

EBD: Database Specification Component

Software tool for tracking and managing projects. This application is designed to help users plan, coordinate, and execute tasks that need to be completed to make progress on the project at hand.

A4: Conceptual Data Model

This artifact presents the Conceptual Data Model using a UML class diagram to document the model. It contains the identification and description of the entities and relationships that are relevant to the database specification.

1. Class Diagram

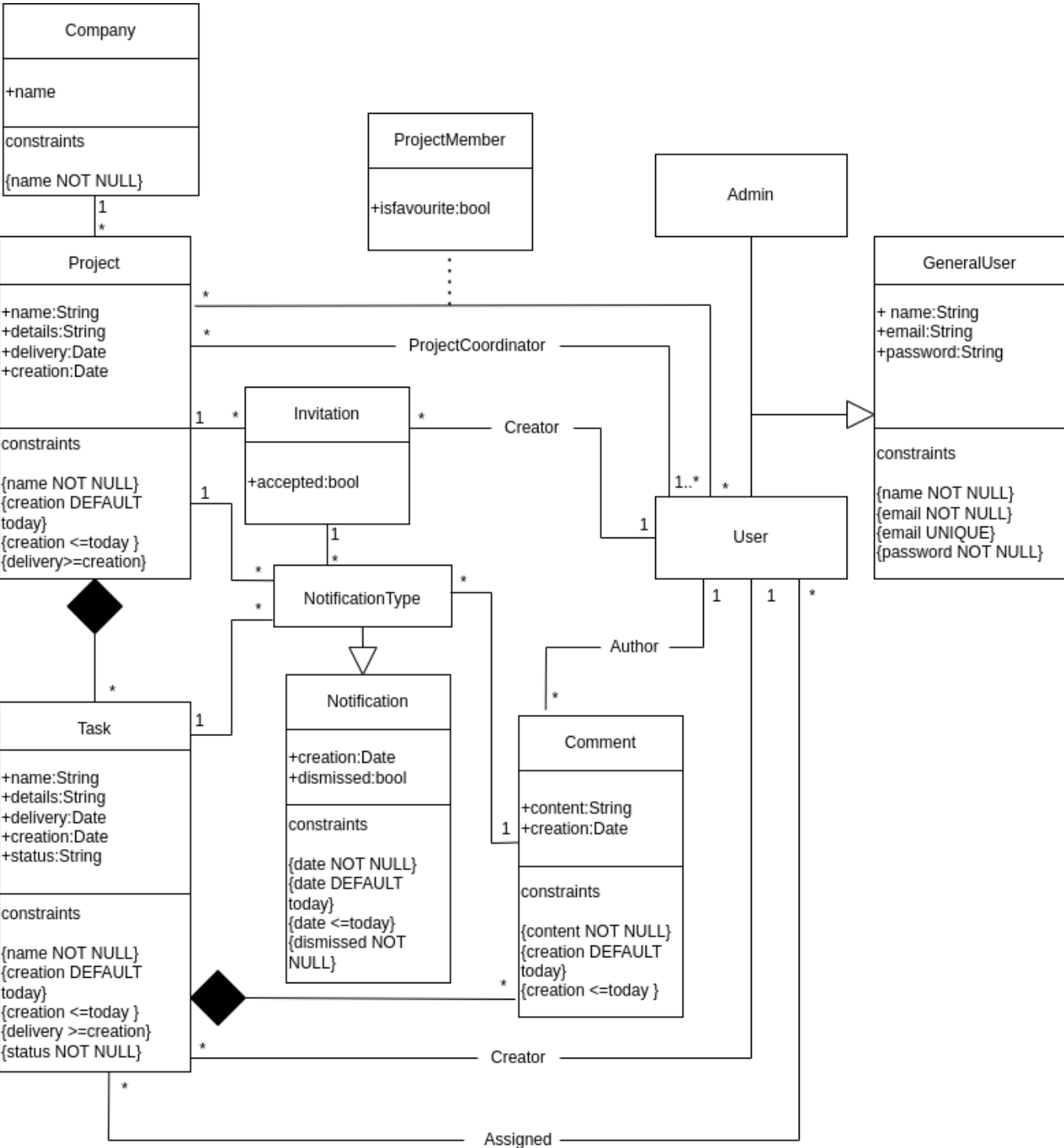


Fig1. Conceptual Data Model in UML

2. Additional Business Rules

- BR01. GeneralUser is the conceptual name, in order to separate Admins from the rest of the users.

A5: Relational Schema, validation and schema refinement

This artifact contains the Relational Schema made by mapping the Conceptual Data Model and represents the relation schema, attributes, domains, primary keys, foreign keys and other integrity rules that will be included in the database.

1. Relational Schema

Relation reference	Relation Compact Notation
R01	users(<u>id</u> , name NN , email NN UK CK valid_email_format, password NN)
R02	admins(<u>id</u> , name NN , email NN UK CK valid_email_format, password NN)
R03	company(<u>id</u> , name NN)
R04	project(<u>id</u> , company_id -> company, name NN , details, creation NN DF today CK creation<=today,delivery NN CK delivery>=creation)
R05	project_member(<u>users_id</u> -> users, <u>project_id</u> -> project, is_favourite NN DF false)
R06	project_coordinator(<u>id</u> , users_id -> users, project_id -> project)
R07	task(<u>id</u> , project_id -> project, creator -> users, name NN , details, status NN , creation NN DF today CK creation<=today, delivery NN CK delivery>=creation)
R08	task_assigned(<u>users_id</u> -> users, <u>task_id</u> -> task)
R09	comment(<u>id</u> , task_id -> task, author -> users, content NN , creation NN DF today CK creation<=today)
R10	invitation(<u>id</u> , project_id -> project, users_id -> users,project_coordinator_id -> project_coordinator)
R11	notifications(<u>id</u> , dismissed NN , users_id -> user NN , invitation_id -> invitation, comment_id -> comment, task_id -> task, project_id -> project, notification_type NN , creation NN DF today CK creation<=today)

Legend:

- UK = UNIQUE KEY
- NN = NOT NULL
- DF = DEFAULT

- CK = CHECK

2. Domains

Domain Name	Domain Specification
today	TIMESTAMP DEFAULT CURRENT_DATE
status	ENUM('Completed', 'Ongoing', 'Paused', 'Abandoned', 'Overdue')
notification_type	ENUM('project_notification','invitation_notification','task_notification','comment_notification')

3. Schema validation

Table R01	users
Keys:	{id},{email}
Functional Dependencies	
FD0101	{id} -> {name, email, password}
FD0102	{email} -> {id, name, password}

Normal Form BCNF

Table R02	admins
Keys:	{id},{email}
Functional Dependencies	
FD0201	{id} -> {name, email, password}
FD0202	{email} -> {id, name, password}

Normal Form BCNF

Table R03	company
Keys:	{id}
Functional Dependencies	
FD0301	{id} -> {name}

Normal Form BCNF

Table R04	project
Keys:	{id}
Functional Dependencies	
FD0401	{id} -> {company_id, name, details, creation, delivery}

