

GitMate

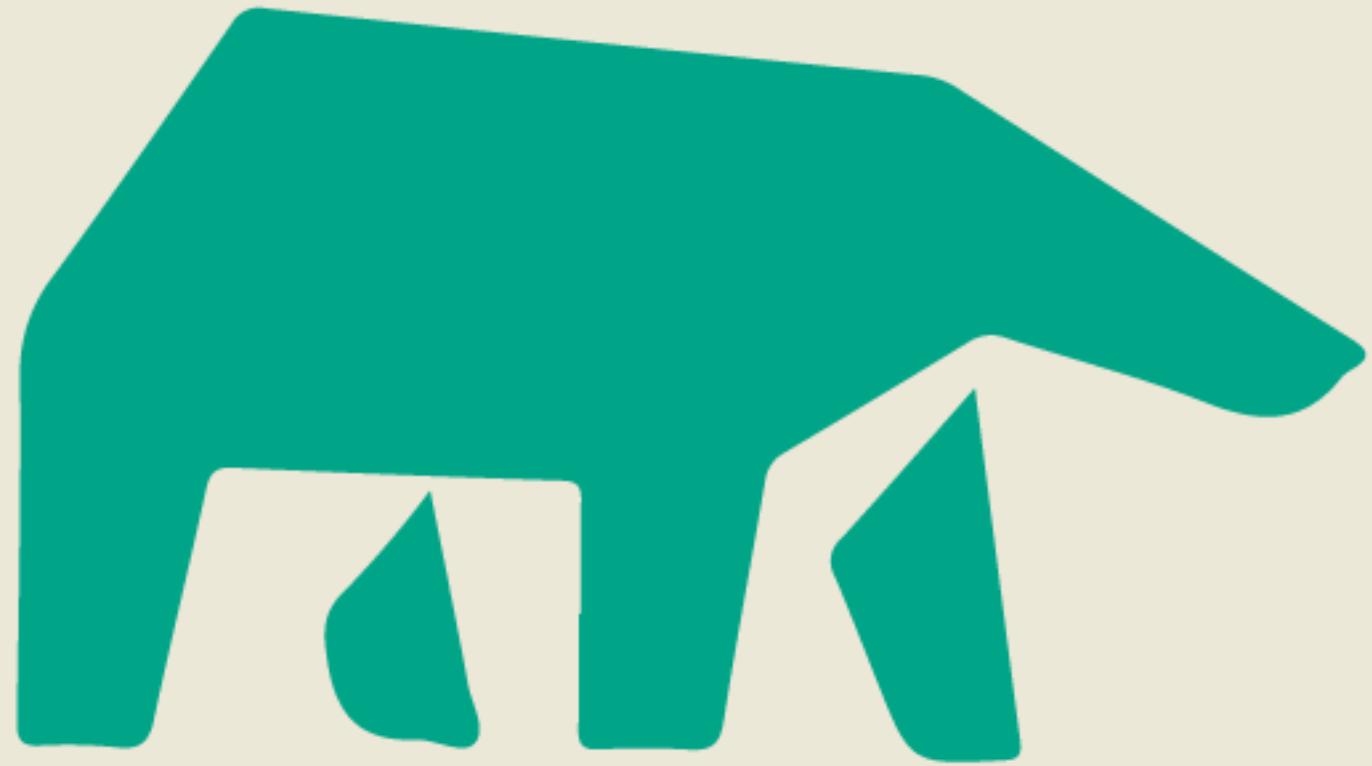
Elina Kapetanaki, 8210050

My First OSS Contribution

My journey

<https://github.com/ElinaKapetanaki/mindsdb/tree/zotero-handler>

...I have chosen...



mindshare

What is MindsDB?

Use AI Models in
your Data

Connects to applications,
databases, files

application examples:



shopify



DB examples:



mongoDB[®]



