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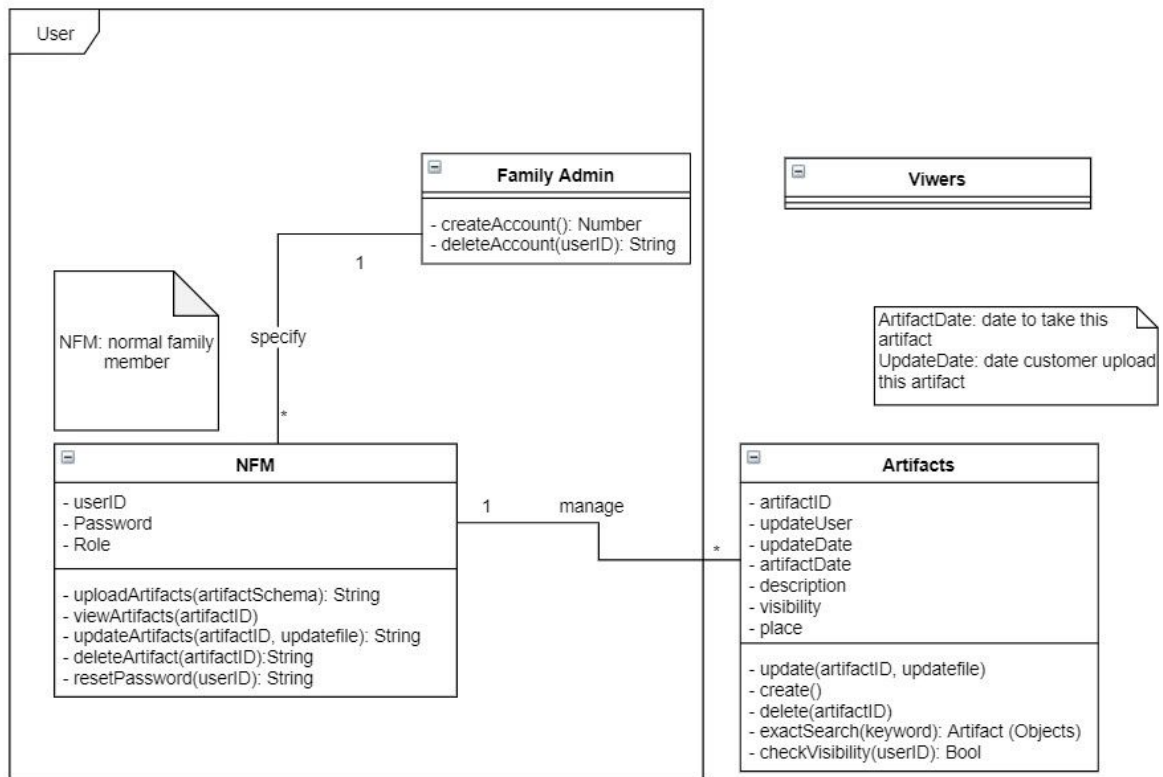
1 High-Level Diagram



- **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/1xv04wkhhmxTO6Js0qGQXu-fqcAHGO-hkW/view?usp=sharing>