Normal Form BCNF

Table R05	project_member
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Table R05	project_member
Keys:	{users_id, project_id}
Functional Dependencies	
FD0501	{users_id, project_id} -> {is_favourite}
Normal Form	BCNF
Table R06	project_coordinator
Keys:	{id}
Functional Dependencies	
FD0601	{id} -> {users_id, project_id}
Normal Form	BCNF
Table R07	task
Keys:	{id}
Functional Dependencies	
FD0701	{id} -> {project_id, creator, name, details, status, creation, delivery}
Normal Form	BCNF
Table R08	task_assigned
Keys:	{users_id, task_id}
Functional Dependencies	none
Normal Form	BCNF
Table R09	comment
Keys:	{id}
Functional Dependencies	
FD0901	{id} -> {task_id, author, content, creation}
Normal Form	BCNF
Table R010	invitation
Keys:	{id}
Functional Dependencies	none
FD1001	{id} -> {project_id, users_id, project_coordinator_id}
Normal Form	BCNF
Table R11	notification
Keys	{id}

Table R11 notification	
Functional Dependencies:	
FD1101	{id} -> {creation, dismissed, users_id, inviation_id, comment_id, task_id, project_id, notification_type}
NORMAL FORM	BCNF

Because all relations are in the Boyce–Codd Normal Form (BCNF), the relational schema is also in the BCNF and, therefore, the schema does not need to be further normalized.

A6: Indexes, triggers, transactions and database population

This artifact contains the physical schema of the database, the identification and characterisation of the indexes, the support of data integrity rules with triggers and the definition of the database user-defined functions.

Furthermore, it also shows the database transactions needed to assure the integrity of the data in the presence of concurrent accesses. For each transaction, the isolation level is explicitly stated and justified.

This artifact also contains the database's workload as well as the complete database creation script, including all SQL necessary to define all integrity constraints, indexes and triggers. Finally, this artifact also includes a separate script with INSERT statements to populate the database.

1. Database Workload

Relation	Relation name	Order of magnitude	Estimated growth
R01	users	10 k (tens of thousands)	10 (tens) / day
R02	admins	1 (one)	1 (one) / year
R03	company	100 (hundreds)	1 / week
R04	project	1 k (thousands)	1 / day
R05	project_member	10 k	10 / day
R06	project_coordinator	1 k	1 / day
R07	task	100 k (hundreds of thousands)	100 (hundred) / day
R08	task_assigned	100 k	100 / day
R09	comment	1 M (million)	1 k (thousands) / day
R10	invitation	10 k	10 / day
R11	notifications	1 M	1 k / day

2. Proposed Indices

2.1. Performance Indices

Index	IDX01
Index relation	task_assigned
Index attribute	users_id
Index type	B-tree
Cardinality	Medium
Clustering	No
Justification	Every time the user needs to see tasks assigned to him, a query will be issued. This table will be frequently updated so clustering is not efficient. Also there will be multiple rows with the same 'users_id' value, so hash was also not efficient.

```
CREATE INDEX task_assigned_idx ON task_assigned USING btree (users_id);
```

Index	IDX02
Index relation	users
Index attribute	email
Index type	hash
Cardinality	Medium
Clustering	No
Justification	In authentication we will filter 'users' 'email' frequently so an index here will greatly increase efficiency. Email is an exact match so hash is the best option.

```
CREATE INDEX idx_users_email ON users USING hash (email);
```

Index	IDX03
Index relation	task
Index attribute	project_id
Index type	B-tree
Cardinality	Medium
Clustering	No

Index	IDX03
Justification	Table 'task' will be frequently accessed for showing tasks in a certain project. A b-tree index allows for faster date range queries based on the 'project_id'.

```
CREATE INDEX idx_task_project_id ON task USING btree (project_id);
```

2.2. Full-text Search Indices

Index	IDX11
Index relation	project
Index attributes	name, details
Index type	GIN
Clustering	No
Justification	To provide full-text search features to look for projects based on matching names or details. The index type is GIN because the indexed fields are not expected to change often.

```
ALTER TABLE project
ADD COLUMN tsvectors TSVECTOR;

CREATE FUNCTION project_search_update() RETURNS TRIGGER AS $$
BEGIN
  IF TG_OP = 'INSERT' THEN
    NEW.tsvectors = (
      setweight(to_tsvector('english', NEW.name), 'A') ||
      setweight(to_tsvector('english', NEW.details), 'B')
    );
  END IF;
  IF TG_OP = 'UPDATE' THEN
    IF (NEW.name <> OLD.name OR NEW.details <> OLD.details) THEN
      NEW.tsvectors = (
        setweight(to_tsvector('english', NEW.name), 'A') ||
        setweight(to_tsvector('english', NEW.details), 'B')
      );
    END IF;
  END IF;
  RETURN NEW;
END $$
LANGUAGE plpgsql;

CREATE TRIGGER project_search_update
BEFORE INSERT OR UPDATE ON project
FOR EACH ROW
EXECUTE PROCEDURE project_search_update();
```

```
CREATE INDEX search_idx ON project USING GIN (tsvectors);
```

3. Triggers

Trigger	TRIGGER01
Description	Prevents duplicated task assignments
SQL Code	

```
CREATE FUNCTION prevent_duplicate_assignment() RETURNS TRIGGER AS $$
BEGIN
    IF EXISTS (SELECT 1 FROM task_assigned WHERE users_id = NEW.users_id AND
task_id = NEW.task_id) THEN
        RAISE EXCEPTION 'User is already assigned to this task';
    END IF;
    RETURN NEW;
END;
$$ LANGUAGE plpgsql;

CREATE TRIGGER prevent_duplicate_assignment_trigger
BEFORE INSERT ON task_assigned
FOR EACH ROW
EXECUTE FUNCTION prevent_duplicate_assignment();
```

Trigger	TRIGGER01
Description	Auto updating task status to overdue if not completed by the delivery date.
SQL Code	

```
CREATE OR REPLACE FUNCTION update_task_status_trigger()
RETURNS TRIGGER AS $$
BEGIN
    IF NEW.delivery < NOW() THEN AND NEW.delivery != 'Completed'
        NEW.status = 'Overdue';
    END IF;
    RETURN NEW;
END;
$$ LANGUAGE plpgsql;

CREATE TRIGGER task_update_status
BEFORE INSERT OR UPDATE ON task
FOR EACH ROW
EXECUTE FUNCTION update_task_status_trigger();
```

