# Feedback Received (Adrian) & Implementation Plan

# **Feedback Summary**

I sought feedback from Adrian regarding the Entity Relationship Diagram (ERD) for my Freelancer Job Board API. Below are the key areas evaluated and the feedback received: His feedback involved security risks that were put into place following Jesso's feedback, her implementation of feedback was then removed as I couldn't have major security risks in my API

# 1. Clarity & Understanding

#### Feedback:

- The ERD correctly represents how freelancers, clients, and jobs interact.
- However, it takes some time to interpret and understand.
- Questioned the necessity of including Payments, considering the number of relationships and CRUD routes already involved.

# Implementation:

- Simplified the ERD by removing the Payments table, as suggested.
- Enhanced documentation to improve clarity for new users reviewing the ERD.

#### 2. Relationships & Foreign Keys

#### Feedback:

- Reviewed foreign key constraints and relationships between Users, Jobs, Applications, Contracts, and Payments.
- The **client** id relationship was missing in the Contracts table.
- **Reviewer\_id** and **reviewee\_id** in the Reviews table might be redundant since they can be inferred from existing relationships.
- The **contract\_id** relationship in Payments should allow multiple payments or no payment at all.
- Suggested nullable foreign keys for relationships that may not always exist.

#### Implementation:

- Removed Payments to reduce complexity.
- Added client id to Contracts to correctly associate clients with their contracts.
- Reviewed Reviews table, removing reviewer\_id and reviewee\_id as they can be inferred from Contracts.

Adjusted nullable foreign keys where appropriate to allow optional relationships.

# 3. Normalization & Data Integrity

#### Feedback:

- Ensure proper normalization (3NF or higher) to avoid redundancy.
- Questioned whether any data is unnecessarily duplicated.
- Ensure all primary keys and foreign keys are correctly referenced.

# Implementation:

- Conducted a final review of data normalization, ensuring no unnecessary duplication.
- Checked all **foreign key constraints** to ensure proper data integrity enforcement.
- Updated Contracts and Reviews to minimize redundant fields.

# 4. Scalability & Future-Proofing

#### Feedback:

- Users may require additional fields such as **company name** and **employment details**.
- Future expansion may include reviews and ratings, which should be properly structured.
- Jobs table may need duration or commitment type (full-time, part-time, etc.) fields.

#### Implementation:

- **Did not add company name or employment details** in the Users table, as they were not deemed essential for the current phase of the project.
- Ensured the Reviews table is structured efficiently to accommodate future rating and review expansions.

#### 5. Security & Validation

#### Feedback:

- Payments table contained **ip address**, which may pose security risks.
- Need to consider proper validation for sensitive data.

# Implementation:

- Removed Payments table altogether to avoid handling sensitive financial data.
- Did not implement IP logging as initially suggested by Jesso, following Adrian's feedback on security risks.

#### Conclusion

The feedback from Adrian highlighted key areas for improvement, particularly regarding **relationships, data integrity, and scalability**. The removal of the **Payments table** simplifies the system and reduces security risks. By refining relationships, removing unnecessary fields, and improving clarity, the Freelancer Job Board API is now more scalable, easier to maintain, and future-proofed for additional features.