

Log parser app

Develop the command line node.js application, which parses the input log file.

The application should find all the log messages with the level error and print them into the output file. Formats of input and outfit files are described below.

Requirements

- TypeScript OOP project.
- Node.js v10+.
- Designed in accordance with OOD principles (DRY, SLAP, SOLID, etc).
- Unit-testing ready (or partially covered by tests)
- Flexibility of the architecture. Application should be easy to extend and modify.

Usage

```
> node parser.js --input ./app.log --output ./errors.json
```

Input

Format

```
<ISO Date> - <Log Level> - {"transactionId: "<UUID>", "details":  
"<message event/action description>", "err": "<Optionall, error  
description>", ...<additional log information>}
```

Example

```
2021-08-09T02:12:51.253Z - info -  
{ "transactionId": "9abc55b2-807b-4361-9dbe-aa88b1b2e978", "details": "Se  
rvice is started" }  
  
2021-08-09T02:12:51.254Z - debug -  
{ "transactionId": "9abc55b2-807b-4361-9dbe-aa88b1b2e978", "details": "Ab  
out to request the user information", "userId": 10 }  
2021-08-09T02:12:51.254Z - debug -  
{ "transactionId": "9abc55b2-807b-4361-9dbe-aa88b1b2e978", "details": "Ab  
out to request user orders list", "userId": 10 }  
2021-08-09T02:12:51.255Z - info -  
{ "transactionId": "9abc55b2-807b-4361-9dbe-aa88b1b2e821", "details": "Se  
rvice is started" }
```

```
2021-08-09T02:12:51.257Z - debug -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e821","details":"Ab
out to request the user information","userId": 16}
2021-08-09T02:12:51.257Z - debug -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e978","details":"Us
er information is gathered","user":{"id":10,"name":"Alice"}}
2021-08-09T02:12:51.258Z - debug -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e821","details":"Ab
out to request user orders list","userId":16}
2021-08-09T02:12:51.259Z - error -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e978","details":"Ca
nnot find user orders list","code": 404,"err":"Not found"}
2021-08-09T02:12:51.259Z - debug -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e821","details":"Us
er information is retrieved","user": {"id": 16, "name": "Michael"}}
2021-08-09T02:12:51.262Z - debug -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e821","details":"Us
er information is
retrieved","user":{"id":16,"orders":[{"id":472,"items":{"id":7,"price
":7.12}}]}}
2021-08-09T02:12:51.264Z - warn -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e978","details":"Se
rvice finished with error","code":404,"err":"Cannot find user orders
list"}
2021-08-09T02:12:51.265Z - info -
{"transactionId":"9abc55b2-807b-4361-9dbe-aa88b1b2e821","details":"Se
rvice is successfully finished"}
```

Output

Format

```
[{"timestamp": <Epoch Unix Timestamp>, "loglevel": "<loglevel>",
"transactionId": "<UUID>", "err": "<Error message>" }]
```

Example

```
[{"timestamp":1628475171259,"loglevel":"error","transactionId":"9abc5
5b2-807b-4361-9dbe-aa88b1b2e978","err":"Not found"}]
```