4. Transactions

Transaction	TRAN01
Description	Addition of a generic project coordinator
Justification	In order to maintain consistency, it's necessary to use a transaction to ensure that all the code executes without errors. If an error occurs, a ROLLBACK is issued. The isolation level is Repeatable Read, because, otherwise, an update of users_id could happen, due to an insert in the table project_coordinator committed by a concurrent transaction, and as a result, inconsistent data would be stored.
Isolation Level	REPEATABLE READ
SQL Code	<pre>BEGIN TRANSACTION SET TRANSACTION ISOLATION LEVEL REPEATABLE READ INSERT INTO project_member(users_id, project_id, is_favorite) VALUES (\$users_id, \$project_id, \$is_favorite); INSERT INTO project_coordinator(id, users_id, project_id) VALUES (\$id, \$users_id, \$project_id); END TRANSACTION;</pre>

Annex A. SQL Code

A.1. Database Schema

```
DROP TABLE IF EXISTS users CASCADE;
DROP TABLE IF EXISTS admins;
DROP TABLE IF EXISTS company;
DROP TABLE IF EXISTS project CASCADE;
DROP TABLE IF EXISTS project_member;
DROP TABLE IF EXISTS project_coordinator;
DROP TABLE IF EXISTS task CASCADE;
DROP TABLE IF EXISTS task_assigned;
DROP TABLE IF EXISTS comment CASCADE;
DROP TABLE IF EXISTS invitation;

DROP TYPE IF EXISTS status;
DROP TYPE IF EXISTS notification_type;

CREATE TYPE status AS ENUM ('Completed', 'Ongoing', 'Paused', 'Abandoned',
'Overdue');
CREATE TYPE notification_type AS
ENUM('project_notification','invitation_notification','task_notification','comment_
notification');
```

```
CREATE TABLE users(  
    id SERIAL PRIMARY KEY,  
    name TEXT NOT NULL,  
    email TEXT NOT NULL UNIQUE,  
    password TEXT NOT NULL,  
    CONSTRAINT valid_email_format CHECK (email ~ '^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$')  
);  
  
CREATE TABLE admins(  
    id SERIAL PRIMARY KEY,  
    name TEXT NOT NULL,  
    email TEXT NOT NULL UNIQUE,  
    password TEXT NOT NULL,  
    CONSTRAINT valid_email_format CHECK (email ~ '^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$')  
);  
  
CREATE TABLE company(  
    id SERIAL PRIMARY KEY,  
    name TEXT NOT NULL  
);  
  
CREATE TABLE project (  
    id SERIAL PRIMARY KEY,  
    company_id REFERENCES company(id) ON DELETE CASCADE,  
    name TEXT NOT NULL,  
    details TEXT,  
    creation TIMESTAMP WITH TIME ZONE DEFAULT now(),  
    delivery TIMESTAMP WITH TIME ZONE CHECK (delivery >= creation)  
);  
  
CREATE TABLE project_member(  
    users_id INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,  
    project_id INTEGER NOT NULL REFERENCES project(id) ON DELETE CASCADE,  
    is_favorite BOOLEAN DEFAULT FALSE;  
    PRIMARY KEY(project_id, users_id)  
);  
  
CREATE TABLE project_coordinator(  
    id SERIAL PRIMARY KEY,  
    users_id INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,  
    project_id INTEGER NOT NULL REFERENCES project(id) ON DELETE CASCADE  
);  
  
CREATE TABLE task(  
    id SERIAL PRIMARY KEY,  
    project_id INTEGER NOT NULL REFERENCES project(id) ON DELETE CASCADE,  
    creator INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,  
    name TEXT NOT NULL,  
    details TEXT,  
    TYPE status NOT NULL,  
    creation TIMESTAMP WITH TIME ZONE DEFAULT now(),  
    delivery TIMESTAMP WITH TIME ZONE CHECK (delivery >= creation)
```

```

);

CREATE TABLE task_assigned(
    users_id INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,
    task_id INTEGER NOT NULL REFERENCES task(id) ON DELETE CASCADE,
    PRIMARY KEY(users_id, task_id)
);

CREATE TABLE comment(
    id SERIAL PRIMARY KEY,
    author INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,
    task_id INTEGER NOT NULL REFERENCES task(id) ON DELETE CASCADE,
    content TEXT NOT NULL,
    creation TIMESTAMP WITH TIME ZONE DEFAULT now()
);

CREATE TABLE invitation(
    id SERIAL PRIMARY KEY,
    project_id INTEGER NOT NULL REFERENCES project(id) ON DELETE CASCADE,
    users_id INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,
    project_coordinator_id INTEGER NOT NULL REFERENCES project_coordinator(id) ON
DELETE CASCADE,
);

CREATE TABLE notifications(
    id SERIAL PRIMARY KEY,
    dismissed BOOLEAN NOT NULL,
    users_id INTEGER NOT NULL REFERENCES users(id) ON DELETE CASCADE,
    invitation_id INTEGER REFERENCES invitation(id) ON DELETE CASCADE,
    comment_id INTEGER REFERENCES comment(id) ON DELETE CASCADE,
    task_id INTEGER REFERENCES task(id) ON DELETE CASCADE,
    project_id INTEGER REFERENCES project(id) ON DELETE CASCADE,
    TYPE notification_type NOT NULL,
    creation TIMESTAMP WITH TIME ZONE DEFAULT now()
);

-----
-- INDEXES
-----

CREATE INDEX task_assigned_idx ON task_assigned USING btree (users_id);

CREATE INDEX idx_users_email ON users USING hash (email);

CREATE INDEX idx_task_project_id ON task USING btree (project_id);

-- FULL-TEXT SEARCH INDEX

ALTER TABLE project
ADD COLUMN tsvectors TSVECTOR;
```

```

CREATE FUNCTION project_search_update() RETURNS TRIGGER AS $$
BEGIN
    IF TG_OP = 'INSERT' THEN
        NEW.tsvector = (
            setweight(to_tsvector('english', NEW.name), 'A') ||
            setweight(to_tsvector('english', NEW.details), 'B')
        );
    END IF;
    IF TG_OP = 'UPDATE' THEN
        IF (NEW.name <> OLD.name OR NEW.details <> OLD.details) THEN
            NEW.tsvector = (
                setweight(to_tsvector('english', NEW.name), 'A') ||
                setweight(to_tsvector('english', NEW.details), 'B')
            );
        END IF;
    END IF;
    RETURN NEW;
END $$
LANGUAGE plpgsql;

CREATE TRIGGER project_search_update
BEFORE INSERT OR UPDATE ON project
FOR EACH ROW
EXECUTE PROCEDURE project_search_update();

CREATE INDEX search_idx ON project USING GIN (tsvector);

-----
-----
-- TRIGGER
-----
-----

-- TRIGGER 1

CREATE FUNCTION prevent_duplicate_assignment() RETURNS TRIGGER AS $$
BEGIN
    IF EXISTS (SELECT 1 FROM task_assigned WHERE users_id = NEW.users_id AND
task_id = NEW.task_id) THEN
        RAISE EXCEPTION 'User is already assigned to this task';
    END IF;
    RETURN NEW;
END;
$$ LANGUAGE plpgsql;

CREATE TRIGGER prevent_duplicate_assignment_trigger
BEFORE INSERT ON task_assigned
FOR EACH ROW
EXECUTE FUNCTION prevent_duplicate_assignment();

-- TRIGGER 2

CREATE OR REPLACE FUNCTION update_task_status_trigger()
RETURNS TRIGGER AS $$