Uses AI on that data

Predictions

Chat Bots

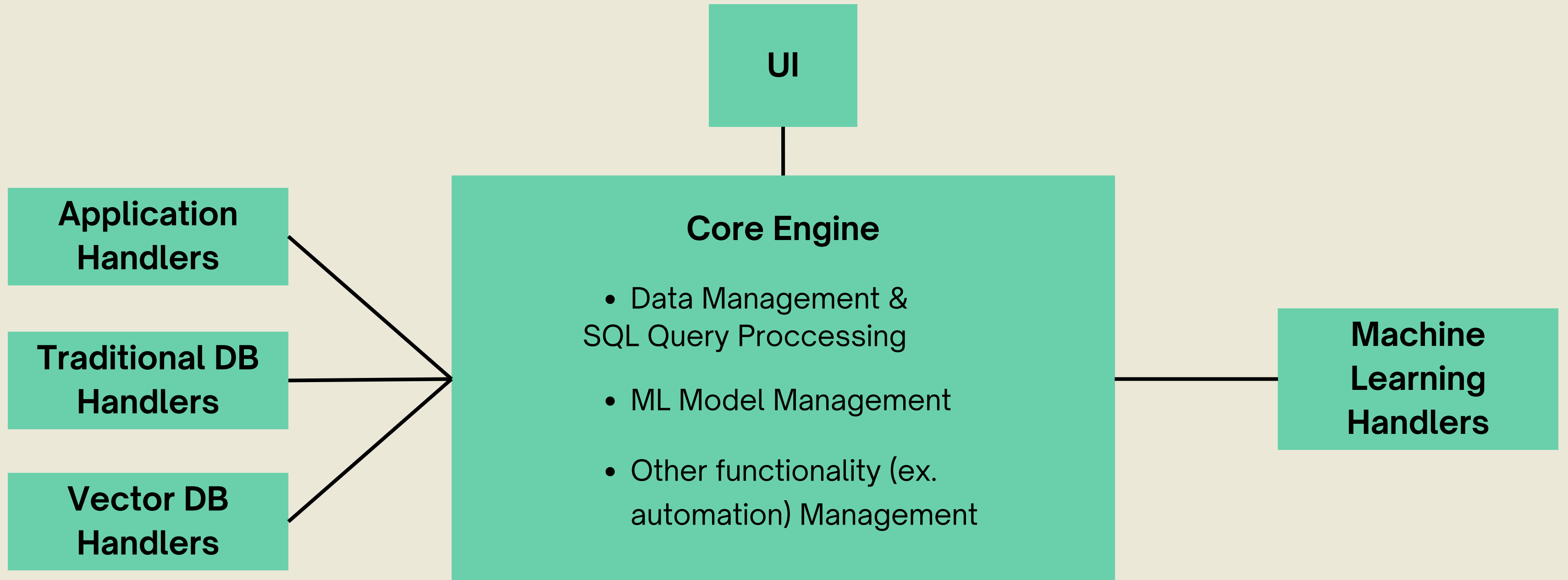
Text Summarization

Sentiment Analysis

Classification

and many more...

What is MindsDB?



My Contribution

```
CREATE DATABASE mindsdb_zotero
WITH ENGINE = 'zotero',
PARAMETERS = {
  "library_id": [REDACTED],
  "library_type": "user",
  "api_key": [REDACTED]
}

SELECT * FROM mindsdb_zotero.annotations

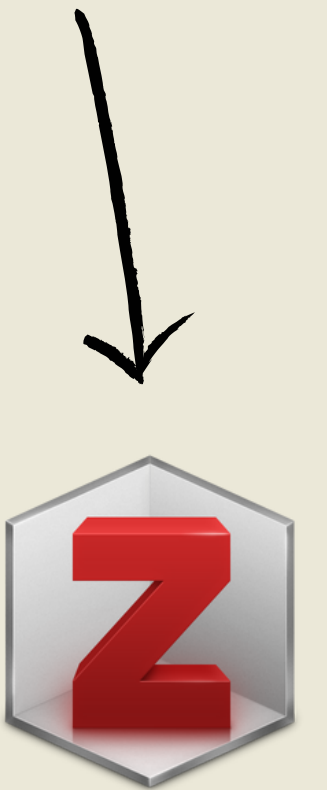
SELECT * FROM mindsdb_zotero.annotations WHERE item_id = [REDACTED]

SELECT * FROM mindsdb_zotero.annotations WHERE parent_item_id = [REDACTED]
```

annotationPageLabel	annotationText
171	That's my idea of sensitive; I couldn't ask a writer to give me two more wonderful examination than gratitude. I also wonder: how many other examples of bat sensitivity did she able to choose those two? Always start with too much material. Then give your reader
169	Roueché's secret is as old as the art of storytelling. We are in on a chase and a mysterious medical history of poisoning, or talk about standard texts on toxicology. He gives us one. Another way to help your readers understand unfamiliar facts is to relate them to h. Reduce the abstract principle to an image they can visualize.
168	That was the appeal of the articles called "Annals of Medicine" that Berton Roueché wrote. They are detective stories, almost always involving a victim—some ordinary person and a gumshoe obsessed with finding the villain.
168	The example of the linseed oil is just piquant enough to make us wonder what "memory" really
168	One problem has been to decide what memory is and what things have it. Linseed oil, for once exposed to light, even if only briefly, it will change consistency and speed the process "remember" its first encounter with the light.
167	One human element is yourself. Use your own experience to connect the reader to some memory. In the following article on memory, notice how the writer, Will Bradbury, gives us a complex subject:
167	Again, this means looking for the human element

