

ERROR-LOG-MICROSERVICE

Error log microservice overview

An error log microservice is implemented in order to catch all the errors during other microservices logging. These errors will be stored in the database and a regular record will be maintained along with the error code, error details and based on that we provide a solution to the particular error. So, when a client comes up with a problem, it will be easy for us to identify the error and solve it.

Overall workflow

- ❖ In our Eunimart platform, we do a lot of microservices and deploy them on the server. We filter the user based on their organization. Eg:Eunimart,TradeIndia etc.
- ❖ If an error occurs the clients will contact us, then the developer checks all microservices logs and finds the errors, then the developer will rectify it. This is actually what we do.
- ❖ What we have implemented in our microservices are, whenever an error occurs in other microservices, we call this particular microservices and then store all the details about the particular error in our database.
- ❖ Whenever the error occurs, the developer can easily find the error from which microservice, which module, which version, like this way they can easily identify the error and rectify the error easily.

Technologies Used:

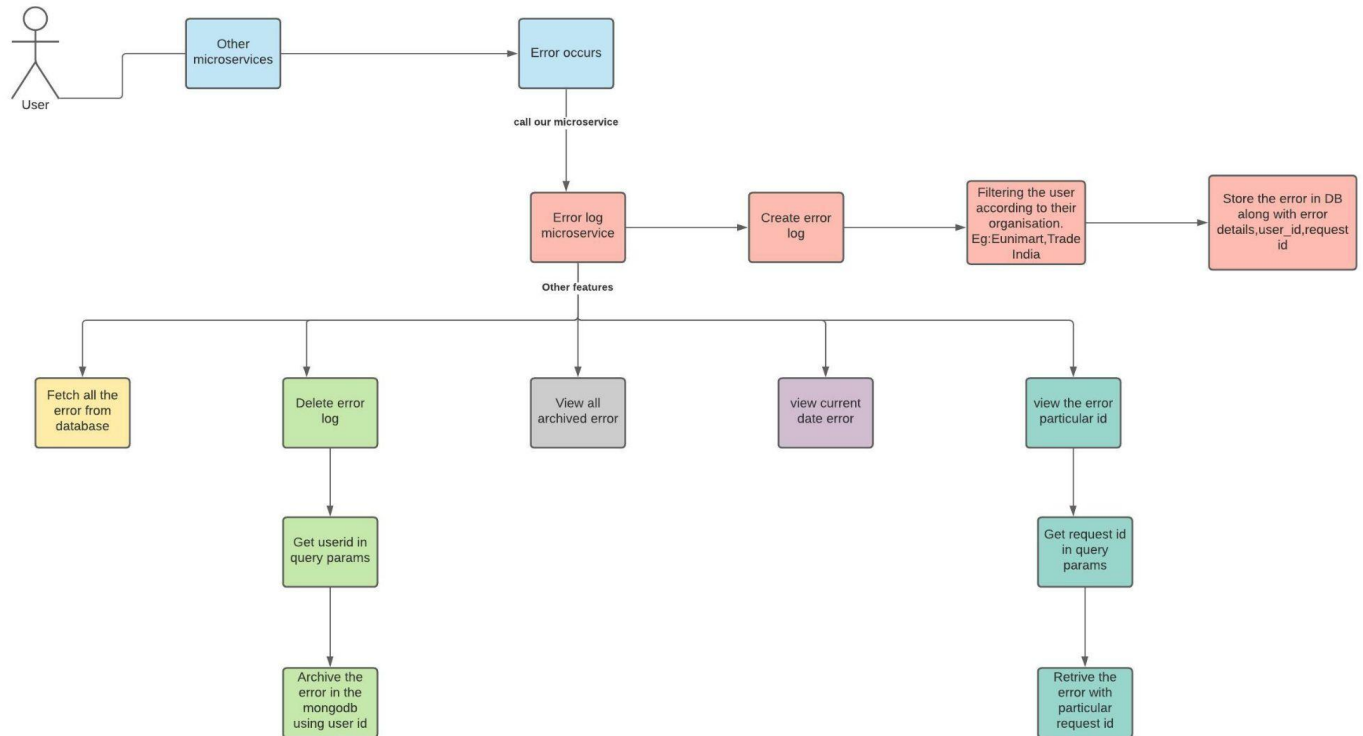
- ❖ Express js
- ❖ MongoDB

Database Schema:

Error Log:

```
request_Id:"10400",
user_Id:"kausic30"
version:"v1"
microservice_name:"shipment_service",
module:"shipment",
path:"/createshipment",
method:"GET/POST",
status_code: 400/500,
message:""
error_obj:{
  "error_code": "400",
  "description":"error description"
},
createdAt : "2021-08-18T05:37:07.516Z",
updatedAt : "2021-08-18T05:37:07.516Z",
archivedAt: 2021-08-23T01:52:23.016+00:00
```

Flow chart:



https://lucid.app/lucidchart/invitations/accept/inv_99050b97-1abc-459f-afa3-fd578cc9d3f7?viewport_loc=83%2C-201%2C3754%2C1543%2C0_0

Fields Explanation:

- **Request_Id:** Using this id, we can identify to whom the error occurred. eg. 10400- first two digits represent Eunimart user or other user , last three digits represent the status code.
- **User_id:** This is for user details.

- **Version, microservicename, module, path, method, status_code, message, error_obj ,timestamp** -these are for identifying the error from where it will happen.
- **ArchivedAt:** Instead of removing the document from DB directly we archive it. Eg. Like how we use in telegram, instagram.

Api Endpoints as of now we implemented:

- ❖ <http://localhost:3030/api/errorlog-service/v1/errors/createErrorLog>

whenever the error occurs in other microservices then call this api it will create a document and store it in DB.

- ❖ <http://localhost:3030/api/errorlog-service/v1/errors/getAllErrorLogs>

By using this api call we can get all error logs from the database

- ❖ http://localhost:3030/api/errorlog-service/v1/errors/deleteErrorLog?user_id = kausic115

If we want to remove any error log after rectifying it, instead of deleting it, we can archive it.

- ❖ http://localhost:3030/api/errorlog-service/v1/errors/fetch?user_id = kausic115

If we want only a particular request id error we will use this api.

- ❖ <http://localhost:3030/api/errorlog-service/v1/errors/todayErrorLogs>

Using this api we can retrieve the current day's error logs

- ❖ <http://localhost:3030/api/errorlog-service/v1/errors/archive>

If we want to fetch all archived errors we call this api.

GitHub Link:

<https://github.com/kausicm30/Error-log-microservices>

Reference:

- ELK Frameworks

Still in Discuss part/working part:

- ❖ **Request_id** – If we want to identify the users i.e Eunimart user or other user for that we use x-correlation-id in request headers. From that we can identify what kind of users they are. As of now what we have implemented is, whenever we call an api check with x-correlation-id if it contains some x-correlation id, we will check with our ID . If it matches then it's our user else they are other users.
- ❖ If we are instructed to implement any other api call, then we will implement it in the future.

-SCMS intern team