```

```

BEGIN
  IF NEW.delivery < NOW() THEN AND NEW.delivery != 'Completed'
    NEW.status = 'Overdue';
  END IF;
  RETURN NEW;
END;
$$ LANGUAGE plpgsql;

CREATE TRIGGER task_update_status
BEFORE INSERT OR UPDATE ON task
FOR EACH ROW
EXECUTE FUNCTION update_task_status_trigger();

-----
-----
-- TRANSACTION
-----
-----

-- TRANSACTION 1

BEGIN TRANSACTION

SET TRANSACTION ISOLATION LEVEL REPEATABLE READ

INSERT INTO project_member(users_id, project_id, is_favorite)
VALUES ($users_id, $project_id, $is_favorite);

INSERT INTO project_coordinator(id, users_id, project_id)
VALUES ($id, $users_id, $project_id);

END TRANSACTION;

```

A.2. Database Population

```

-- Populate ProjeTatu database

-- Insert data into the "company" table, 30 rows
INSERT INTO company (name) VALUES
  ('Tech Solutions Inc.'),
  ('Creative Innovations Ltd.'),
  ('Global Services Co.'),
  ('InnovateTech Corporation'),
  ('Swift Solutions Group'),
  ('TechHive Enterprises'),
  ('Dynamic Software Solutions'),
  ('WebTech Innovations'),
  ('Innovative Designs Inc.'),
  ('eCommerce Experts Ltd.'),
  ('Data Science Solutions'),
  ('WebCrafters Inc.'),
  ('Digital Dynamics Ltd.'),

```

```

('Future Vision Technologies'),
('CodeGenius Inc.'),
('Infotech Solutions'),
('Software Wizards Ltd.'),
('DataMasters Inc.'),
('WebMasters Group'),
('Innovative Web Solutions'),
('MobileTech Innovations'),
('Visionary Software Solutions'),
('TechArt Creations Ltd.'),
('TechFusion Corporation'),
('WebSphere Technologies'),
('DataCrafters Inc.'),
('CloudTech Innovations'),
('eCommerce Elegance Ltd.'),
('CyberSolutions Inc.'),
('InfoTech Innovators');

-- Insert data into the "users" table, 120 rows
INSERT INTO users (name, email, password) VALUES
('John Doe', 'john.doe@example.com', 'password123'),
('Jane Smith', 'jane.smith@example.com', 'pass456word'),
('Michael Johnson', 'michael.j@example.com', 'securepass123'),
('Emily Brown', 'emily.brown@example.com', 'strongpass789'),
('William Davis', 'william.d@example.com', 'userpass456'),
('Sophia Wilson', 'sophia.w@example.com', 'pass1234'),
('James Anderson', 'james.a@example.com', 'mypassword'),
('Olivia Harris', 'olivia.h@example.com', 'securepass789'),
('Liam Thomas', 'liam.t@example.com', 'liampass123'),
('Emma Lee', 'emma.l@example.com', 'emma1234'),
('Noah White', 'noah.w@example.com', 'noahpass456'),
('Ava Martinez', 'ava.m@example.com', 'avapass789'),
('Logan Garcia', 'logan.g@example.com', 'loganpass123'),
('Isabella Rodriguez', 'isabella.r@example.com', 'isabellapass'),
('Mason Taylor', 'mason.t@example.com', 'mason1234'),
('Oliver Lewis', 'oliver.l@example.com', 'oliverpass456'),
('Sophia Smith', 'sophia.s@example.com', 'sophiapass789'),
('Ethan Johnson', 'ethan.j@example.com', 'ethan1234'),
('Amelia Davis', 'amelia.d@example.com', 'ameliapass456'),
('Liam Wilson', 'liam.w@example.com', 'liampass789'),
('Olivia Taylor', 'olivia.t@example.com', 'olivia1234'),
('Jackson Brown', 'jackson.b@example.com', 'jacksonpass456'),
('Ava Jones', 'ava.j@example.com', 'avapass789'),
('Lucas Clark', 'lucas.c@example.com', 'lucas1234'),
('Ava Anderson', 'ava.a@example.com', 'avapass456'),
('Sophia Moore', 'sophia.m@example.com', 'sophiapass789'),
('Liam Thomas', 'liam.t@example.com', 'liampass123'),
('Emma Lee', 'emma.l@example.com', 'emma1234'),
('Noah White', 'noah.w@example.com', 'noahpass456'),
('Ava Martinez', 'ava.m@example.com', 'avapass789'),
('Logan Garcia', 'logan.g@example.com', 'loganpass123'),
('Isabella Rodriguez', 'isabella.r@example.com', 'isabellapass'),
('Mason Taylor', 'mason.t@example.com', 'mason1234'),
('Oliver Lewis', 'oliver.l@example.com', 'oliverpass456'),
('Sophia Smith', 'sophia.s@example.com', 'sophiapass789'),