Create API handler connecting MindsDB to Zotero (annotations)

- from a library
- from a book/paper
- a specific annotation



Zotero: App to manage your research.

My Contribution

```
6
7
8 CREATE DATABASE mindsdb_zotero_example
9 WITH ENGINE = 'zotero',
10 PARAMETERS = {
11   "library_id": [REDACTED],
12   "library_type": "user",
13   "api_key": [REDACTED]
14 }
15
16
17
18
19
20
21
22
23
```

Message

1 Query successfully completed

```
31
32
33 SELECT * FROM mindsdb_zotero_example.annotations WHERE parent_item_id = [REDACTED]
34
35
36
37
```

Export

annotationComment	annotationPageLabel	annotationText
	40	one of the earliest offshoots of the original something awful thread was the
	48	I found it interesting to watch as sort of an accelerated version of an urban of the urban legend in that it is on the Internet, and this both helps and ha n my personal opinion, an urban legend requires an audience ignorant of the o third and forth [sic] hand (or more) accounts to perpetuate the myth. On the s evidenced by the very public Somethingawful thread. But what is funny is th memes are finicky things and by making something at the right place and time d." (Tomberry 2010)
	44	The term fictitious legend best describes the case of Dracula. Fictitious, no

1 to 50 of 60 Page 1 of 2

```
26
27 SELECT * FROM mindsdb_zotero_example.annotations WHERE item_id = [REDACTED]
28
29
30
```

annotationComment	annotationPageLabel	annotationText
	53	because it generated a great deal of interes a the game were unaware of the complexity of

Keep photos of functionality in a repo linked to my PR
https://github.com/ElinaKapetanaki/mindsdb-test/blob/main/Zotero_QA.MD

Metrics

Python Code Lines

(including docstrings + tests)

450

README lines

55

Classes

2

Methods

10

Files Added

8

Quality



README



DocStrings



Logging &
Exceptions



PEP8: 100%

Build your own Zotero AI agent

This is the implementation of the Zotero handler for MindsDB.

Zotero

[Zotero](#) is a free tool for organizing and managing research materials. It lets you store articles, books, notes, take notes, and create collections for organization. You can also share your collections with others.

Implementation

This handler uses [pyzotero](#), an API wrapper for Zotero as a simple library to facilitate the integration.

The required arguments to establish a connection are,

- `library_id` :
To find your library ID, as noted on [pyzotero](#) :
 - Your personal library ID is available [here](#), in the section "Your userID for use in API calls"
 - For group libraries, the ID can be found by opening the group's page: <https://www.zotero.org/groups/your-group-name> the group settings link. The ID is the integer after /groups/
- `library_type` : "user" for personal account or "group" for a group library
- `api_key` :
To find your api key, as noted on [pyzotero](#) : follow [this link](#)

Usage

In order to make use of this handler and connect to Zotero in MindsDB, the following syntax can be used:

```
CREATE DATABASE mindsdb_zotero
WITH ENGINE = 'zotero',
PARAMETERS = {
  "library_id": "your-library-id"
```

```
class AnnotationsTable(APITable):
    """Represents a table of annotations in Zotero"""

    def select(self, query: ast.Select):
        """Select annotations based on the provided query

        Parameters
        -----
        query : ast.Select
            AST (Abstract Syntax Tree) representation of the query

        Returns
        -----
        Response
        |       Response object containing the selected annotations
        """
        if query.where is None: # Handle case
```

```
except Exception as e:
    logger.error(f"Error fetching item with id {id}")
    raise e
```



Test on Push / Run static code checks (on push)

Testing

Used API Mocking to unit test my code



Independence of
testing from
external services

Test Cases
7

Coverage
64%

(direct API calling methods
were not tested)


