



ORACLE ACONEX PROJECT

BIM Launcher SE Technical Assessment

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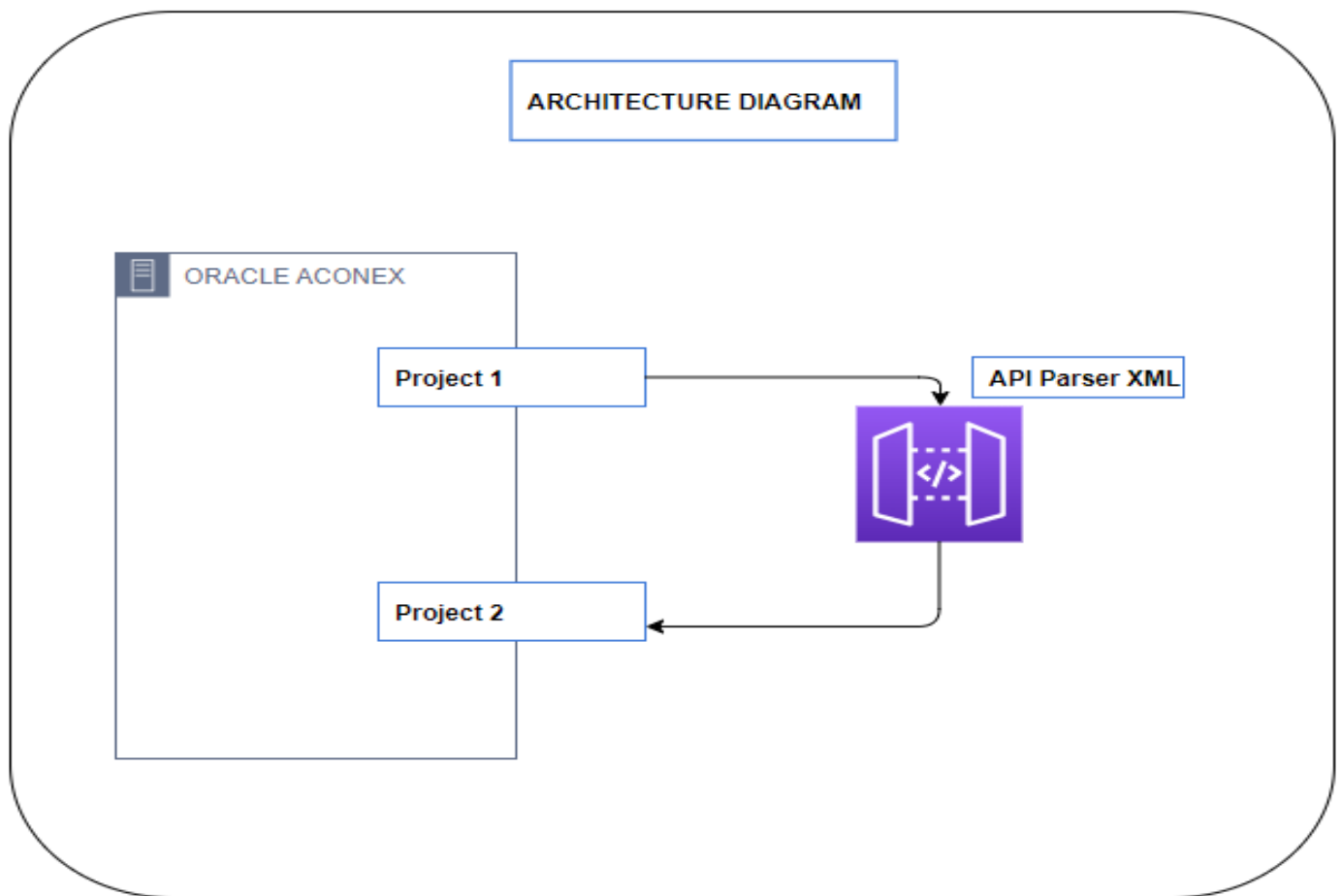
1. Introduction

The purpose of this project is to develop a system that facilitates the seamless transfer of documents between two projects within the Aconex online collaboration platform. Aconex is widely used in the construction industry for managing and exchanging project-related information, including documents.

The document transfer functionality implemented in this project aims to address this limitation and streamline the document exchange process.

The successful implementation of this document transfer system will greatly benefit Majestic Builders and other organizations using the Aconex platform by enhancing collaboration and information sharing between projects.