```

```
('Ethan Johnson', 'ethan.j@example.com', 'ethan1234'),
('Amelia Davis', 'amelia.d@example.com', 'ameliapass456'),
('Liam Wilson', 'liam.w@example.com', 'liampass789'),
('Olivia Taylor', 'olivia.t@example.com', 'olivia1234'),
('Jackson Brown', 'jackson.b@example.com', 'jacksonpass456'),
('Ava Jones', 'ava.j@example.com', 'avapass789'),
('Lucas Clark', 'lucas.c@example.com', 'lucas1234'),
('Ava Anderson', 'ava.a@example.com', 'avapass456'),
('Sophia Moore', 'sophia.m@example.com', 'sophiapass789'),
('Ethan Martinez', 'ethan.m@example.com', 'ethan1234'),
('Olivia Davis', 'olivia.d@example.com', 'oliviapass456'),
('Logan Harris', 'logan.h@example.com', 'loganpass789'),
('Ava Lewis', 'ava.l@example.com', 'ava1234'),
('William Garcia', 'william.g@example.com', 'williampass456'),
('Mia Thomas', 'mia.t@example.com', 'miapass789'),
('Elijah Wilson', 'elijah.w@example.com', 'elijahpass123'),
('Sophia Smith', 'sophia.s@example.com', 'sophiapass456'),
('James Davis', 'james.d@example.com', 'jamespass789'),
('Amelia Lee', 'amelia.l@example.com', 'amelia1234'),
('Ethan Moore', 'ethan.m@example.com', 'ethanpass456'),
('Olivia Thomas', 'olivia.t@example.com', 'oliviapass789'),
('Ava Harris', 'ava.h@example.com', 'avapass123'),
('Jackson White', 'jackson.w@example.com', 'jackson1234'),
('Oliver Brown', 'oliver.b@example.com', 'oliverpass456'),
('Mia Taylor', 'mia.t@example.com', 'miapass789'),
('Sophia Lewis', 'sophia.l@example.com', 'sophiapass123'),
('William Garcia', 'william.g@example.com', 'williampass456'),
('Ava Thomas', 'ava.t@example.com', 'avapass789'),
('Liam Harris', 'liam.h@example.com', 'liampass123'),
('Olivia Wilson', 'olivia.w@example.com', 'oliviapass456'),
('Noah Smith', 'noah.s@example.com', 'noahpass789'),
('Elijah Moore', 'elijah.m@example.com', 'elijah1234'),
('Mia Anderson', 'mia.a@example.com', 'miapass456'),
('Oliver Davis', 'oliver.d@example.com', 'oliverpass789'),
('Sophia Taylor', 'sophia.t@example.com', 'sophiapass123'),
('Ethan Lewis', 'ethan.l@example.com', 'ethanpass456'),
('William Harris', 'william.h@example.com', 'williampass789'),
('Ava White', 'ava.w@example.com', 'avapass123'),
('Logan Smith', 'logan.s@example.com', 'logan1234'),
('Amelia Wilson', 'amelia.w@example.com', 'ameliapass456'),
('Olivia Moore', 'olivia.m@example.com', 'oliviapass789'),
('Jackson Davis', 'jackson.d@example.com', 'jacksonpass123'),
('Sophia Anderson', 'sophia.a@example.com', 'sophiapass456'),
('Liam Thomas', 'liam.t@example.com', 'liampass789'),
('William Garcia', 'william.g@example.com', 'williampass123'),
('Emma Brown', 'emma.b@example.com', 'emma1234'),
('Oliver Clark', 'oliver.c@example.com', 'oliverpass456'),
('Sophia Taylor', 'sophia.t@example.com', 'sophiapass789'),
('Ethan Lewis', 'ethan.l@example.com', 'ethan1234'),
('Mia Harris', 'mia.h@example.com', 'miapass456'),
('Olivia Anderson', 'olivia.a@example.com', 'oliviapass789'),
('Ava Smith', 'ava.s@example.com', 'avapass123'),
('Jackson Davis', 'jackson.d@example.com', 'jackson1234'),
('Liam Wilson', 'liam.w@example.com', 'liampass456'),
('Sophia Moore', 'sophia.m@example.com', 'sophiapass789'),
```

```
(
    'Ethan Martinez', 'ethan.m@example.com', 'ethan1234'),
    ('Olivia Davis', 'olivia.d@example.com', 'oliviapass456'),
    ('Logan Harris', 'logan.h@example.com', 'loganpass789'),
    ('Ava Lewis', 'ava.l@example.com', 'ava1234'),
    ('William Garcia', 'william.g@example.com', 'williampass456'),
    ('Mia Thomas', 'mia.t@example.com', 'miapass789'),
    ('Elijah Wilson', 'elijah.w@example.com', 'elijahpass123'),
    ('Sophia Smith', 'sophia.s@example.com', 'sophiapass456'),
    ('James Davis', 'james.d@example.com', 'jamespass789'),
    ('Amelia Lee', 'amelia.l@example.com', 'amelia1234'),
    ('Ethan Moore', 'ethan.m@example.com', 'ethanpass456'),
    ('Olivia Thomas', 'olivia.t@example.com', 'oliviapass789'),
    ('Ava Harris', 'ava.h@example.com', 'avapass123'),
    ('Jackson White', 'jackson.w@example.com', 'jackson1234'),
    ('Oliver Brown', 'oliver.b@example.com', 'oliverpass456'),
    ('Mia Taylor', 'mia.t@example.com', 'miapass789'),
    ('Sophia Lewis', 'sophia.l@example.com', 'sophiapass123'),
    ('William Garcia', 'william.g@example.com', 'williampass456'),
    ('Ava Thomas', 'ava.t@example.com', 'avapass789'),
    ('Liam Harris', 'liam.h@example.com', 'liampass123'),
    ('Olivia Wilson', 'olivia.w@example.com', 'oliviapass456'),
    ('Noah Smith', 'noah.s@example.com', 'noahpass789'),
    ('Elijah Moore', 'elijah.m@example.com', 'elijah1234'),
    ('Mia Anderson', 'mia.a@example.com', 'miapass456'),
    ('Oliver Davis', 'oliver.d@example.com', 'oliverpass789'),
    ('Sophia Taylor', 'sophia.t@example.com', 'sophiapass123'),
    ('Ethan Lewis', 'ethan.l@example.com', 'ethanpass456'),
    ('William Harris', 'william.h@example.com', 'williampass789'),
    ('Ava White', 'ava.w@example.com', 'avapass123'),
    ('Logan Smith', 'logan.s@example.com', 'logan1234'),
    ('Amelia Wilson', 'amelia.w@example.com', 'ameliapass456'),
    ('Olivia Moore', 'olivia.m@example.com', 'oliviapass789');

```

```
-- Insert data into the "project" table, 30 rows
```

```
INSERT INTO project (company_id, name, details, delivery) VALUES
```

```
    (1, 'Project Audit', 'Conduct a comprehensive audit of the company finances.',
    NOW() + INTERVAL '90 days'),
    (2, 'Website Redesign', 'Redesign the company website for a more modern look.',
    NOW() + INTERVAL '60 days'),
    (3, 'Product Launch', 'Plan and execute the launch of a new product in the
    market.', NOW() + INTERVAL '120 days'),
    (4, 'Marketing Campaign', 'Create and launch a new marketing campaign to boost
    sales.', NOW() + INTERVAL '75 days'),
    (5, 'Inventory Management System', 'Develop an inventory management system for
    the warehouse.', NOW() + INTERVAL '100 days'),
    (6, 'Customer Support Portal', 'Build a customer support portal for better
    customer service.', NOW() + INTERVAL '90 days'),
    (7, 'New Mobile App', 'Develop a new mobile application for iOS and Android.',
    NOW() + INTERVAL '150 days'),
    (8, 'Financial Analysis', 'Analyze financial data and provide insights for
    decision-making.', NOW() + INTERVAL '60 days'),
    (9, 'Supply Chain Optimization', 'Optimize the supply chain for cost reduction
    and efficiency.', NOW() + INTERVAL '120 days'),
    (10, 'Social Media Strategy', 'Create and implement a new social media strategy
    for engagement.', NOW() + INTERVAL '45 days'),