2 Domain Diagram

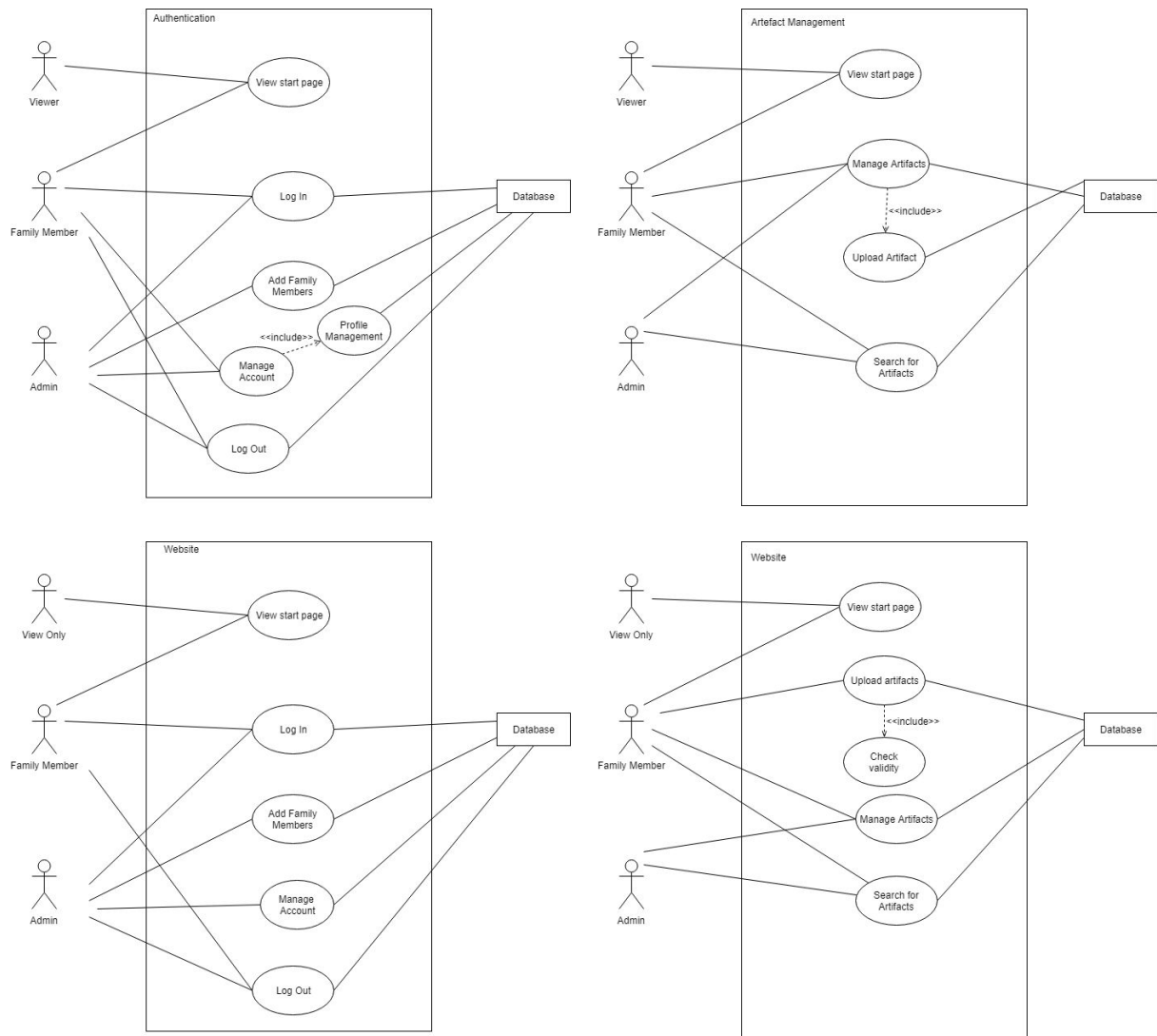


This diagram includes three main components User, Viewers and Artifacts. User module contains normal family members, they can use their userID and user password to the website and view, upload, update and delete artifacts. Family admin is a special user who can also generate or delete account for normal family members. Artifacts module contains the ID, update user, date information, and description, tag, visibility, date for this artifacts.

Link:

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

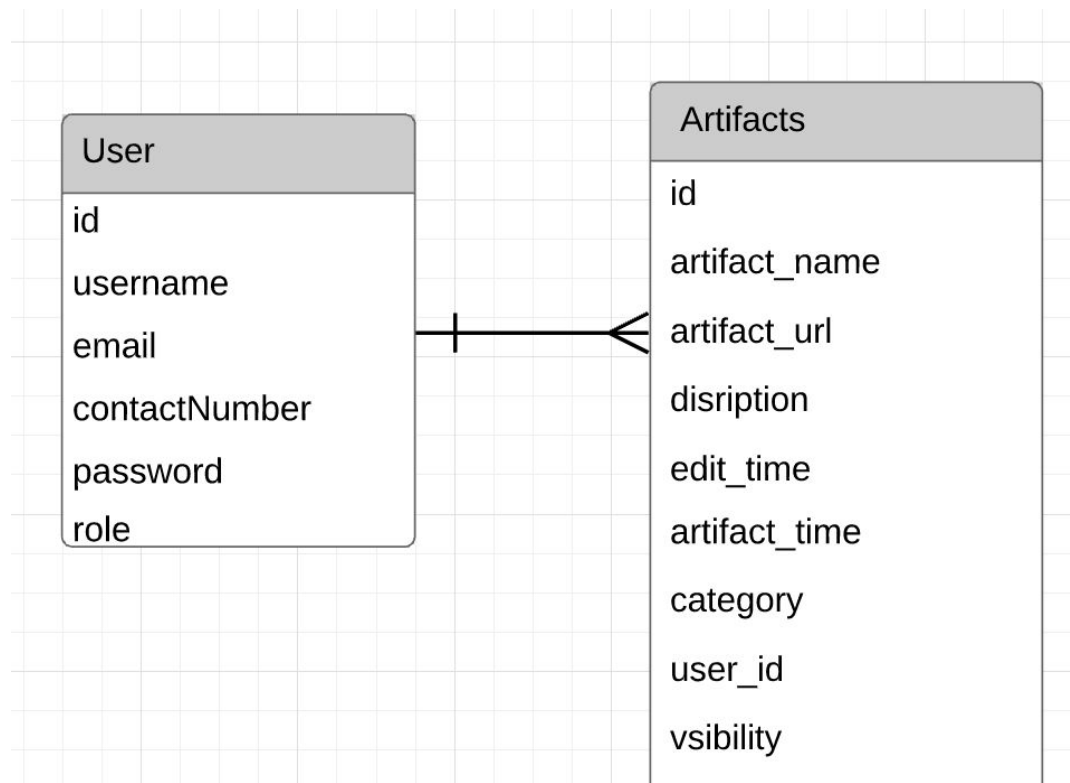
3 Use Case Diagram



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
 - vsibility: the user who can view the artifact

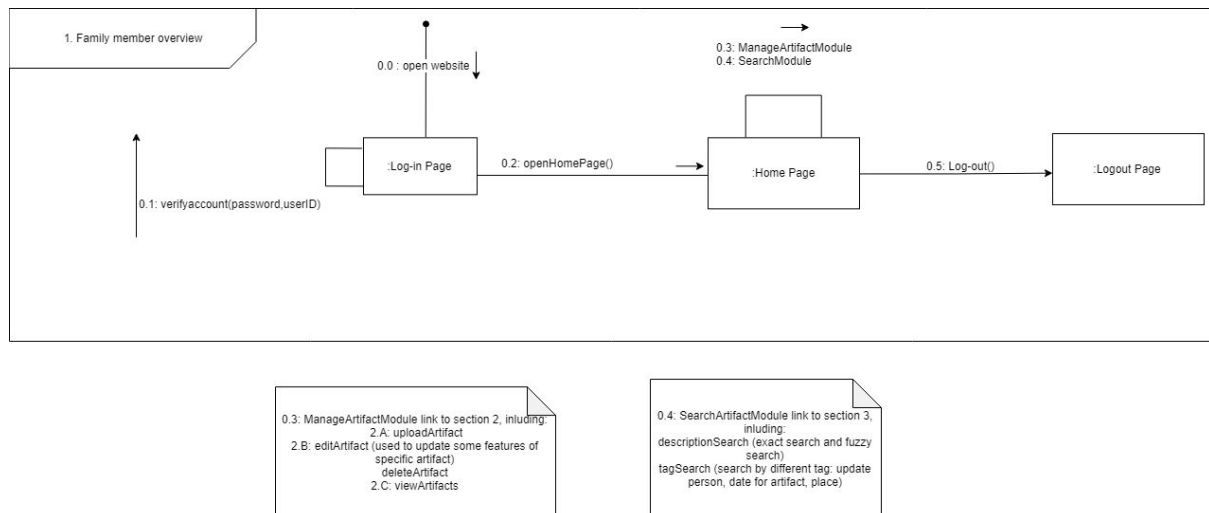
Link:

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 and search the artifact after this family member log out or website by clicking the logout button.

