

# Mingle- Project Collaboration Application

Project Report

Team Members:

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# Abstract

Collaboration, Teamwork, Togetherness are essential in the industry. This Application provides a platform for enthusiastic project developers to make a post highlighting their requirements and other developers can request it. So that they can collaborate. The request made to the post is made visible to the post author who can accept the right person by validating the resume, or proposal. The Application will be open for all developers, they can make a profile with all their interests. The Feed with all the project requirements will be based on their interest. Via this application, developers all over the world can find skillful and interested teammates of all levels. With this platform, new projects can be called on by big companies and inter-university collaboration projects can be initiated. The Platform can have a future implementation like feed prediction and custom filters.

# Introduction

The app is an application written in Java FX. The app allows developers of various domains to connect with the developers on their domain and collaborate with them. Each Developer, Company will have a profile. The feed will be adjusted based on interest. Developers can show interest in the post by request. The author will review the request and accept or reject it. Once Accepted the details will be shared and they can collaborate on the project.

Source Program :- <https://github.com/niranjanneeru/mingle>

# System Requirements

## Hardware Requirements

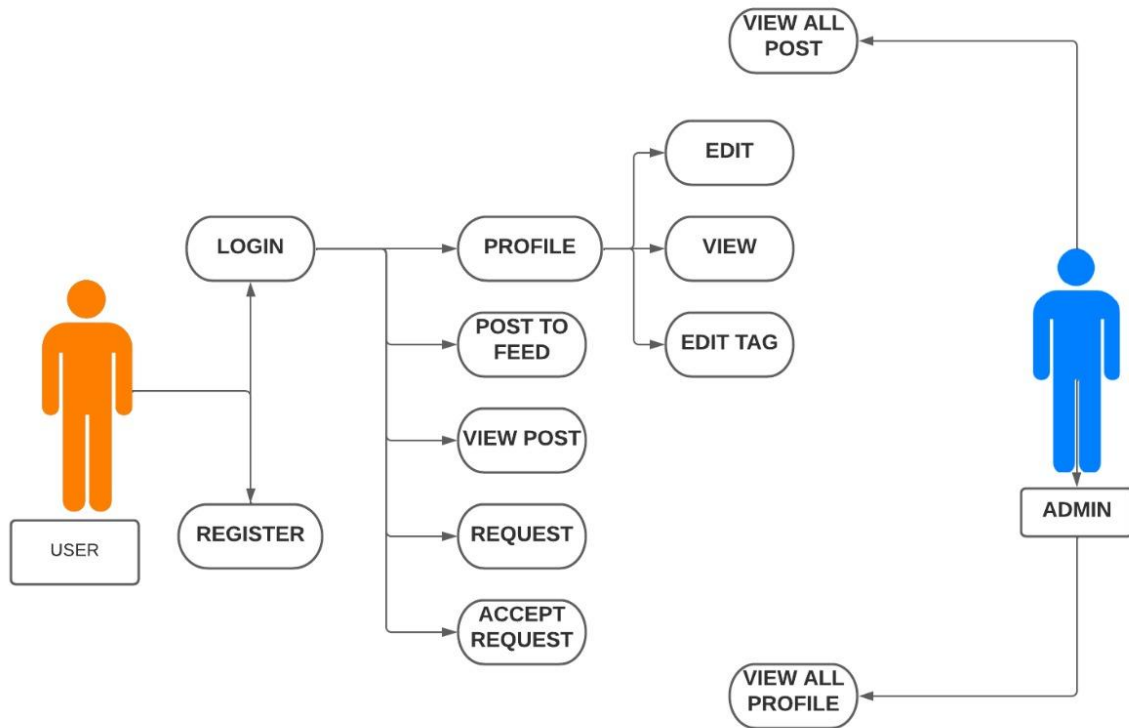
Requirements	Recommended Specification
Processor	Intel Pentium
Speed	2 GHz or higher
RAM	2 GB or higher
Hard Disk	200 MB or higher