	Stmts	Miss	Cover
-----	-----	-----	-----
__about__.py	9	0	100%
__init__.py	13	3	77%
zotero_handler.py	39	3	92%
zotero_tables.py	69	41	41%
-----	-----	-----	-----
	130	47	64%

```
AnnotationsTableTest::test_get_columns_returns_all_columns PASSED [ 16%]
AnnotationsTableTest::test_select_returns_all_columns PASSED [ 33%]
AnnotationsTableTest::test_select_with_conditions PASSED [ 50%]
ZoteroHandlerTest::test_check_connection_failure PASSED [ 66%]
ZoteroHandlerTest::test_check_connection_success PASSED [ 83%]
ZoteroHandlerTest::test_connect PASSED [100%]

===== 6 passed in 2.66s =====
```

Collaboration with team



Advice and approval for my contribution idea

 **Minura** 5:47 AM


To answer your question, to start off, I think it will be sufficient for you to build the API handler and connect to any data asset that you think might be useful and then we can open issues for the others and work on them slowly. For instance, if you think it might be useful to connect notes, we can start with that and open issues for books, papers etc., and open issues for them, so that either you or any other contributor can take them up in the future.

Does this make sense?



And yes, please feel free to ask me any questions that you may have.

 1 

Tuesday, March 26th

 **Elina Kapetanaki** 2:28 PM

Hello!! Yes that sounds great


 1 

Help during troubleshooting


 **MinuraPunchihewa** 3 days ago • edited

I believe the handler has become unusable due to this error. Let me know if this fixes your issue. Try running the `CREATE DATABASE` statement again with this fix.



 **ElinaKapetanaki** 3 days ago


Great!! The `CREATE DATABASE` statement worked now! I will work on fixing a few things more and will update this pr.




 **ElinaKapetanaki** 3 days ago

The queries work!! Made quite a few changes to my code. I want to make it a bit cleaner and will update the pr with also some pictures of the functionality.



