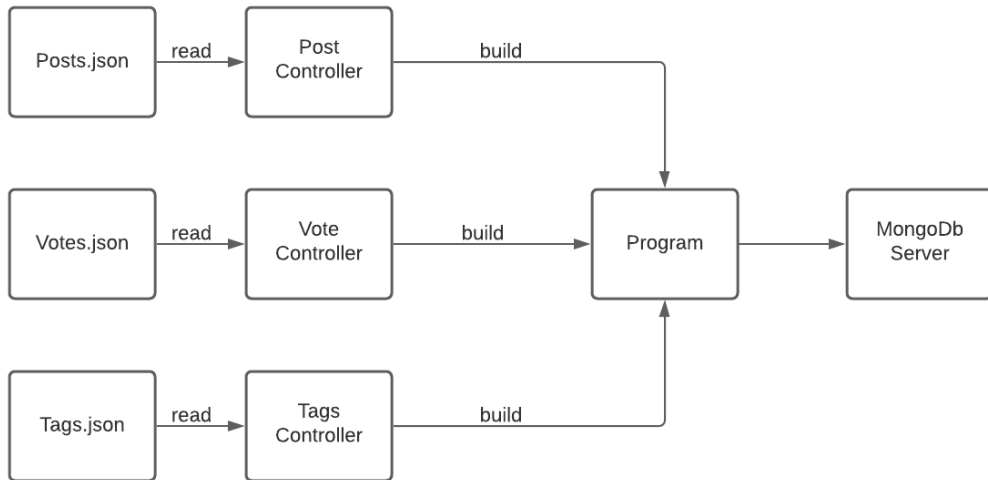
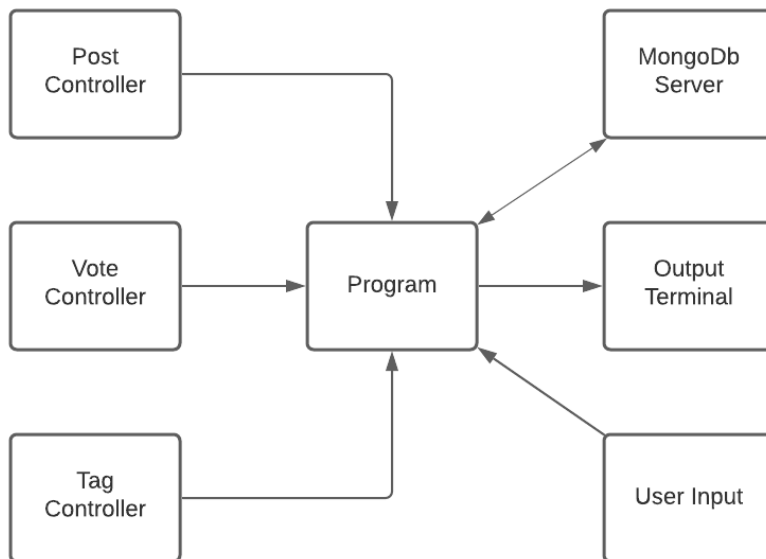


## 1. Overview: the pictures below shows the flow of data inside our program

### Phase 1:



### Phase 2:



## 2. User guide

### Phase 1:

- Run in terminal: `python3 phase1.py [port number]`
  1. This will read 3 json files and build a document store, including a collection for each

## Phase 2:

- Run in terminal: `python3 phase2.py [port number]`
- Optional: enter user ID
- There are 3 available actions: post, search, exit

```
Available actions:
1. post - post a question
2. search - search for questions by keywords
3. exit - exit program
Choose an action (number or text):
```

- Post: Enter a title, body, tags (optional)

```
Enter a title: question 1
Enter a body: first ever question
Enter tags (optional): question first
```

- Search: by keywords

```
Available actions:
1. post - post a question
2. search - search for questions by keywords
3. exit - exit program
Choose an action (number or text): 2
Enter keywords to search: sql question
```

- Choose a question ID: users can answer the question, list all answers, or vote

```
Available actions:
1. answer - post an answer for this question
2. list - list all answers
3. vote - cast a vote to this question
4. back - go back to search list
```

- Choose an answer ID: users can only vote the answer

```
Available action:
1. vote - cast a vote for this answer
2. back - go back to answer list
Choose an action:
```

- 

## 3. Detailed Design:

- Post a question: Allow user to post a question by entering a title, body, and tags (optional)

```
Enter a title: question 1
Enter a body: first ever question
Enter tags (optional): question first
```

- Search for a question: Allow user to find all questions with keywords

```
Available actions:
1. post - post a question
2. search - search for questions by keywords
3. exit - exit program
Choose an action (number or text): 2
Enter keywords to search: sql question
```

- Question action – Answer: Allow user to answer a question

```
Id: 400714
Score: 0
Tags: ['macbook-pro', 'dock', 'kvm']
Terms: ['share', 'monitors', 'and', 'peripherals',
with', 'without', 'having', 'unplug', 'them', 'from
LastEditorUserId: 388444
Title: Share monitors and peripherals between Linux
AnswerCount: 0
LastActivityDate: 2020-09-05T21:15:17.307
CreationDate: 2020-09-05T21:11:01.470
LastEditDate: 2020-09-05T21:15:17.307
Available actions:
1. answer - post an answer for this question
2. list - list all answers
3. vote - cast a vote to this question
4. back - go back to search list
Choose an action (text or number): 1
Answer body:
```

- Question action – List Answers: Allow users to see all answers for a question

```
Available actions:
1. answer - post an answer for this question
2. list - list all answers
3. vote - cast a vote to this question
4. back - go back to search list
Choose an action (text or number): 2
{"t":{"date":"2020-11-21T20:44:18.126-07:00"}
ts","filter":{"PostTypeId":"2","ParentId":"400
":"COLLSCAN","keysExamined":0,"docsExamined":2
nStateTransition":{"acquireCount":{"w":276}},"
l}},"storage":{"protocol":"op_msg","duration
Id | Body | Creation Date | Score
400705 | <blockquote>
<p>Note: This answer assumes the missing parti
```

- Question/Answer action – vote: Allow users to cast a vote on a question or answer

```
Available actions:
1. answer - post an answer for this question
2. list - list all answers
3. vote - cast a vote to this question
4. back - go back to search list
Choose an action (text or number): 3
Vote success
```

#### 4. Testing strategy

ID	Description	Expected Output	Actual Output
1	Enter user ID	A report is printed out	A report is printed out
2	Post a question with title, body	Success	Success
3	Post a question with no title	Error	Error
4	Search for questions with keywords	Success	Success
5	Answer to a question with no body	Error	Error
6	List all answers of a question	Success	Success
7	Cast a vote on a question	Success	Success

and so on

#### 5. Group work strategy

- Project break-down: for the first day, we spent around 1 hour planning the work that needed to be done by each person. Then we coded together during the meeting and notified each other when a task was done. If someone needed help, we all helped. We used GitHub for version control and created each branch for a feature then created a pull request to let everyone reviewed the code.
- Member responsible for each task:
  - **Sang**: Phase 1 votes, phase 2 posts, vote comment code documentation, UML, user guide, detailed design
  - **Trung**: Phase 1 tags, phase 2 answer, vote user guide, detailed design
  - **Khang**: Phase 1 posts, phase 2 search, list answer, setup GitHub
  - **Group effort**: debug, integration and clean up code.
- The time spent and the progress made for each partner is stated:

We schedule meetings during weekend and spent the whole weekend working together, approximately 20 hours for everyone.
- The method of coordination:

Version control: GitHub  
Communication: Discord