Capstone Project
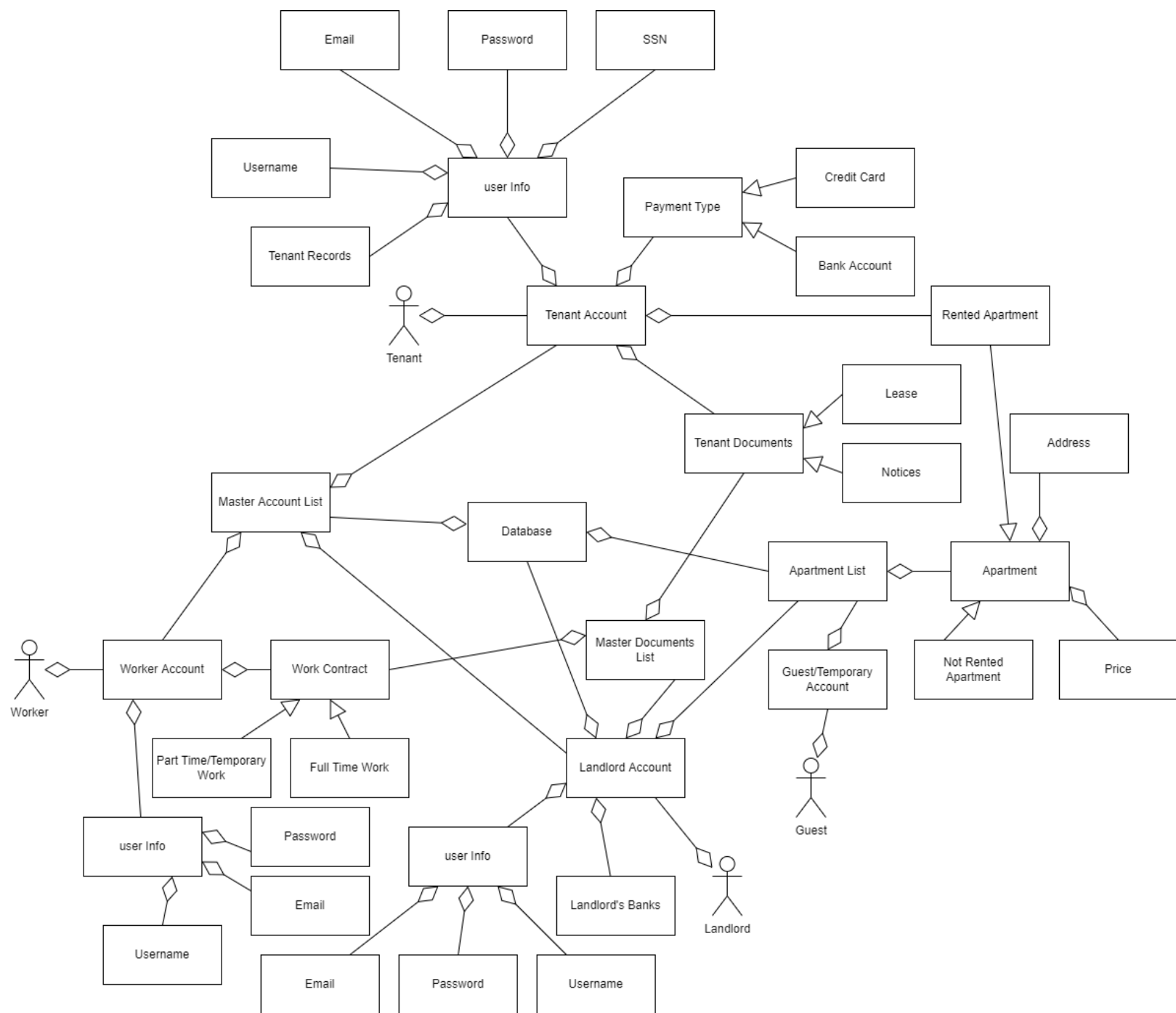
Tenant/Landlord Management App