 **MinuraPunchihewa** 3 days ago

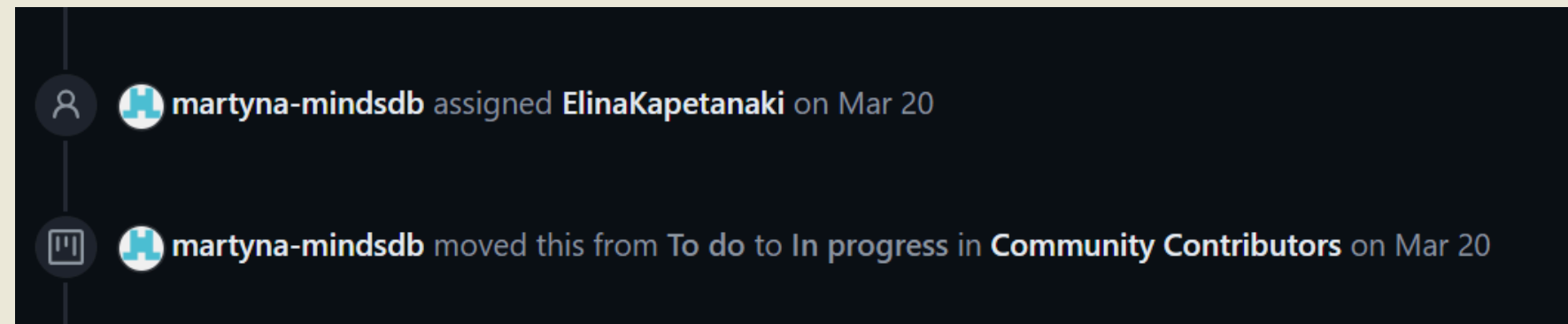
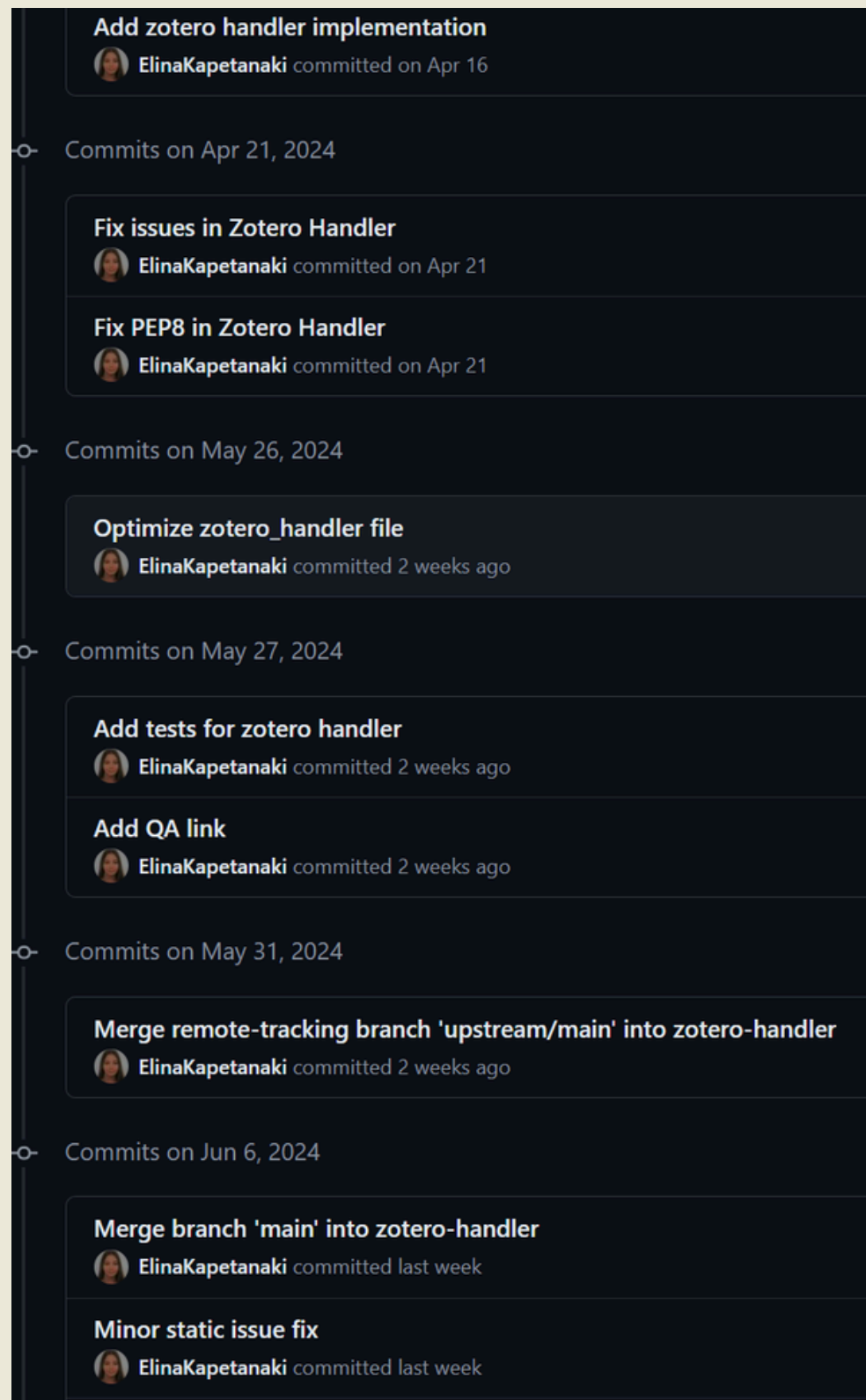
[@ElinaKapetanaki](#) Sounds great! Just mark the PR as ready for review whenever you are ready and I will take a look.

  1

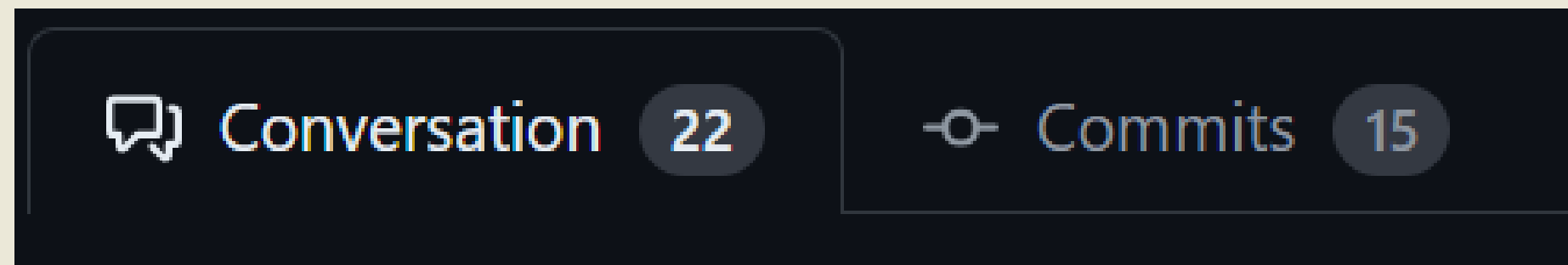
 Reply...