```



```

(11, 'Content Marketing', 'Develop and publish content for content marketing
campaigns.', NOW() + INTERVAL '90 days'),
(12, 'Quality Assurance Testing', 'Conduct comprehensive QA testing on the
product.', NOW() + INTERVAL '75 days'),
(13, 'Employee Training Program', 'Design a training program for employee
development.', NOW() + INTERVAL '60 days'),
(14, 'Market Research', 'Conduct market research to identify growth
opportunities.', NOW() + INTERVAL '120 days'),
(15, 'IT Infrastructure Upgrade', 'Upgrade and enhance the company IT
infrastructure.', NOW() + INTERVAL '100 days'),
(16, 'New Product Design', 'Design a new product based on market demand and
trends.', NOW() + INTERVAL '150 days'),
(17, 'Sales Strategy', 'Develop and implement a new sales strategy for the
sales team.', NOW() + INTERVAL '90 days'),
(18, 'Customer Feedback Survey', 'Create and analyze customer feedback surveys
for insights.', NOW() + INTERVAL '75 days'),
(19, 'Environmental Sustainability Initiative', 'Initiate sustainability
programs and reduce environmental impact.', NOW() + INTERVAL '120 days'),
(20, 'Human Resources Management System', 'Implement an HR management system
for better HR operations.', NOW() + INTERVAL '60 days'),
(21, 'Product Testing and Validation', 'Conduct product testing and validation
for quality assurance.', NOW() + INTERVAL '100 days'),
(22, 'Public Relations Campaign', 'Launch a PR campaign to improve brand
reputation.', NOW() + INTERVAL '45 days'),
(23, 'Customer Loyalty Program', 'Develop a customer loyalty program to retain
customers.', NOW() + INTERVAL '90 days'),
(24, 'Market Expansion Strategy', 'Plan and execute a strategy for expanding
into new markets.', NOW() + INTERVAL '75 days'),
(25, 'Security Enhancement', 'Enhance security measures to protect company data
and assets.', NOW() + INTERVAL '60 days'),
(26, 'Corporate Social Responsibility', 'Initiate CSR programs for social and
community impact.', NOW() + INTERVAL '150 days'),
(27, 'Financial Forecasting', 'Create financial forecasts for better financial
planning.', NOW() + INTERVAL '90 days'),
(28, 'Product Packaging Redesign', 'Redesign product packaging for improved
market appeal.', NOW() + INTERVAL '100 days'),
(29, 'Digital Marketing Campaign', 'Launch a digital marketing campaign to
increase online presence.', NOW() + INTERVAL '120 days'),
(30, 'Innovation and Research', 'Invest in research and innovation for product
improvement.', NOW() + INTERVAL '45 days');

```

```
-- Insert data into the "task" table, 100 rows
```

```

INSERT INTO task (project_id, creator, name, details, status, delivery) VALUES
(1, 1, 'Financial Report Analysis', 'Analyze the companys financial reports and
prepare an audit.', 'Ongoing', NOW() + INTERVAL '30 days'),
(1, 2, 'Revenue Data Review', 'Review and validate revenue data for the
audit.', 'Ongoing', NOW() + INTERVAL '45 days'),
(2, 3, 'Website Redesign Mockups', 'Create mockups for the redesigned
website.', 'Ongoing', NOW() + INTERVAL '60 days'),
(2, 4, 'Content Update Planning', 'Plan the content updates for the new
website.', 'Ongoing', NOW() + INTERVAL '75 days'),
(3, 5, 'Product Launch Strategy', 'Develop a strategy for the product launch.',
'Ongoing', NOW() + INTERVAL '90 days'),
(3, 6, 'Marketing Materials Creation', 'Create marketing materials for the new
product.', 'Ongoing', NOW() + INTERVAL '100 days'),

