



# United International University

## Project: Tenant Management

Course Name: Smart Phone Application Development

Course Code – CSE 6143

Class Test - 1

**Submitted by –**

Mohammad Ruhul Amin

ID: 012212056

Md. Mubdiur Rahman

ID: 012213006

**Submitted to –**

A. S. M. Fazle Rabbi

Department of CSE

United International University

Date of Submission: 04/11/2022

## Design Pattern – Singleton

Building a retrofit instance for networking in the app requires heavy processes like building a GSON builder and creating OkHttpClient. So, it is a good practice to make retrofit instance a singleton. The application can still parallelly perform multiple API requests through this single instance. Code for creating the singleton class is given below:

```
public class RetrofitSingleton {
    private static Retrofit retrofit = null;
    private static OkHttpClient client;

    private RetrofitSingleton() {
    }

    public static Retrofit getInstance() {
        // if the instance is null then the instance is created first
        if (retrofit == null) {
            OkHttpClient.Builder okHttpBuilder = new OkHttpClient.Builder();

            client = okHttpBuilder.build();

            retrofit = new Retrofit.Builder().baseUrl(SharedData.getInstance().baseUrl)
                .addConverterFactory(GsonConverterFactory.create())
                .client(client)
                .build();
        }


        return retrofit;
    }
}
```

And then, when we wish to use this singleton instance we can call:

```
private Retrofit retrofitInstance = RetrofitSingleton.getInstance();
```


# Login & Registration


12:30




Tenant  
Management

Login

 Username


 Password

Forgot Password?

Login 


Registration →


12:30





Tenant  
Management


Registration

 Username

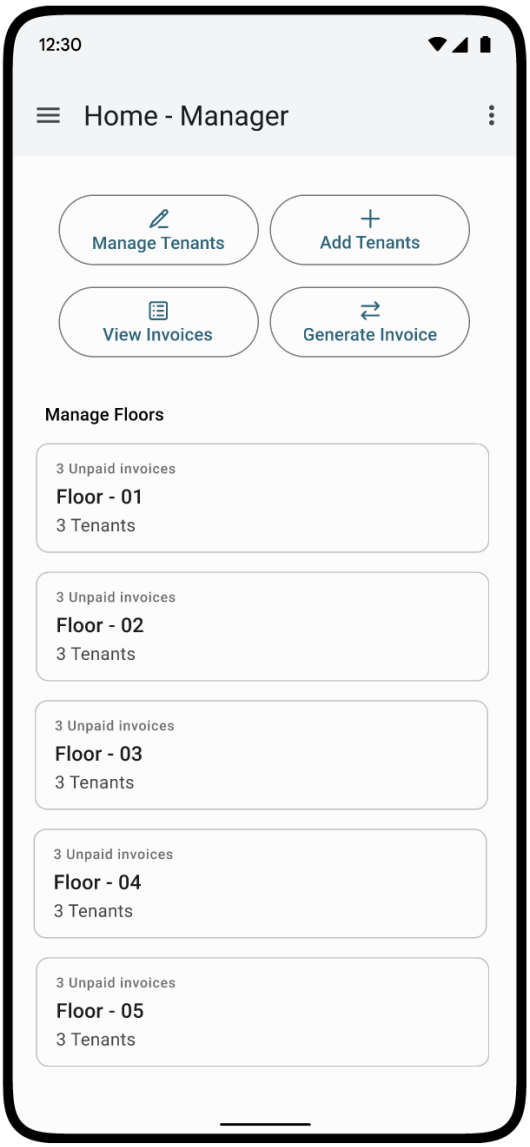
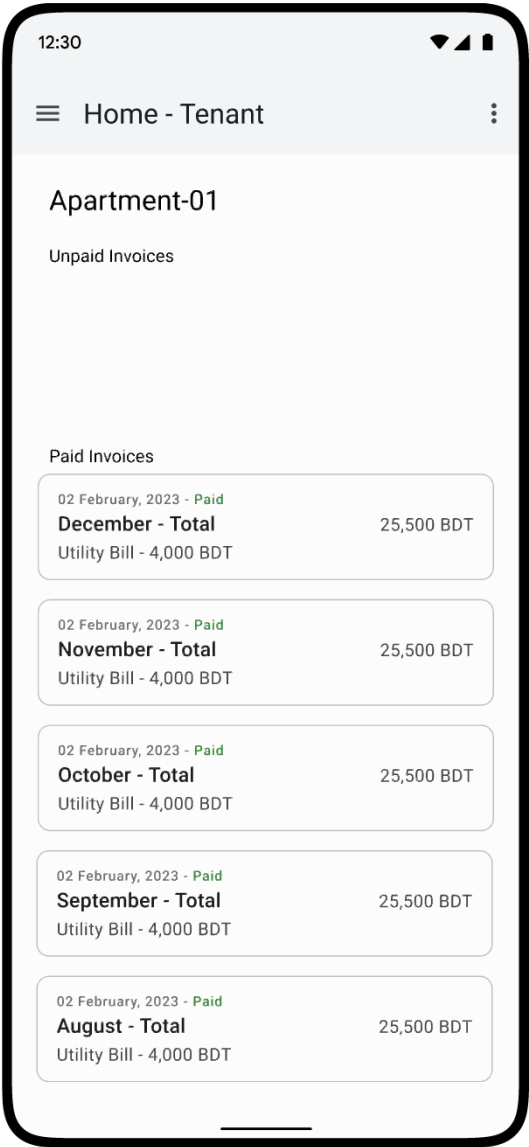
 Password