GitHub use

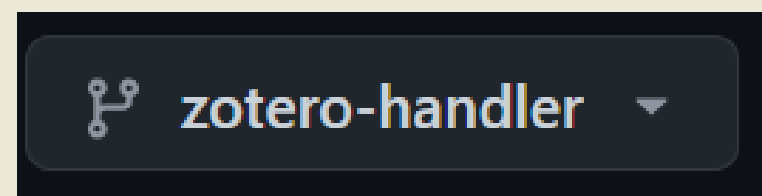
Get assigned on “help wanted issue”



Open a PR (at first as a draft)



Work on my branch in my fork

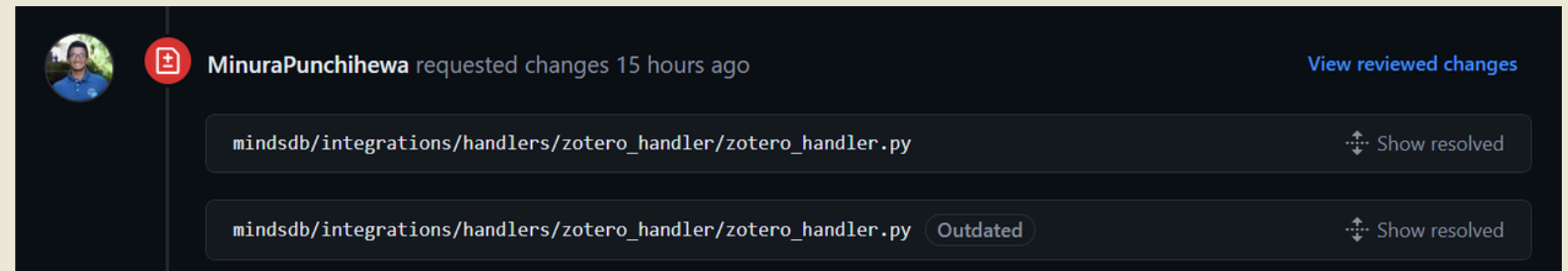


Code Reviews

Requests:

Refactoring

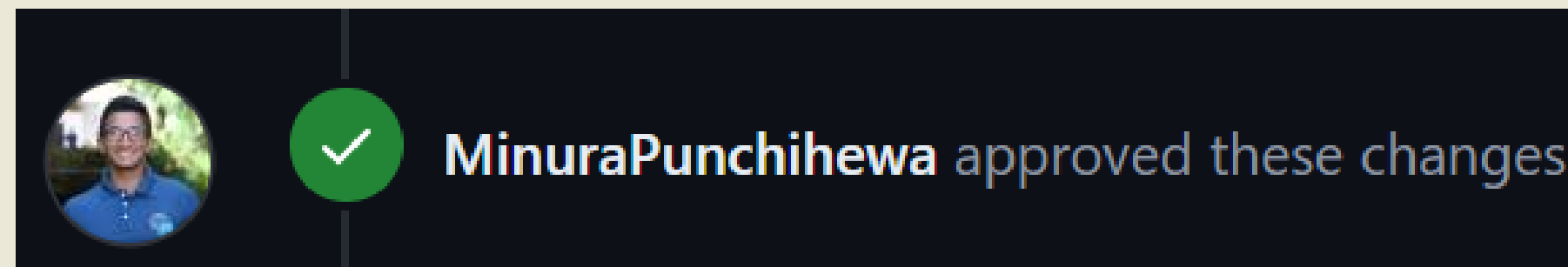
- split 1 file to 2 files,
- split 1 method to 3 methods



Screenshots of everything working

I've got a couple of requests:

1. Can you please resolve the conflicts here by merging the main branch into yours, please? The branches seem to be out of sync.
2. Can you please post a few screenshots or a quick video of this handler working as expected?



Code Reviews

Kind words

MinuraPunchihewa left a comment

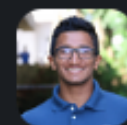
Hey [@ElinaKapetanaki](#),
Thank you very much for this great contribution!

MinuraPunchihewa reacted with hooray emoji



Ready to merge

(changes -are shown in previous slide-
were approved)



Minura 🌱 12:35 PM

Hey Elina,

I just left a couple of quick comments on your PR.

I think once those changes are made, we can merge it.

**Thank you for your
time!**

Questions?