FREELANCE MARKETPLACE DATA ANALYSIS

-Exploring trends, performance, and relationships in freelancer–client projects

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Project Overview

Objective: To analyze a custom freelance marketplace dataset and derive meaningful business insights.
Dataset: Unique, self-created freelance platform dataset with multiple tables (projects, freelancers, clients, bids, transactions).
Tools Used: MySQL Workbench, Canva (for presentation).

Analysis Scope:

- Easy-level queries: Basic retrievals and aggregations.
- Medium-level queries: Joins and grouped analysis.
- Hard-level queries: Complex joins and analytical queries for business KPIs.

Dataset Overview

Dataset Name: Freelance Platform Database
Total Tables: 4

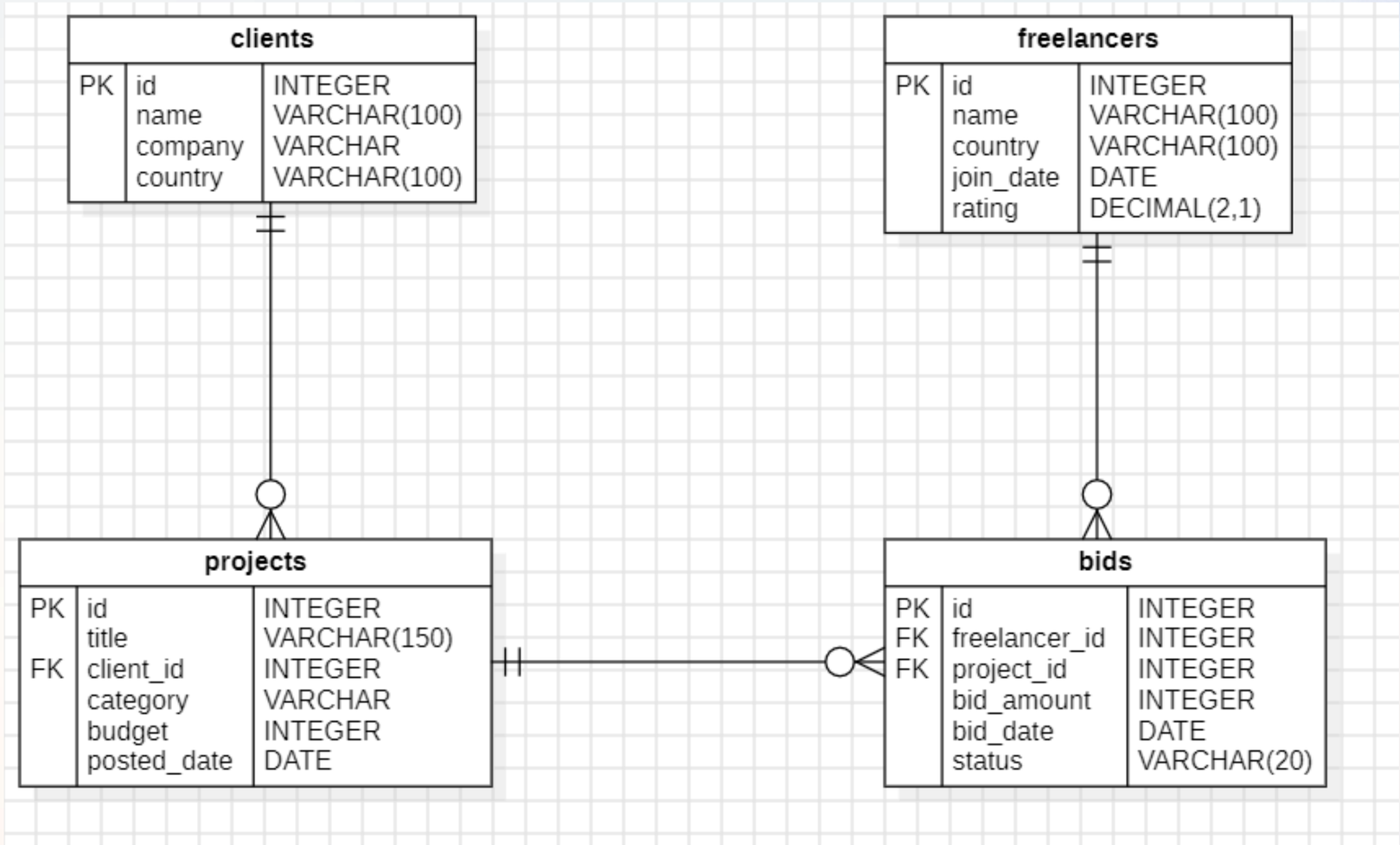
bids
id, freelancer_id, project_id, bid_amount, bid_date, status

