Freelenso

Project Overview

FREELENSO is a Django-based freelance marketplace designed to connect clients with freelancers for various services like web development, graphic design, content writing, and more. The platform allows clients to post projects, receive proposals from freelancers, and manage payments securely.

The various tables used :

User Table

```
users (
    id SERIAL PRIMARY KEY,
    username VARCHAR(100) UNIQUE NOT NULL,
    email VARCHAR(255) UNIQUE NOT NULL,
    password_hash VARCHAR(255) NOT NULL,
    user_type VARCHAR(10) CHECK (user_type IN ('freelancer', 'client')) NOT NULL,
    skills TEXT,
    profile_description TEXT,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
)
```

Table projects

```
projects (
    id SERIAL PRIMARY KEY,
    client_id INT REFERENCES users(id) ON DELETE CASCADE,
    title VARCHAR(255) NOT NULL,
    description TEXT NOT NULL,
    budget DECIMAL(10,2) NOT NULL,
    deadline DATE NOT NULL,
    status VARCHAR(20) CHECK (status IN ('open', 'in_progress', 'completed', 'cancelled')) NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
)
```

Table Proposals

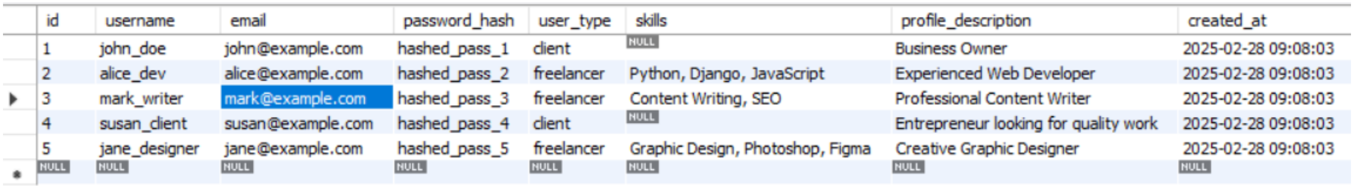
```
proposals (
    id SERIAL PRIMARY KEY,
    project_id INT REFERENCES projects(id) ON DELETE CASCADE,
    freelancer_id INT REFERENCES users(id) ON DELETE CASCADE,
    bid_amount DECIMAL(10,2) NOT NULL,
    cover_letter TEXT,
    status VARCHAR(20) CHECK (status IN ('pending', 'accepted', 'rejected')) NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
)
```

Table Payments

```
payments (
    id SERIAL PRIMARY KEY,
    project_id INT REFERENCES projects(id) ON DELETE CASCADE,
    client_id INT REFERENCES users(id) ON DELETE CASCADE,
    freelancer_id INT REFERENCES users(id) ON DELETE CASCADE,
    amount DECIMAL(10,2) NOT NULL,
    status VARCHAR(20) CHECK (status IN ('escrow', 'released', 'disputed')) NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
)
```

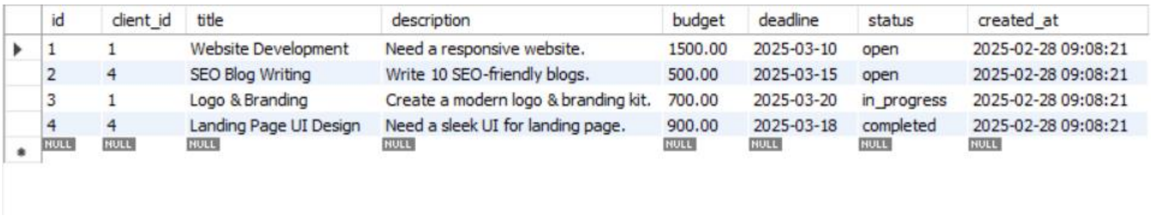
Sample data in each table

User table



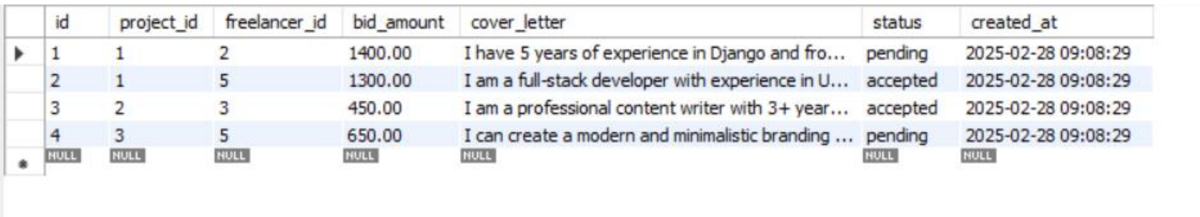
	id	username	email	password_hash	user_type	skills	profile_description	created_at
	1	john_doe	john@example.com	hashed_pass_1	client	NULL	Business Owner	2025-02-28 09:08:03
	2	alice_dev	alice@example.com	hashed_pass_2	freelancer	Python, Django, JavaScript	Experienced Web Developer	2025-02-28 09:08:03
▶	3	mark_writer	mark@example.com	hashed_pass_3	freelancer	Content Writing, SEO	Professional Content Writer	2025-02-28 09:08:03
	4	susan_client	susan@example.com	hashed_pass_4	client	NULL	Entrepreneur looking for quality work	2025-02-28 09:08:03
	5	jane_designer	jane@example.com	hashed_pass_5	freelancer	Graphic Design, Photoshop, Figma	Creative Graphic Designer	2025-02-28 09:08:03
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Project table