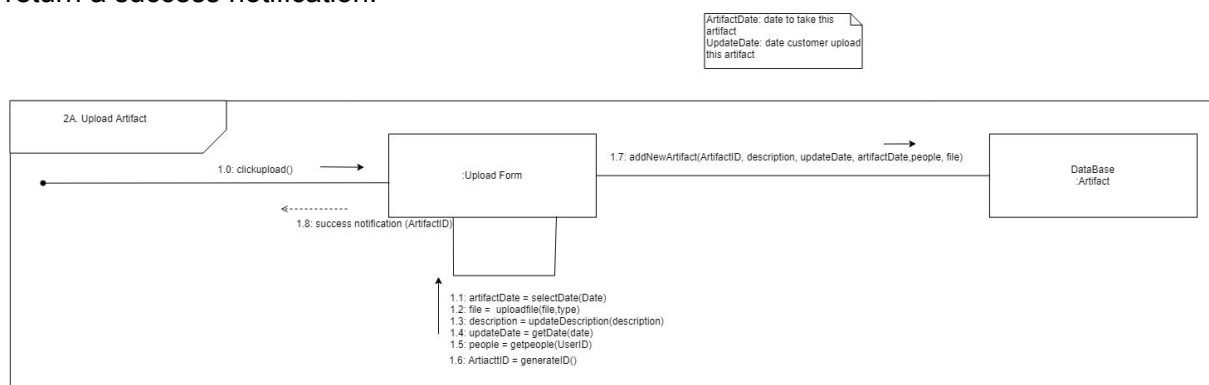


Section 2: Artifacts management section

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 and the photo of artifact, then they can click submit button and the system will post these to database and return a success notification.



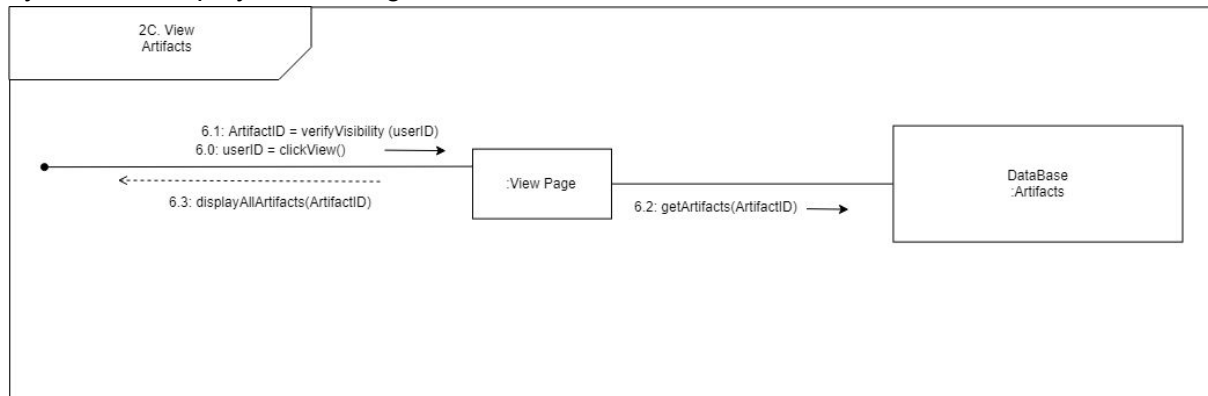
2.B: process for user updates descriptions, tags, date of artifacts related to specific artifact or delete artifact

This diagram shows the sequence that user update and delete artifacts. When user click the update 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 form database and return notification.