```

```

(4, 7, 'Market Analysis', 'Analyze the market for the upcoming marketing
campaign.', 'Ongoing', NOW() + INTERVAL '60 days'),
(4, 8, 'Campaign Content Creation', 'Create content for the marketing
campaign.', 'Ongoing', NOW() + INTERVAL '75 days'),
(5, 9, 'Inventory System Development', 'Develop the inventory management
system.', 'Ongoing', NOW() + INTERVAL '120 days'),
(5, 10, 'System Testing', 'Test the inventory management system for accuracy
and functionality.', 'Ongoing', NOW() + INTERVAL '100 days'),
(6, 11, 'Customer Support Portal Design', 'Design the user interface for the
customer support portal.', 'Ongoing', NOW() + INTERVAL '90 days'),
(6, 12, 'Development and Testing', 'Develop and test the customer support
portal.', 'Ongoing', NOW() + INTERVAL '120 days'),
(7, 13, 'Mobile App Wireframing', 'Create wireframes for the new mobile
application.', 'Ongoing', NOW() + INTERVAL '60 days'),
(7, 14, 'App Development', 'Develop the mobile application for iOS and
Android.', 'Ongoing', NOW() + INTERVAL '150 days'),
(8, 15, 'Financial Data Collection', 'Collect financial data for analysis.',
'Ongoing', NOW() + INTERVAL '45 days'),
(8, 16, 'Data Analysis', 'Analyze the financial data for insights.', 'Ongoing',
NOW() + INTERVAL '75 days'),
(9, 17, 'Supply Chain Evaluation', 'Evaluate the current supply chain
process.', 'Ongoing', NOW() + INTERVAL '90 days'),
(9, 18, 'Optimization Recommendations', 'Provide recommendations for supply
chain optimization.', 'Ongoing', NOW() + INTERVAL '60 days'),
(10, 19, 'Social Media Audit', 'Conduct an audit of the companys social media
presence.', 'Ongoing', NOW() + INTERVAL '100 days'),
(10, 20, 'Strategy Development', 'Develop a new social media engagement
strategy.', 'Ongoing', NOW() + INTERVAL '45 days'),
(11, 21, 'Content Creation Plan', 'Plan content creation for upcoming marketing
campaigns.', 'Ongoing', NOW() + INTERVAL '90 days'),
(11, 22, 'Content Production', 'Produce content for marketing purposes.',
'Ongoing', NOW() + INTERVAL '75 days'),
(12, 23, 'QA Testing', 'Conduct quality assurance testing on the product.',
'Ongoing', NOW() + INTERVAL '60 days'),
(12, 24, 'Bug Fixes and Improvements', 'Address bugs and make necessary
improvements.', 'Ongoing', NOW() + INTERVAL '100 days'),
(13, 25, 'Employee Training Material Design', 'Design training materials for
employee development.', 'Ongoing', NOW() + INTERVAL '120 days'),
(13, 26, 'Training Sessions Conduct', 'Conduct training sessions for
employees.', 'Ongoing', NOW() + INTERVAL '45 days'),
(14, 27, 'Market Research Survey', 'Design and conduct a survey for market
research.', 'Ongoing', NOW() + INTERVAL '60 days'),
(14, 28, 'Data Analysis and Insights', 'Analyze survey data and provide market
insights.', 'Ongoing', NOW() + INTERVAL '75 days'),
(15, 29, 'IT Infrastructure Assessment', 'Assess the current IT infrastructure
for upgrades.', 'Ongoing', NOW() + INTERVAL '90 days'),
(15, 30, 'Infrastructure Upgrade', 'Upgrade IT infrastructure for better
performance.', 'Ongoing', NOW() + INTERVAL '60 days'),
(16, 31, 'Product Redesign Planning', 'Plan the redesign of the companys
flagship product.', 'Ongoing', NOW() + INTERVAL '120 days'),
(16, 32, 'Design and Prototyping', 'Design product prototypes for the
redesign.', 'Ongoing', NOW() + INTERVAL '100 days'),
(17, 33, 'Sales Strategy Development', 'Develop a new sales strategy for the
sales team.', 'Ongoing', NOW() + INTERVAL '90 days'),
(17, 34, 'Implementation and Training', 'Implement the strategy and train the

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sales team.', 'Ongoing', NOW() + INTERVAL '150 days'),
  (18, 35, 'Customer Feedback Survey Design', 'Design a customer feedback survey
for customers.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (18, 36, 'Survey Analysis and Recommendations', 'Analyze survey results and
provide recommendations.', 'Ongoing', NOW() + INTERVAL '45 days'),
  (19, 37, 'Sustainability Programs Planning', 'Plan environmental sustainability
programs.', 'Ongoing', NOW() + INTERVAL '75 days'),
  (19, 38, 'Implementation and Monitoring', 'Implement sustainability programs
and monitor progress.', 'Ongoing', NOW() + INTERVAL '90 days'),
  (20, 39, 'HR Management System Design', 'Design a new HR management system for
the company.', 'Ongoing', NOW() + INTERVAL '100 days'),
  (20, 40, 'Development and Testing', 'Develop and test the HR management
system.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (21, 41, 'Product Testing Plan', 'Plan the comprehensive testing of the
product.', 'Ongoing', NOW() + INTERVAL '120 days'),
  (21, 42, 'Testing and Validation', 'Conduct product testing and validation
procedures.', 'Ongoing', NOW() + INTERVAL '90 days'),
  (22, 43, 'Public Relations Strategy', 'Develop a PR strategy for improving
brand reputation.', 'Ongoing', NOW() + INTERVAL '75 days'),
  (22, 44, 'PR Campaign Execution', 'Execute the PR campaign for brand
improvement.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (23, 45, 'Customer Loyalty Program Design', 'Design a customer loyalty program
for customer retention.', 'Ongoing', NOW() + INTERVAL '100 days'),
  (23, 46, 'Program Launch and Monitoring', 'Launch the customer loyalty program
and monitor its performance.', 'Ongoing', NOW() + INTERVAL '45 days'),
  (24, 47, 'Market Expansion Planning', 'Plan the strategy for expanding into new
markets.', 'Ongoing', NOW() + INTERVAL '120 days'),
  (24, 48, 'Execution and Market Entry', 'Execute the market expansion strategy
and enter new markets.', 'Ongoing', NOW() + INTERVAL '90 days'),
  (25, 49, 'Security Assessment', 'Assess the companys security measures and
identify vulnerabilities.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (25, 50, 'Security Enhancement Plan', 'Develop a plan to enhance the companys
security measures.', 'Ongoing', NOW() + INTERVAL '75 days'),
  (26, 51, 'CSR Program Development', 'Develop corporate social responsibility
programs for community impact.', 'Ongoing', NOW() + INTERVAL '100 days'),
  (26, 52, 'CSR Initiatives Implementation', 'Implement CSR initiatives for
social and environmental impact.', 'Ongoing', NOW() + INTERVAL '45 days'),
  (27, 53, 'Financial Forecasting Modeling', 'Create financial models for
accurate forecasting.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (27, 54, 'Forecasting Data Analysis', 'Analyze financial data and provide
forecasts.', 'Ongoing', NOW() + INTERVAL '75 days'),
  (28, 55, 'Product Packaging Redesign Concept', 'Design new concepts for product
packaging.', 'Ongoing', NOW() + INTERVAL '90 days'),
  (28, 56, 'Prototyping and Testing', 'Create prototypes and test new product
packaging designs.', 'Ongoing', NOW() + INTERVAL '60 days'),
  (29, 57, 'Digital Marketing Campaign Planning', 'Plan a digital marketing
campaign for online presence.', 'Ongoing', NOW() + INTERVAL '120 days'),
  (29, 58, 'Campaign Execution and Monitoring', 'Execute the digital marketing
campaign and monitor results.', 'Ongoing', NOW() + INTERVAL '75 days'),
  (30, 59, 'Innovation and Research Strategy', 'Develop a strategy for research
and innovation.', 'Ongoing', NOW() + INTERVAL '100 days'),
  (30, 60, 'Research and Development', 'Conduct research and development
activities for innovation.', 'Ongoing', NOW() + INTERVAL '45 days');