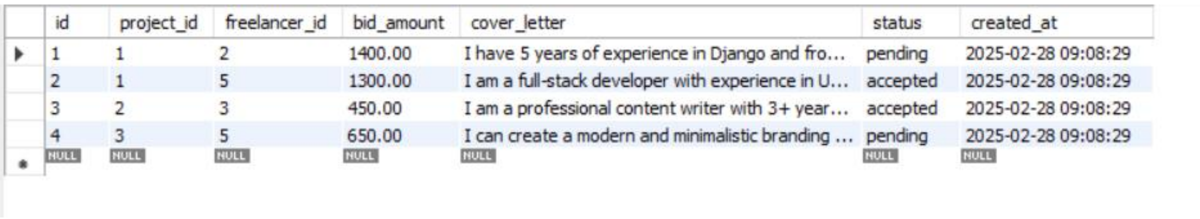
	id	client_id	title	description	budget	deadline	status	created_at
▶	1	1	Website Development	Need a responsive website.	1500.00	2025-03-10	open	2025-02-28 09:08:21
	2	4	SEO Blog Writing	Write 10 SEO-friendly blogs.	500.00	2025-03-15	open	2025-02-28 09:08:21
	3	1	Logo & Branding	Create a modern logo & branding kit.	700.00	2025-03-20	in_progress	2025-02-28 09:08:21
	4	4	Landing Page UI Design	Need a sleek UI for landing page.	900.00	2025-03-18	completed	2025-02-28 09:08:21
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Project Proposals



	id	project_id	freelancer_id	bid_amount	cover_letter	status	created_at
▶	1	1	2	1400.00	I have 5 years of experience in Django and fro...	pending	2025-02-28 09:08:29
	2	1	5	1300.00	I am a full-stack developer with experience in U...	accepted	2025-02-28 09:08:29
	3	2	3	450.00	I am a professional content writer with 3+ year...	accepted	2025-02-28 09:08:29
	4	3	5	650.00	I can create a modern and minimalistic branding ...	pending	2025-02-28 09:08:29
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Table Payments



	id	project_id	freelancer_id	bid_amount	cover_letter	status	created_at
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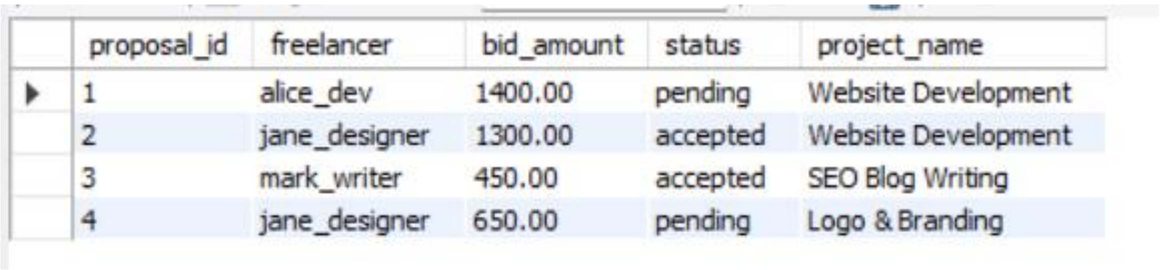
	2	1	5	1300.00	I am a full-stack developer with experience in U...	accepted	2025-02-28 09:08:29
	3	2	3	450.00	I am a professional content writer with 3+ year...	accepted	2025-02-28 09:08:29
	4	3	5	650.00	I can create a modern and minimalistic branding ...	pending	2025-02-28 09:08:29
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The Join query that you are about to run

1. INNER JOIN - Get All Proposals with Project & Freelancer Details

```
SELECT
    p.id AS proposal_id,
    u.username AS freelancer,
    p.bid_amount,
    p.status,
    proj.title AS project_name
FROM proposals p
INNER JOIN users u ON p.freelancer_id = u.id
INNER JOIN projects proj ON p.project_id = proj.id;
```

Purpose: Retrieves all proposals, showing freelancer name, bid amount, proposal status, and project title.