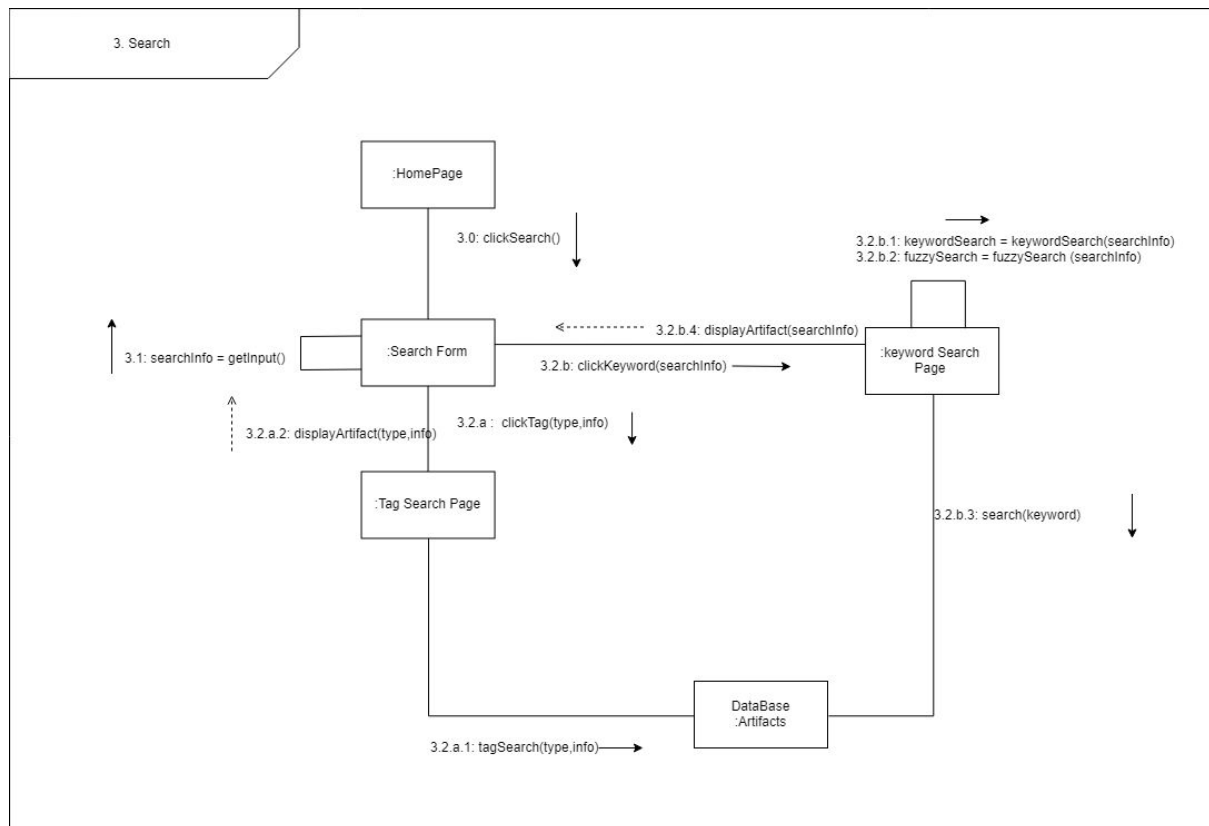
2.C: process when users view artifacts

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 exact search and fuzzy search of keyword in description and tag (update person, date, place) search

This section contains all functions relate to search. Users are able to search by clicking the search button and select a search type, which includes exact search by keyword, also the search by tags, date, and title.



Section 4: process when family admin generate and delete account

This section demonstrates the process of family admin generate account. After login as a family admin, user can generate a new userID by clicking the generate button, the system will create a new userID the database. Furthermore, by clicking the delete button, family admin can delete the selected account. System will display new userID after account is successfully generated and notification when account deleted.

Family Admin can manage whole family member's accounts, including:
generateNewAccount
DeleteAccount