Phase 1

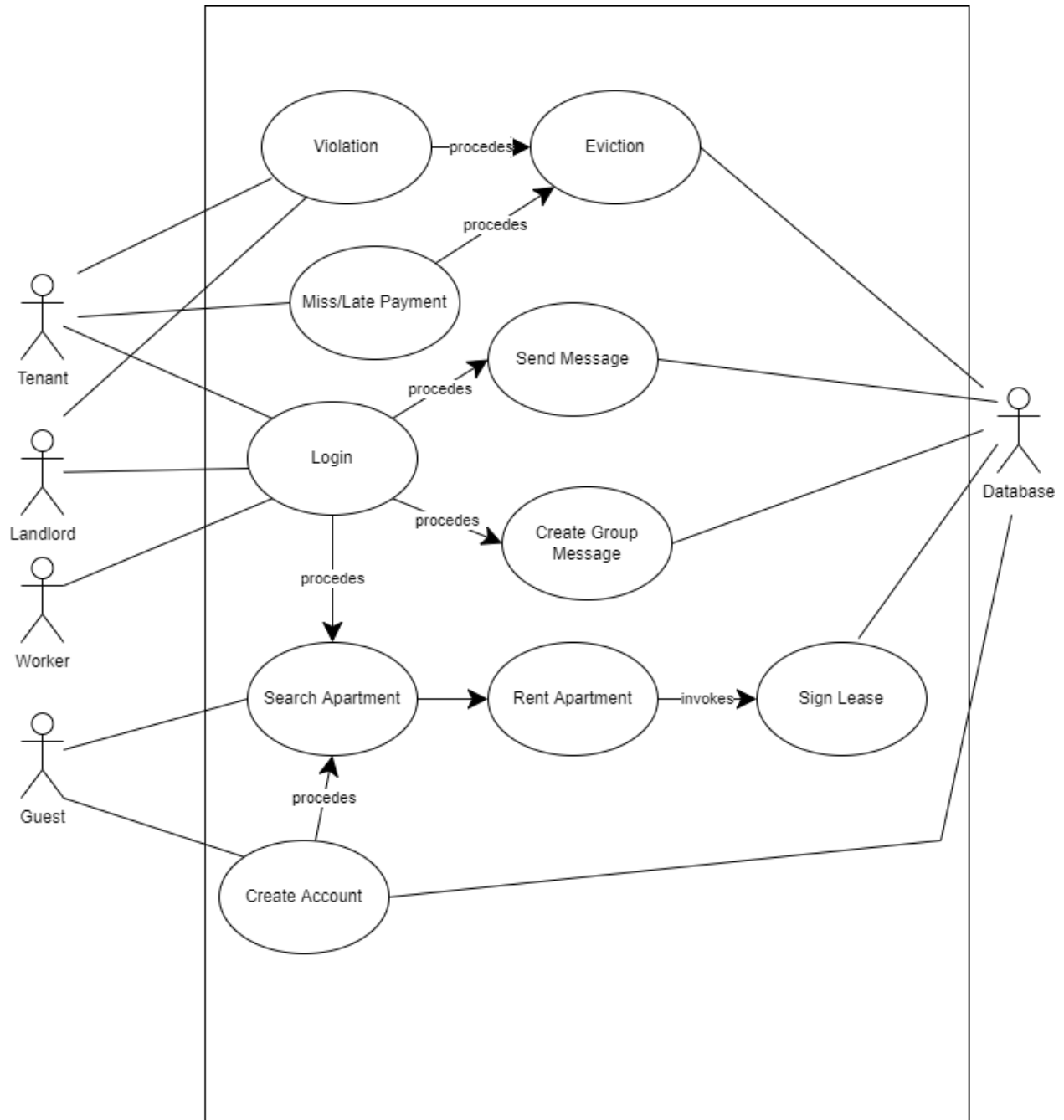**By: Joe Yeung, Vlad Yatsuta, and Afreen Ahmad**

High Level Requirement

1. The Tenant/Landlord Management App will be both a web-based and mobile app
    a. Both web-based and mobile apps must have most features be the same
2. The user must be able to create an account and allow the system to store and remember the user's details
    a. System maintains all accounts through the database
    b. System must be able to distinguish between different types of accounts (tenant, landlord, worker, guest/temporary (potential tenant))
    c. When logging into the app, the user's input of password must match what is in the master account list
3. All accounts must be able to send messages to each other
    a. All users must be able to send images (by album and camera) within messages
    b. The app must allow all users to report any misconduct (harassment, spam, etc.)
4. User must be able to request an apartment within the app
    a. Landlord must be able to respond to requests and make a deal
5. User must be able to search apartments through various search methods (location, price range, # of bedrooms, types of apartments, etc.)
6. The App must be able to send notifications through all parties (violations, announcements, repair requests, and more)
7. Tenant must be able to pay the rent by multiple means
    a. The app must allow multiple payment types: Credit card, bank account, check, etc.
    b. The app must allow multiple payment options: Manual payment or automatic payment
8. The app must be able to hold documents and paperwork for all parties
    a. Lease, notices, eviction notices, worker contracts, etc.
    b. App must be able to sign these documents electronically
    c. App must be able to scan physical files and convert them into electronic ones
9. The App database must be scalable to accommodate apartments added and removed
    a. The landlord must be able to add, edit, and remove apartments from the database
    b. The landlord must be able to categorize the apartments depending on what the landlord wants
10. The app must be able to distinguish between apartments that have been rented and that have not been
11. The landlord must be able to schedule their own availability so guests and tenants will have an idea of when the landlord is available.
    a. Guest and tenants must have access to this schedule at all time
    b. Landlord must be able to change this at any time
    c. All guests and tenants must be able to set up meeting times within the landlord's available time
12. Landlord must have access to all data from database