clients
id, name, company, country

freelancers
id, name, country, join_date, rating

projects
id, title, client_id, category, budget, posted_date

ER Diagram Of Freelance Platform Database



SQL Queries

Simple SQL Queries:

- List all freelancers from American Samoa
- Find all distinct countries represented by clients
- Show the top 5 projects with the highest budgets
- Get all bids with amount greater than project budget
- Find all freelancers who made a bid on a project in the AI category
- Count how many freelancers are from each country

Medium SQL Queries:

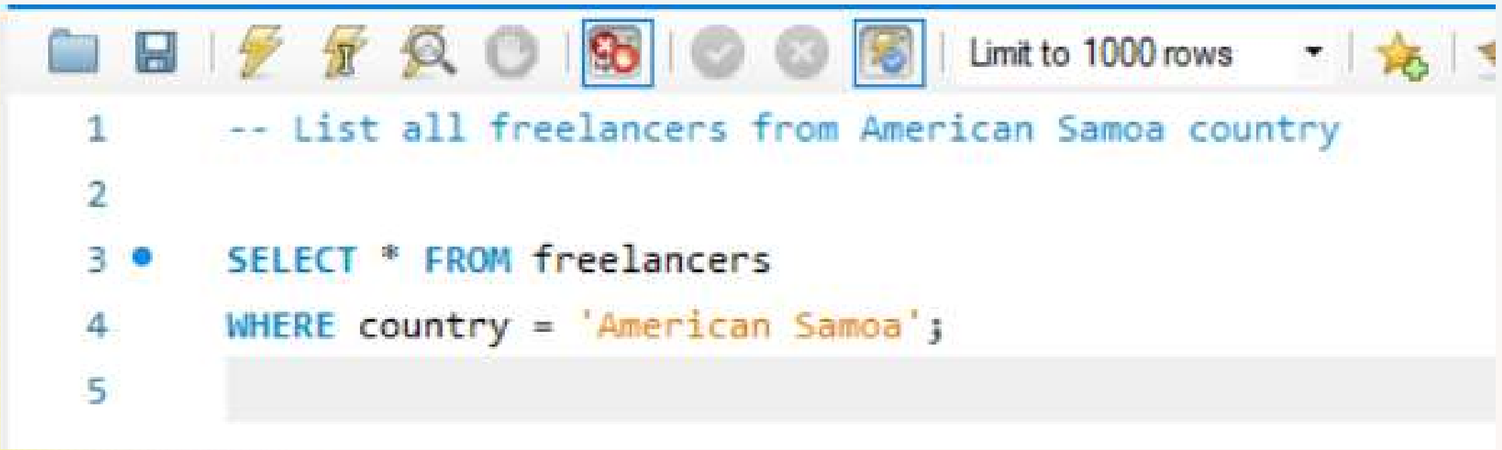
- Find the total number of projects posted by each client
- List the average bid amount for each project
- Show freelancers who have placed more than 5 bids
- Find the highest bid placed for each project
- Count the number of freelancers from each country who have at least 1 accepted bid

Hard SQL Queries:

- Find Freelancers who placed a bid higher than the average bid for the same project
- Find Freelancers whose rating is above the average rating of freelancers from the same country and who have completed at least 3 projects
- Find Freelancers whose rating is above the overall average freelancer rating and who have worked with more than 2 different clients

Simple SQL Queries

List all freelancers from American Samoa country



Output-->

Result Grid | Filter Rows: | Edit:

id	name	country	join_date	rating
17	Walter Pratt	American Samoa	2025-07-27	4.9
36	Faith Cabrera	American Samoa	2024-06-28	3.5

Simple SQL Queries

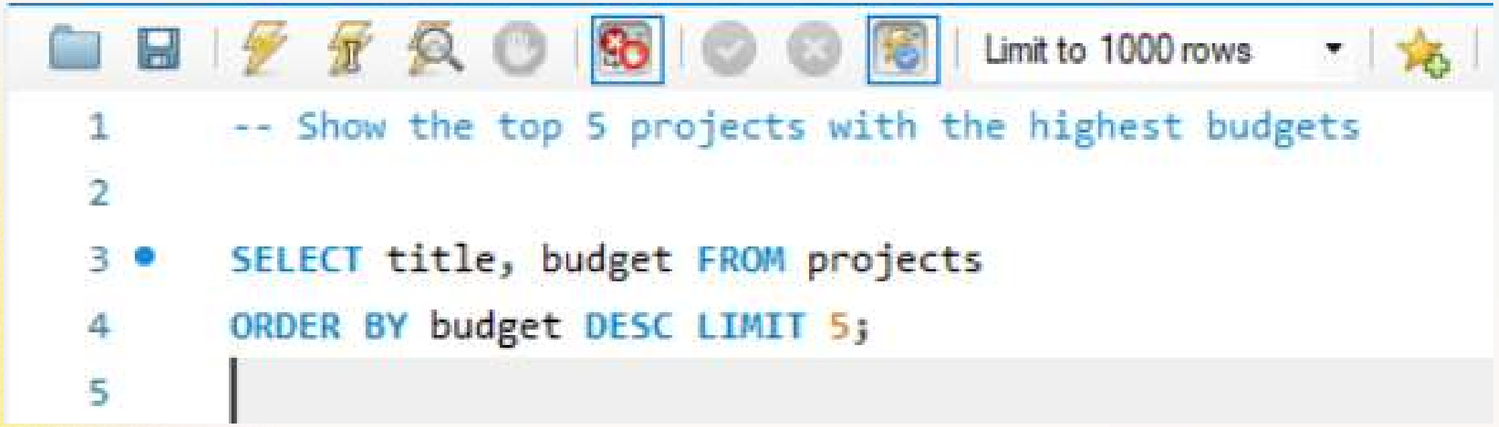
Find all distinct countries represented by clients

Output-->

country	name
Sao Tome and Principe	Amber Carson
Philippines	Jennifer Dunn
Cook Islands	Veronica Monroe
British Indian Ocean Territory (Chagos Archipel...	Adrian Herring
Luxembourg	Aaron Smith
Indonesia	Veronica Lowe
Equatorial Guinea	Cheryl Franklin
Cote d'Ivoire	Eric Barker
Norway	John Livingston
Armenia	Alison Sloan

Simple SQL Queries

Show the top 5 projects with the highest budgets



Output-->

title	budget
Integrate End-To-End Functionalities	4959
Productize Best-Of-Breed Technologies	4837
Synergize Integrated Markets	4666
Synthesize 24/365 Users	4625
Matrix Leading-Edge E-Business	4447

Simple SQL Queries

Get all bids with amount greater than project budget

Output-->

bid_id	bid_amount	budget
105	5891	3857
111	5878	2461
23	5858	3705
69	5817	3239
130	5760	512
39	5682	1932
13	5674	822

Simple SQL Queries

Find all freelancers who made a bid on a project in the AI category

```sql
-- Find all freelancers who made a bid on a project in the AI category

SELECT DISTINCT freelancers.id, freelancers.name FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
JOIN projects ON bids.project_id = projects.id
WHERE projects.category = 'AI';
```