## Software Requirements

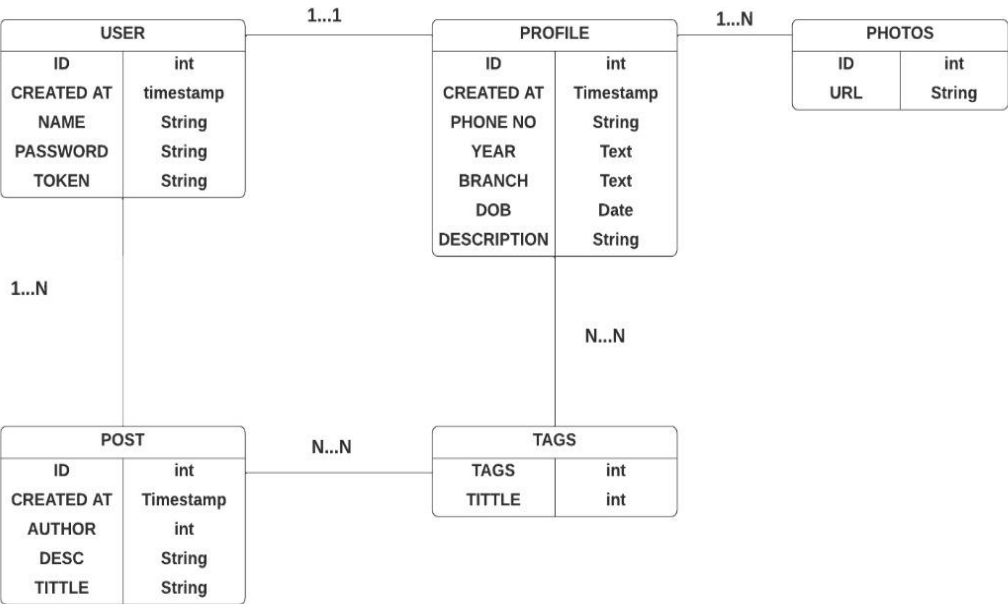
Requirements	Recommended Specification
Operating System	Windows 10, Linux, macOS
System Architecture	Intel(x86), AMD64 and Intel EM64T
Developing Tool	JDK 11.0
Front End	JavaFX
Database	PostgreSQL v13, Supabase