Domain Model

Email

Password

SSN

Username

user Info

Payment Type

Credit Card

Tenant Records

Bank Account

Tenant Account

Rented Apartment

Tenant

Lease

Tenant Documents

Address

Notices

Master Account List

Database

Apartment List

Apartment

Master Documents List

Worker Account

Work Contract

Guest/Temporary Account

Not Rented Apartment

Price

Worker

Part Time/Temporary Work

Full Time Work

Landlord Account

Guest

user Info

Password

user Info

Email

Landlord's Banks

Username

Landlord

Email

Password
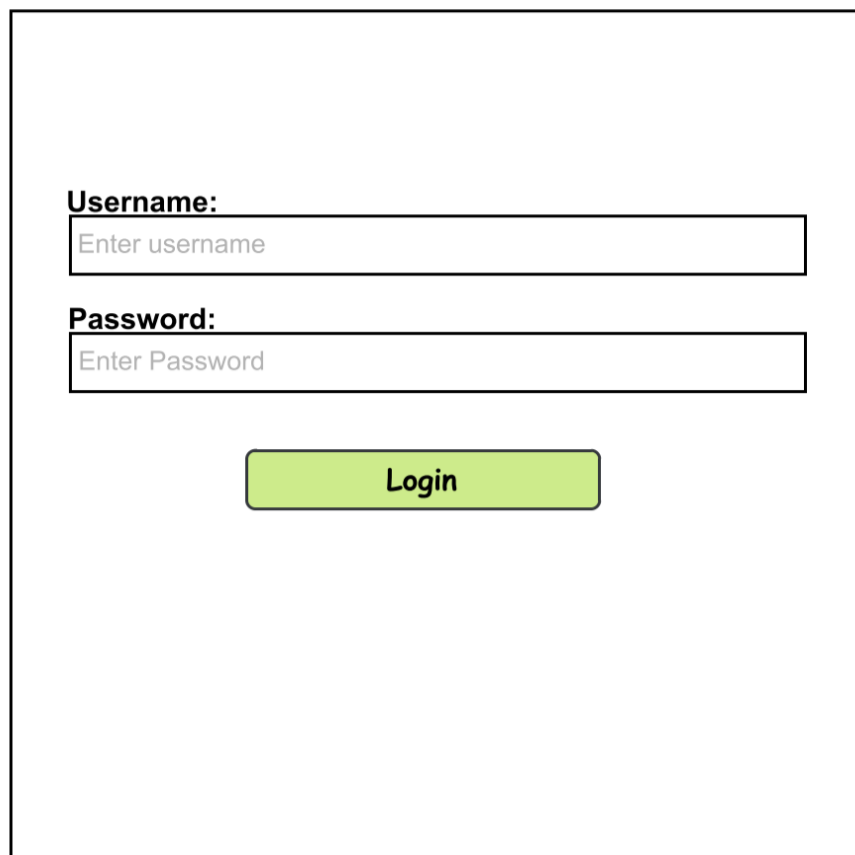
Username

Use Case Diagram

Login Use Case

Basic Course:
The System Displays the login page. The user enters their password and username and clicks the login button. The system looks up the user in the master account list and checks the password. The system then logs in the user.

Alternative Course:
User enters wrong password: System displays "Incorrect Password" message on error page.

System cannot find account in Master Account List: System displays "No account found" on error page.

Username:

Enter username

Password:

Enter Password

Login

Create group messaging Use Case

Basic Course:
The system displays the main page. The user clicks the messaging button. System displays the messaging screen. The user clicks the create group message button. The system prompts the user to add users to the group message. The system retrieves the selected users from the database. The system adds the selected users to the group message. The system display the group messaging screen

Alternative Course:
User adds a user who does not exist to the group message: The system displays "User not found" error message.
The user clicks back button: The system displays main error message