2. Architecture Diagram



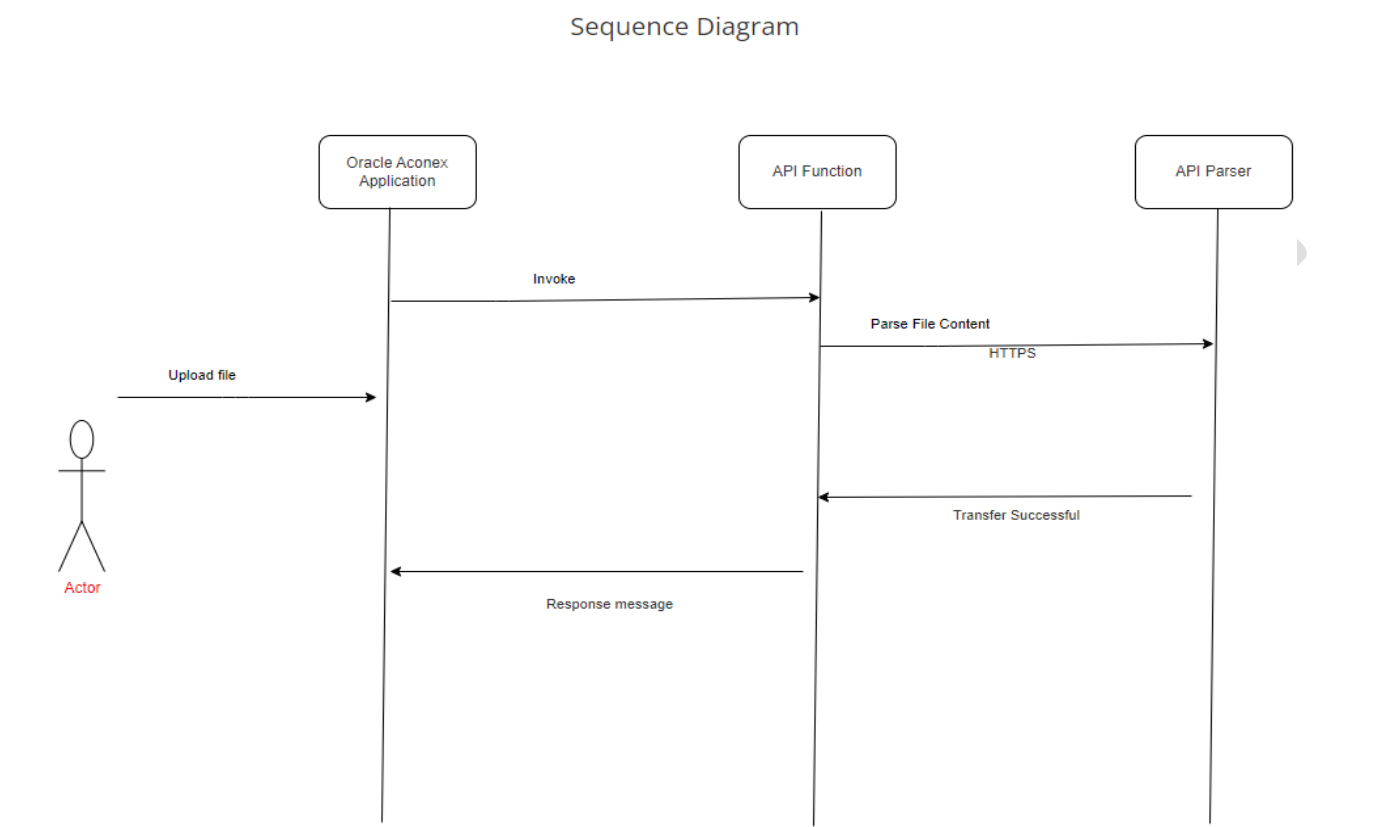
The architecture diagram depicts the Oracle Aconex server, which serves as the central platform for managing construction projects and documents. The server acts as the foundation for communication and data exchange between Project 1 and Project 2.

To facilitate the transfer of documents between Project 1 and Project 2, an API integration is established between the two projects. This API enables secure and controlled communication, allowing documents to be transferred seamlessly from one project to another.

The API integration enables Project 1 to initiate the document transfer process by sending requests to the Aconex server, specifying the documents to be transferred and the target project (Project 2). The Aconex server validates the request, ensuring the document fields and configurations comply with the target project's settings.

Once the validation is successful, the Aconex server facilitates the transfer of documents from Project 1 to Project 2. The documents are securely transmitted and stored within the Aconex server, ensuring data integrity and confidentiality throughout the transfer process.

3. Sequence Diagram



The sequence diagram provides a clear visualization of the step-by-step interactions and communication flow between Project 1, the Aconex server, and Project 2 during the document transfer process. It helps to understand the overall flow, message exchanges, and the order in which events occur, facilitating better comprehension of the system behaviour and interactions.

4. Technical Contents

Programming Language: TypeScript

Runtime: Node.js v18.x

Package Manager: NPM

Library: Axios

5. Results and Evaluation

Source code and other documents have been attached to the email.

Result screenshots:

```
PS [redacted] solution\src> tsc .\aconexproject.ts
PS [redacted] solution\src> node aconexproject.js
An error occurred: Authentication failed
```

Successfully, compiled the assessment file, however, could not execute the assessment file due to the incorrect credentials or a problem with the authentication flow.

6. Conclusion

The architecture diagram showcases the Oracle Aconex server with Project 1 and Project 2, highlighting the API connectivity between them for document transfer. The sequence diagram illustrates the step-by-step interactions and message flow involved in transferring documents. These diagrams provide a visual representation of the system's structure and the chronological order of events, aiding in understanding the document transfer process within the Aconex architecture.

7. GitHub

I have uploaded the files on Github, however kept the repository in private mode.