```

```
-- Insert data into the "comment" table, 60 rows
```

```
INSERT INTO comment (task_id, content) VALUES
(1, 'This task needs to be done by someone else'),
(1, 'I can take care of this task if needed.'),
(1, 'Lets assign this to John for now.'),
(2, 'This is another comment on Task 2 for Project A'),
(2, 'The progress on Task 2 is going well.'),
(2, 'We should schedule a meeting to discuss Task 2.'),
(3, 'Task 3 is critical for the audit. Please prioritize it.'),
(3, 'Ill make sure Task 3 is completed on time.'),
(3, 'Task 3 is in progress and should be done soon.'),
(4, 'Task 4 requires input from the design team.'),
(4, 'The design team has been informed about Task 4.'),
(4, 'Please review the mockups for Task 4.'),
(5, 'I need assistance with Task 5. Can someone help?'),
(5, 'Task 5 is a bit complex. Lets collaborate on it.'),
(5, 'Task 5 has been assigned to the development team.'),
(6, 'The customer support portal is almost ready.'),
(6, 'We should test the customer support portal soon.'),
(6, 'Please confirm the delivery date for the portal.'),
(7, 'Mobile app development is progressing as planned.'),
(7, 'Im working on the iOS version of the mobile app.'),
(7, 'Android app development is also on track.'),
(8, 'Financial data for Task 8 is available in the report.'),
(8, 'We need to review the financial data for Task 8.'),
(8, 'Please provide the financial report for analysis.'),
(9, 'Task 9 is part of the supply chain optimization project.'),
(9, 'Supply chain optimization is a critical task.'),
(9, 'Task 9 is linked to cost reduction efforts.'),
(10, 'Our social media audit is complete for Task 10.'),
(10, 'We are ready to implement the new social media strategy.'),
(10, 'Task 10 is essential for our online presence.'),
(11, 'Content marketing materials for Task 11 are ready.'),
(11, 'Task 11 content is engaging and ready for publishing.'),
(11, 'Lets schedule content publication for Task 11.'),
(12, 'QA testing for Task 12 is in progress.'),
(12, 'Weve identified some issues in the QA testing of Task 12.'),
(12, 'Task 12 needs additional testing and improvements.'),
(13, 'Employee training materials for Task 13 are in development.'),
(13, 'The training sessions for Task 13 have been scheduled.'),
(13, 'Task 13 will contribute to employee development.'),
(14, 'The market research survey for Task 14 is live.'),
(14, 'Weve received valuable responses for Task 14.'),
(14, 'Lets analyze the survey data for Task 14.'),
(15, 'The IT infrastructure assessment for Task 15 is complete.'),
(15, 'Task 15 has identified areas for infrastructure improvement.'),
(15, 'Infrastructure upgrades will enhance operations.'),
(16, 'Product redesign concepts for Task 16 are impressive.'),
(16, 'Task 16 prototypes are ready for testing.'),
(16, 'Product redesign will boost market appeal.'),
(17, 'The new sales strategy for Task 17 is in development.'),
(17, 'The sales team is excited about the new strategy for Task 17.'),
(17, 'Task 17 will drive sales growth.'),
(18, 'Customer feedback survey design for Task 18 is complete.'),
(18, 'Weve received positive feedback on the survey design.'),
(18, 'Lets prepare insights from Task 18 survey data.'),
```

```
(19, 'Sustainability programs planning for Task 19 is underway. '),
(19, 'Task 19 programs will make a positive impact on the environment. '),
(19, 'Task 19 is aligned with our corporate values. '),
(20, 'The HR management system design for Task 20 is impressive. '),
(20, 'Task 20 development is expected to streamline HR operations. '),
(20, 'HR management improvements will benefit the organization. ');
```

```
-- Insert data into the "project_member" table, 60 rows
```

```
INSERT INTO project_member (users_id, project_id, is_favorite) VALUES
```

```
(1, 1, true),
(2, 1, false),
(3, 2, true),
(4, 2, false),
(5, 3, true),
(6, 3, false),
(7, 4, true),
(8, 4, false),
(9, 5, true),
(10, 5, false),
(11, 6, true),
(12, 6, false),
(13, 7, true),
(14, 7, false),
(15, 8, true),
(16, 8, false),
(17, 9, true),
(18, 9, false),
(19, 10, true),
(20, 10, false),
(21, 11, true),
(22, 11, false),
(23, 12, true),
(24, 12, false),
(25, 13, true),
(26, 13, false),
(27, 14, true),
(28, 14, false),
(29, 15, true),
(30, 15, false),
(31, 16, true),
(32, 16, false),
(33, 17, true),
(34, 17, false),
(35, 18, true),
(36, 18, false),
(37, 19, true),
(38, 19, false),
(39, 20, true),
(40, 20, false),
(41, 21, true),
(42, 21, false),
(43, 22, true),
(44, 22, false),
(45, 23, true),
(46, 23, false),
```

```
(47, 24, true),
(48, 24, false),
(49, 25, true),
(50, 25, false),
(51, 26, true),
(52, 26, false),
(53, 27, true),
(54, 27, false),
(55, 28, true),
(56, 28, false),
(57, 29, true),
(58, 29, false),
(59, 30, true),
(60, 30, false);

-- Insert data into the "admins" table, 20 rows
INSERT INTO admins (name, email, password) VALUES
('Admin 1', 'admin1@example.com', 'adminpass1'),
('Admin 2', 'admin2@example.com', 'mypass2'),
('Admin 3', 'admin3@example.com', 'secretpass3'),
('Admin 4', 'admin4@example.com', 'password4'),
('Admin 5', 'admin5@example.com', 'admin123'),
('Admin 6', 'admin6@example.com', 'secureadmin'),
('Admin 7', 'admin7@example.com', 'adminadmin7'),
('Admin 8', 'admin8@example.com', 'adminpass8'),
('Admin 9', 'admin9@example.com', 'mypassword9'),
('Admin 10', 'admin10@example.com', 'adminadmin10'),
('Admin 11', 'admin11@example.com', 'password11'),
('Admin 12', 'admin12@example.com', 'secure123'),
('Admin 13', 'admin13@example.com', 'adminpass13'),
('Admin 14', 'admin14@example.com', 'mypass14'),
('Admin 15', 'admin15@example.com', 'adminadmin15'),
('Admin 16', 'admin16@example.com', 'password16'),
('Admin 17', 'admin17@example.com', 'securepass17'),
('Admin 18', 'admin18@example.com', 'mypassword18'),
('Admin 19', 'admin19@example.com', 'adminadmin19'),
('Admin 20', 'admin20@example.com', 'password20');
-- Add more admin data here

-- Insert data into the "task_assigned" table, 60 rows
INSERT INTO task_assigned (users_id, task_id) VALUES
(7, 1),
(19, 2),
(29, 3),
(8, 4),
(18, 5),
(30, 6),
(9, 7),
(17, 8),
(31, 9),
(10, 10),
(16, 11),
(32, 12),
(11, 13),
(15, 14),
```

```
(33, 15),  
(12, 16),  
(14, 17),  
(34, 18),  
(13, 19),  
(20, 20),  
(35, 21),  
(6, 22),  
(21, 23),  
(36, 24),  
(5, 25),  
(22, 26),  
(37, 27),  
(4, 28),  
(23, 29),  
(38, 30),  
(3, 31),  
(24, 32),  
(39, 33),  
(2, 34),  
(25, 35),  
(40, 36),  
(1, 37),  
(26, 38),  
(41, 39),  
(49, 40),  
(27, 41),  
(42, 42),  
(50, 43),  
(28, 44),  
(43, 45),  
(51, 46),  
(45, 47),  
(52, 48),  
(44, 49),  
(53, 50),  
(46, 51),  
(54, 52),  
(48, 53),  
(55, 54),  
(47, 55),  
(56, 56),  
(53, 57),  
(57, 58),  
(52, 59),  
(58, 60);
```

```
-- Insert data into the "project_coordinator" table, 30 rows  
INSERT INTO project_coordinator (users_id, project_id) VALUES  
(7, 1),  
(10, 2),  
(10, 3),  
(13, 4),  
(14, 5),  
(15, 6),
```



```
(16, 7),
(17, 8),
(18, 9),
(19, 10),
(20, 11),
(21, 12),
(22, 13),
(23, 14),
(24, 15),
(25, 16),
(26, 17),
(27, 18),
(28, 19),
(29, 20),
(30, 21),
(31, 22),
(32, 23),
(33, 24),
(34, 25),
(35, 26),
(36, 27),
(37, 28),
(38, 29),
(39, 30);

-- Insert data into the "invitation" table, 10 rows
INSERT INTO invitation (project_id, users_id, project_coordinator_id) VALUES
(1, 2, 1),
(3, 1, 4),
(5, 3, 2),
(7, 4, 6),
(9, 5, 8),
(11, 6, 10),
(13, 7, 3),
(15, 8, 5),
(17, 9, 7),
(19, 10, 9);

-- Add more invitation data here

--"company" table, 30 rows
--"users" table, 120 rows
--"invitation" table, 10 rows
--"project" table, 30 rows
--"task" table, 100 rows
--"comment" table, 60 rows
--"project_member" table, 60 rows
--"admins" table, 20 rows
--"task_assigned" table, 60 rows
--"project_coordinator" table, 30 rows
--"invitation" table, 10 rows
```

Revision history

GROUP23156, 26/10/2023

- Alexandre Morais up201906049
- Nuno Ramos up201906051 (Editor)
- Bruno Leal up202008047
- Vitor Bizarro up202007888