# Use Case Diagram

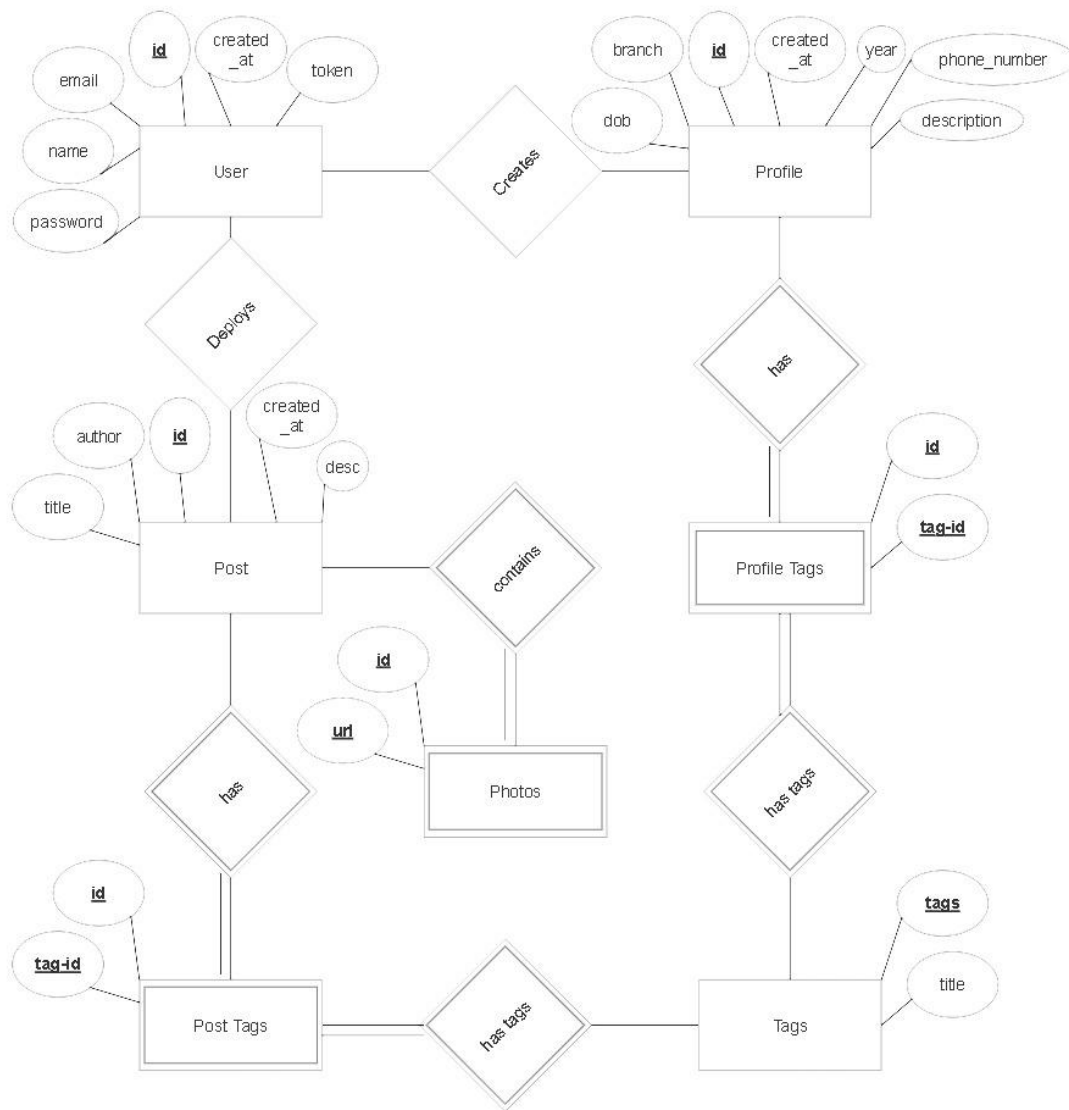


# Database Schema





# ER Diagram



# Table Structure

User table:

Attribute	Datatype	Constraints
id	INT8	Primary Key, Auto Increment
created_at	TIMESTAMP	now() - default value
email	VARCHAR	Unique
name	VARCHAR	Not Null
password	VARCHAR	Not Null
token	VARCHAR	Not Null

Profile:

Attribute	Datatype	Constraints
id	INT8	Primary Key, Auto Increment
created_at	TIMESTAMP	now() - default value
phone_number	VARCHAR	Not Null
year	TEXT	Null
branch	TEXT	Null
dob	DATE	Null
description	VARCHAR	Null

## Post:

Attribute	Datatype	Constraints
id	INT8	Primary Key, Auto Increment
created_at	TIMESTAMP	now() - default value
author	INT8	Not Null
desc	VARCHAR	Null
title	VARCHAR	Null

## Tags:

Attribute	Datatype	Constraints
tags	INT8	Primary Key, Auto Increment
title	TEXT	Null

## Profile Tags:

Attribute	Datatype	Constraints
id	INT8	Primary Key
tag_id	INT8	Primary Key

## Post Tags:

Attribute	Datatype	Constraints
id	INT8	Primary Key
tag_id	INT8	Primary Key

## Photos:

Attribute	Datatype	Constraints
id	INT8	Primary Key
url	VARCHAR	Primary Key

# Module Descriptions

## 1. Controllers Module

Provides the fxml file with Event Handlers:

- Functions
- ListView
- Display
- Request for Post
- Accept Request
- Create Post

## 2. Database Module

Provide Models and JDBC Connection and Query Related:

- Post
- Profile
- Request
- All Queries
- Login Persistence - Once Logged will be always in until logged out.