Output-->

id	name
1	Norma Fisher
3	Elizabeth Woods
26	Peter Mcdowell
50	Caroline Chambers
11	Sean Green
18	Bobby Flores
8	Stephanie Sutton

Simple SQL Queries

Count how many freelancers are from each country

```sql
-- Count how many freelancers are from each country

SELECT country, COUNT(*) AS freelancer_count FROM freelancers
GROUP BY country
ORDER BY freelancer_count DESC;

```

Output-->

country	freelancer_count
American Samoa	2
El Salvador	2
Saint Vincent and the Grenadines	2
Azerbaijan	1
Solomon Islands	1
Philippines	1
Cayman Islands	1

Medium SQL Queries

Find the total number of projects posted by each client

```sql
-- Find the total number of projects posted by each client

SELECT clients.id, clients.name, COUNT(projects.id) AS total_projects FROM clients
JOIN projects ON clients.id = projects.client_id
GROUP BY clients.id, clients.name
ORDER BY total_projects DESC;
```

Output-->

id	name	total_projects
3	Veronica Monroe	7
18	Jeffrey Savage	6
10	Alison Sloan	4
11	Ashley Scott	4
16	Sarah Ali	4
19	James Carter	4
20	Devon Morgan	4
4	Adrian Herring	3
7	Cheryl Franklin	3

Medium SQL Queries

List the average bid amount for each project

```sql
-- List the average bid amount for each project

SELECT projects.id, projects.title, AVG(bids.bid_amount) AS average_bid FROM projects
JOIN bids ON projects.id = bids.project_id
GROUP BY projects.id, projects.title
ORDER BY average_bid DESC;
```

Output-->

id	title	average_bid
55	Morph Proactive Deliverables	5817.0000
57	Evolve Next-Generation Mindshare	5636.5000
30	Leverage End-To-End Action-Items	5616.0000
60	Re-Contextualize Sticky E-Markets	5477.0000
53	Seize Intuitive Paradigms	5102.3333
39	Revolutionize B2C Web-Readiness	4856.5000
20	Evolve Intuitive E-Commerce	4640.0000

Medium SQL Queries

Show freelancers who have placed more than 5 bids

```sql
-- Show freelancers who have placed more than 5 bids

SELECT freelancers.id, freelancers.name, COUNT(bids.id) AS total_bids FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
GROUP BY freelancers.id, freelancers.name
HAVING COUNT(bids.id) > 5
ORDER BY total_bids DESC;
```

Output-->

Result Grid | Filter Rows:

id	name	total_bids
3	Elizabeth Woods	8
1	Norma Fisher	6
42	Alex Woodward	6

Medium SQL Queries

Find the highest bid placed for each project

```sql
-- Find the highest bid placed for each project

SELECT projects.id, projects.title, MAX(bids.bid_amount) AS highest_bid FROM projects
JOIN bids ON projects.id = bids.project_id
GROUP BY projects.id, projects.title
ORDER BY highest_bid DESC;
```

Output-->

id	title	highest_bid
28	Transition Seamless E-Markets	5891
57	Evolve Next-Generation Mindshare	5878
10	Expedite B2C Architectures	5858
55	Morph Proactive Deliverables	5817
53	Seize Intuitive Paradigms	5760
25	Repurpose Clicks-And-Mortar Roi	5682
8	Facilitate Turn-Key Vortals	5674

Medium SQL Queries

Count the number of freelancers from each country who have at least 1 accepted bid

```sql
-- Count the number of freelancers from each country who have at least 1 accepted bid

SELECT freelancers.country, COUNT(DISTINCT freelancers.id) AS total_freelancers FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
WHERE bids.status = 'Accepted'
GROUP BY freelancers.country
ORDER BY total_freelancers DESC;
```