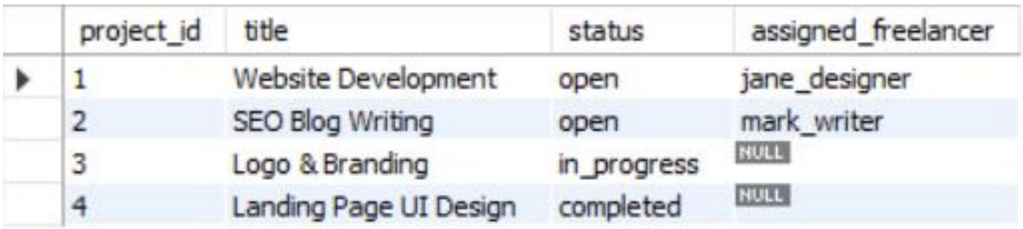


	proposal_id	freelancer	bid_amount	status	project_name
▶	1	alice_dev	1400.00	pending	Website Development
	2	jane_designer	1300.00	accepted	Website Development
	3	mark_writer	450.00	accepted	SEO Blog Writing
	4	jane_designer	650.00	pending	Logo & Branding

LEFT JOIN - Get All Projects and Their Assigned Freelancers (If Any)

```
SELECT
    proj.id AS project_id,
    proj.title,
    proj.status,
    u.username AS assigned_freelancer
FROM projects proj
LEFT JOIN proposals p ON proj.id = p.project_id AND p.status = 'accepted'
LEFT JOIN users u ON p.freelancer_id = u.id;
```

Lists all projects, including freelancers assigned to them (if accepted). Projects without a freelancer will show NULL.

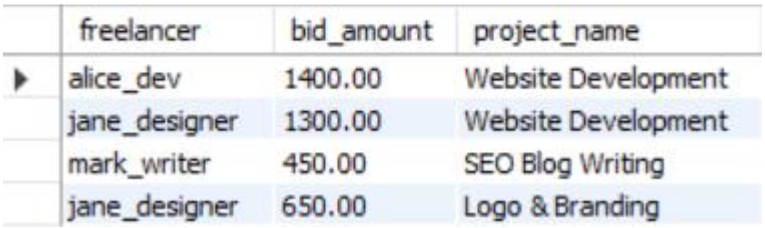


	project_id	title	status	assigned_freelancer
▶	1	Website Development	open	jane_designer
	2	SEO Blog Writing	open	mark_writer
	3	Logo & Branding	in_progress	NULL
	4	Landing Page UI Design	completed	NULL

RIGHT JOIN - Find Freelancers Who Have Submitted Proposals

```
SELECT
    u.username AS freelancer,
    p.bid_amount,
    proj.title AS project_name
FROM proposals p
RIGHT JOIN users u ON p.freelancer_id = u.id
JOIN projects proj ON p.project_id = proj.id;
```

Purpose: Retrieves freelancers who have submitted proposals, showing their bid amount and project name.



	freelancer	bid_amount	project_name
▶	alice_dev	1400.00	Website Development
	jane_designer	1300.00	Website Development
	mark_writer	450.00	SEO Blog Writing
	jane_designer	650.00	Logo & Branding

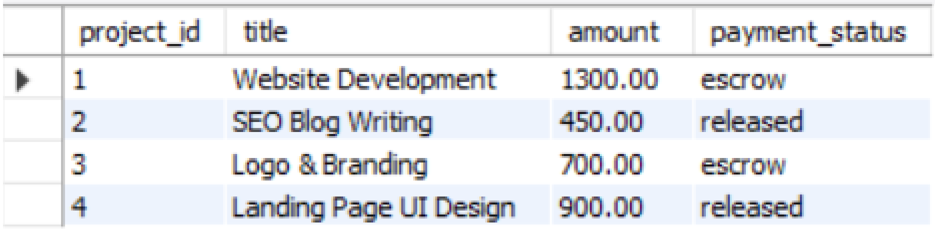
FULL OUTER JOIN - Get All Projects and Payments (Even If No Payment Yet)

```
SELECT
    proj.id AS project_id,
    proj.title,
    p.amount,
    p.status AS payment_status
FROM projects proj
LEFT JOIN payments p ON proj.id = p.project_id

UNION

SELECT
    proj.id AS project_id,
    proj.title,
    p.amount,
    p.status AS payment_status
FROM projects proj
RIGHT JOIN payments p ON proj.id = p.project_id;
```

Purpose: Retrieves all projects along with payment details, even if payment is not made yet.



project_id	title	amount	payment_status
1	Website Development	1300.00	escrow
2	SEO Blog Writing	450.00	released
3	Logo & Branding	700.00	escrow
4	Landing Page UI Design	900.00	released