## 3. Exception Module

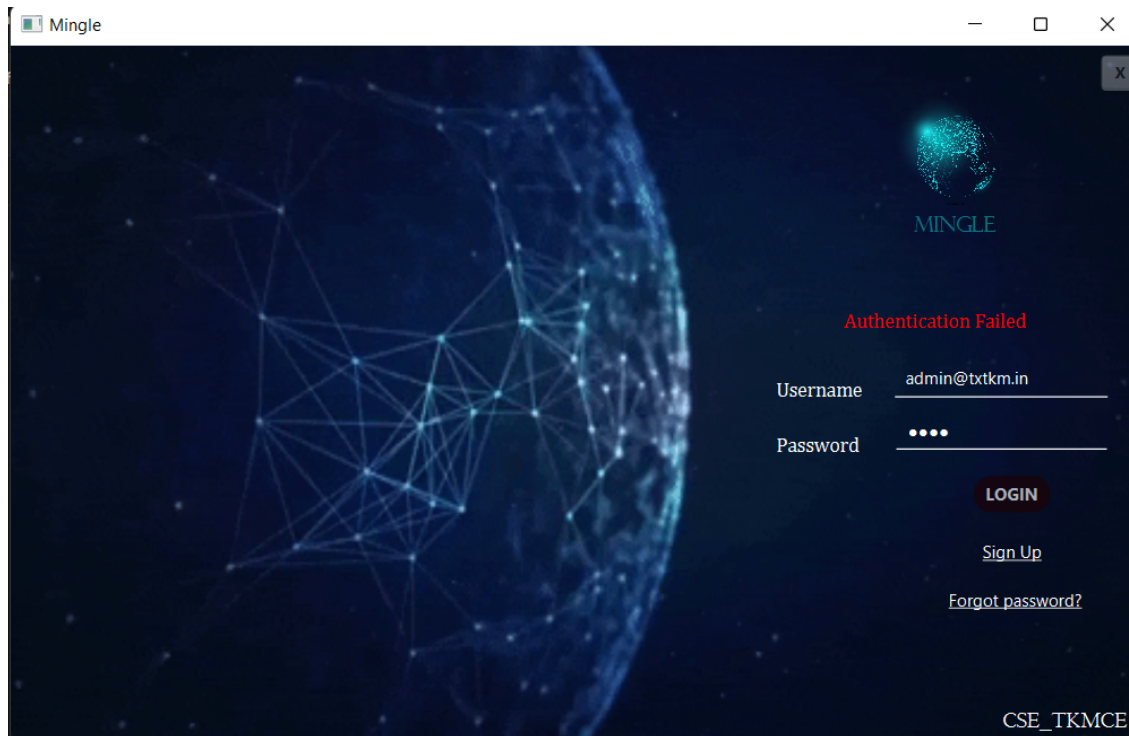
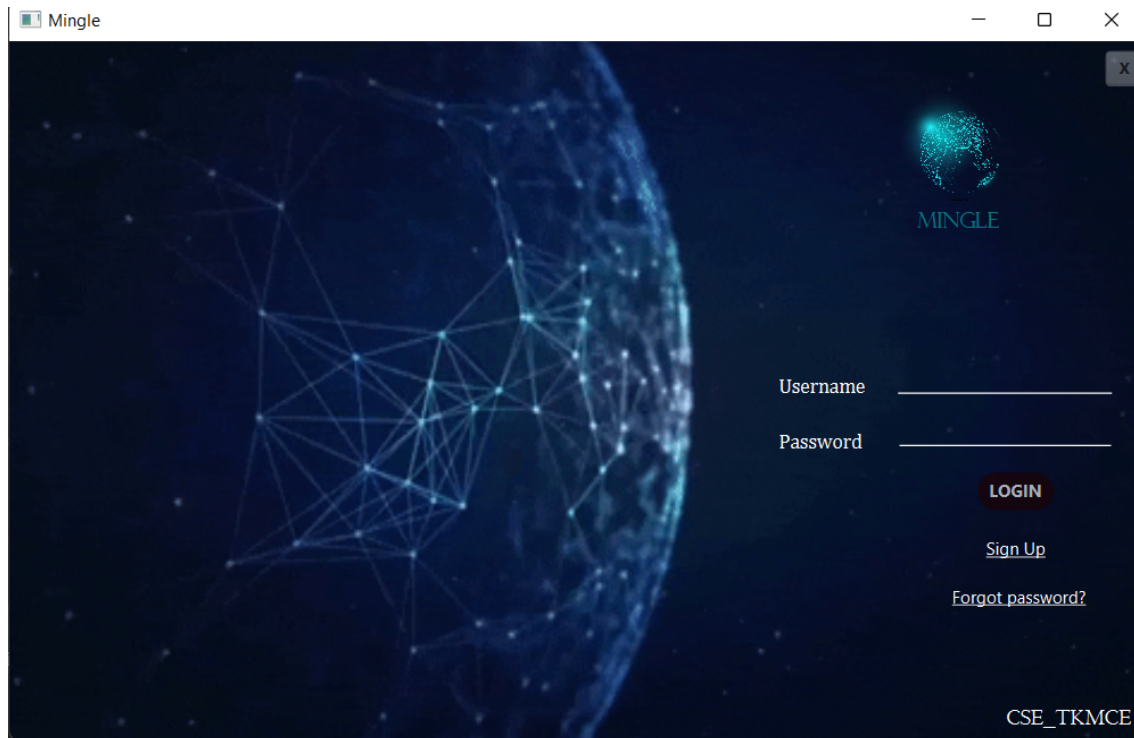
Custom Exceptions:

- User Not Found Exception

The module uses hashed passwords to ensure security.


# Screenshots

## Home Page & Login




## Profile& Edit


Mingle





**Niranjan B**

Edit Profile

 Profile

 Posts

 Feed

 Settings


### Profile Settings

#### Profile Details

Name	Niranjan B
Description	Programmer
Year	2002
Branch	CSE
Phone	+918075145852
e-Mail	admin@btkm.com
Tags	Django RUST


Save Changes


Mingle





**Niranjan B**

Edit Profile

 Profile

 Posts

 Feed

 Settings

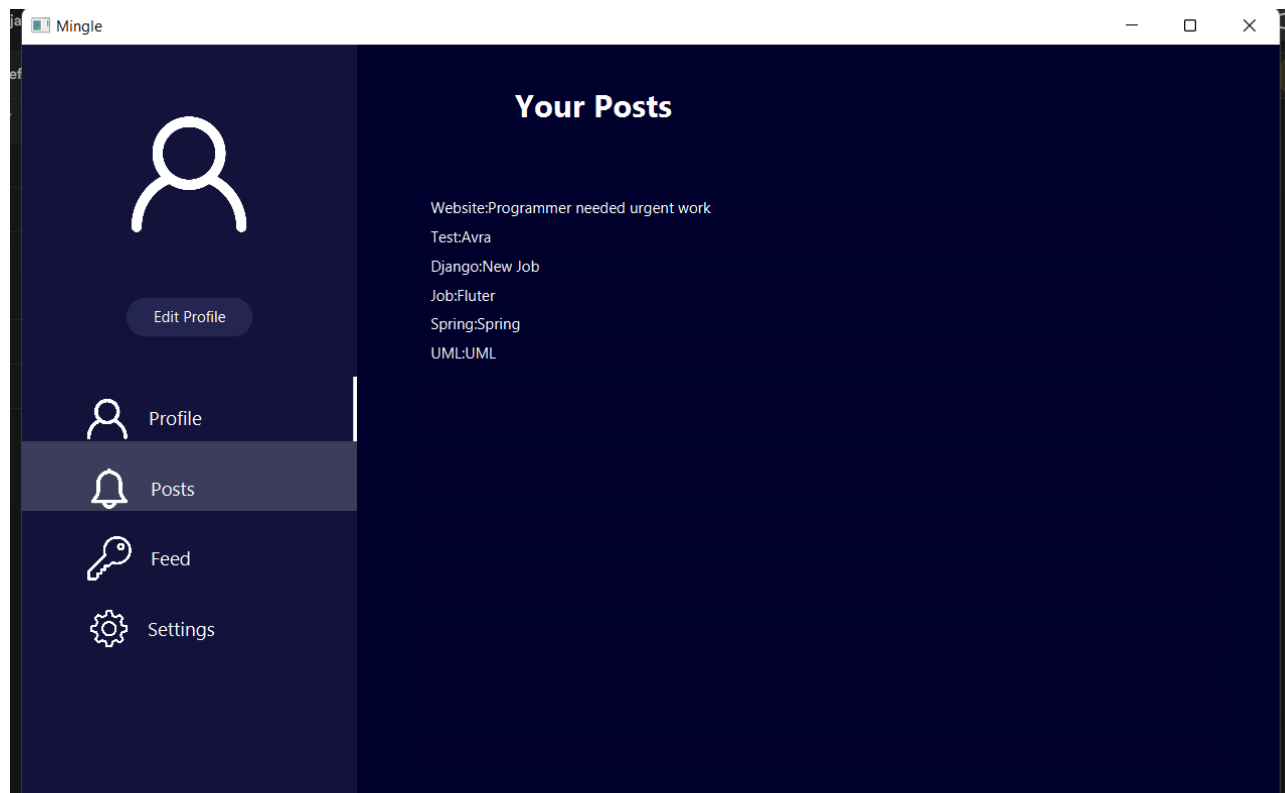
### Profile Settings

#### Profile Details

Name	Niranjan B
Description	Programmer
Year	2002
Branch	CSE
Phone	+918075145852
e-Mail	admin@btkm.com
Tags	Django

Save Changes

## Your Post






## Request in Post

Mingle

REQUESTS



Name

Description

Back

Accept

Decline

The screenshot displays the Mingle application interface. The left sidebar, titled 'REQUESTS', contains a table with a single entry for 'Niranjan B'. The main content area on the right shows a user profile for 'Niranjan B' with a 'Description' field and three buttons: 'Back', 'Accept', and 'Decline'. The 'Accept' button is highlighted in green, while 'Back' and 'Decline' are in blue.

The screenshot displays the Mingle application interface. The left sidebar features a 'REQUESTS' section with a table. The table has a header row with 'Niranjan B' and a description 'Nice'. The right sidebar shows a user profile for 'Niranjan B' with a 'Nice' description. Below the profile are three buttons: 'Back', 'Accept', and 'Decline'.

Name	Description
Niranjan B	Nice

# Conclusion

The application thus helps developers and programmers to effectively collaborate with like minded people. It provides an interface that allows developers to post about their projects and request help and also to collaborate with projects they find attractive. The application also provides a social platform for sharing photos and updates about their projects creating a community which fosters innovation and development. The application uses java which enables the app to be cross platform and run on multiple operating systems and uses supabase to store all the data. The admin which monitors the system has access to create, delete and manipulate the database. The app thus drastically simplifies the process of finding the right partners for your projects and creates a network of talented developers.

# References

1. PostgreSQL Documentation - <https://www.postgresql.org/docs/>
2. Java FX Documentation - <https://docs.oracle.com/javafx/2/>
3. Supabase Cloud DB - <https://supabase.com/docs>
4. JDK Docs - <https://docs.oracle.com/en/java/javase/11/>
5. Gluon Docs - <https://docs.gluonhq.com/>