Output-->

country	total_freelancers
American Samoa	2
El Salvador	2
Aruba	1
Belgium	1
British Indian Ocean Territory (Chagos Archipel...	1
Burkina Faso	1

Hard SQL Queries

Find Freelancers who placed a bid higher than the average bid for the same project

```sql
-- Find Freelancers who placed a bid higher than the average bid for the same project

SELECT freelancers.id, freelancers.name, bids.project_id, bids.bid_amount
FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
WHERE bids.bid_amount > (
    SELECT AVG(bids_inner.bid_amount)
    FROM bids AS bids_inner
    WHERE bids_inner.project_id = bids.project_id
);
```

Output-->

id	name	project_id	bid_amount
1	Norma Fisher	19	2384
1	Norma Fisher	38	2780
1	Norma Fisher	57	5878
3	Elizabeth Woods	8	5674
3	Elizabeth Woods	3	5201
3	Elizabeth Woods	52	5357

Hard SQL Queries

Find Freelancers whose rating is above the average rating of freelancers from the same country and who have completed at least 3 projects

```sql
SELECT freelancers.id, freelancers.name, freelancers.country, freelancers.rating, COUNT(projects.id) AS completed_projects
FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
JOIN projects ON bids.project_id = projects.id
WHERE bids.status = 'Accepted'
GROUP BY freelancers.id, freelancers.name, freelancers.country, freelancers.rating
HAVING freelancers.rating > (
            SELECT AVG(rating) FROM freelancers
            WHERE country = freelancers.country
        )
    AND COUNT(projects.id) >= 3;
```

Output-->

id	name	country	rating	completed_projects
1	Norma Fisher	Seychelles	4.8	3
20	Michelle Kelley	Ireland	4.9	3
14	April Snyder	Kenya	4.6	3
10	Susan Levy	El Salvador	4.4	3

Hard SQL Queries

Find Freelancers whose rating is above the overall average freelancer rating and who have worked with more than 2 different clients

```sql
SELECT freelancers.id, freelancers.name, freelancers.rating, COUNT(DISTINCT projects.client_id) AS unique_clients
FROM freelancers
JOIN bids ON freelancers.id = bids.freelancer_id
JOIN projects ON bids.project_id = projects.id
WHERE bids.status = 'Accepted'
GROUP BY freelancers.id, freelancers.name, freelancers.rating
HAVING freelancers.rating > (
            SELECT AVG(freelancers.rating) FROM freelancers
        )
   AND COUNT(DISTINCT projects.client_id) > 2;
```

Output-->

id	name	rating	unique_clients
1	Norma Fisher	4.8	3
10	Susan Levy	4.4	3
14	April Snyder	4.6	3
20	Michelle Kelley	4.9	3

Key Insights & Observations

- The freelance marketplace recorded around 150 bids, and the acceptance rate of 36–39% shows that the platform is competitive but still healthy.
- The average bid amount is approximately $3,000, while freelancers maintain high ratings (4.2–5.0), which reflects strong talent quality.
- Freelancers represent more than 45 countries, confirming that the platform has a truly global presence.
- Web Development and AI/Data projects dominate demand, and about 27% of projects have budgets above $4,000, highlighting a premium market segment.
- A few clients, contribute nearly 20% of the projects, making them highly valuable for the platform.
- Lower bids are more likely to be accepted, while rejected bids tend to be about 10–12% higher.
- Platform activity has remained consistent from 2023 to 2025, and the number of freelancer sign-ups has steadily increased, showing healthy growth.

Recommendations

- The platform should focus on attracting more projects in high-demand categories like Web Development, AI, and Data.
- Freelancers should be encouraged to place competitive but realistic bids since pricing has a strong influence on success.
- The company should build and maintain strong relationships with key clients who post the most projects, as they are critical to platform stability.
- Promoting top-rated freelancers would help improve client trust and increase project acceptance rates.
- Implementing data-driven project matching could connect freelancers with opportunities that align better with their skills and past successes.

THANK YOU!