 Retype Password

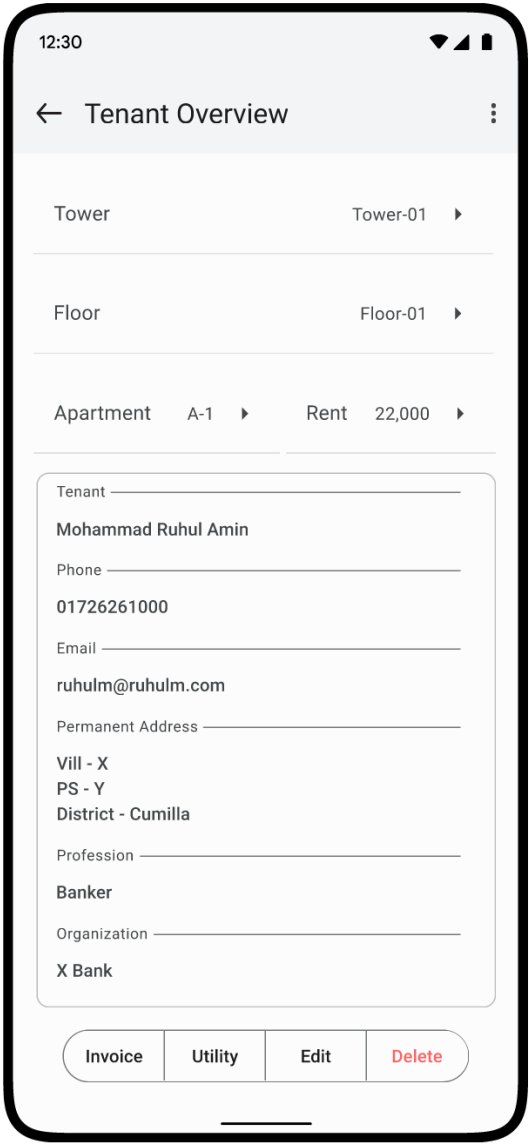
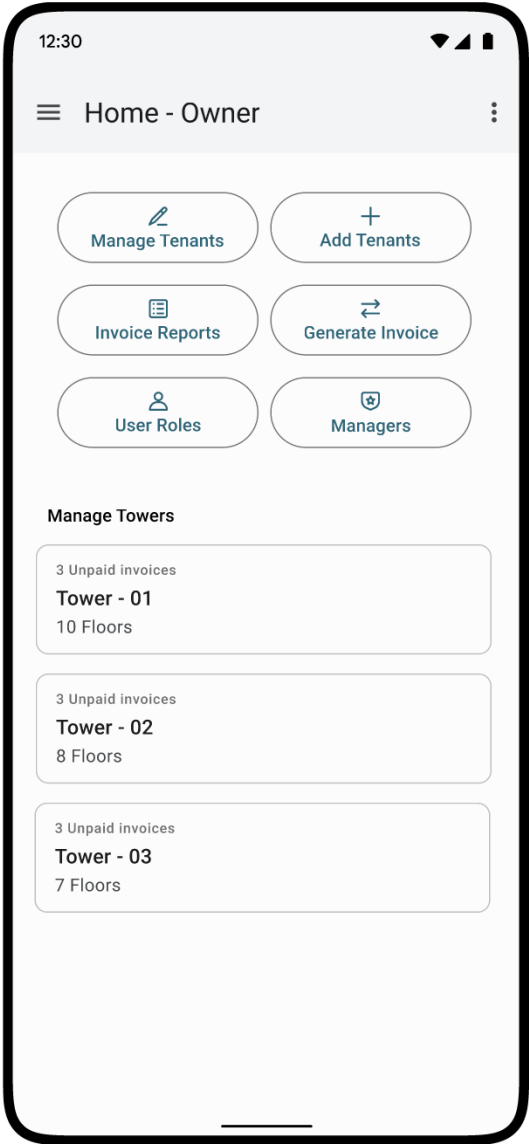
 Phone/Email

Create New Account 

# Home - Tenant & Manager



# Home Owner & Tenant Overview



# Apartment Info & Tower Info

12:30

← Apartment Info

Floor

Floor-01

Apartment

A-1

Rent

22,000

Tenant

Mohammad Ruhul Amin

Invoices

02 February, 2023 - Paid

December - Total

25,500 BDT

Utility Bill - 4,000 BDT

02 February, 2023 - Paid

November - Total

25,500 BDT

Utility Bill - 4,000 BDT

02 February, 2023 - Paid

October - Total

25,500 BDT

Utility Bill - 4,000 BDT

Mark as Available For Rent

Re-assign Tenant

Generate Invoice

12:30

← Tower Info

Tower

Tower-01

Tower Name

Aparajita

Address

Road 8, Area, PO, Ward, District

Owner

Mark

Owner, Tower-Aparajita

Manager

Jen

Manager, Tower-Aparajita

View Apartments

View Tenants

Edit

## Generate Invoice & Invoice Report

12:30

← Generate Invoice

Tower Tower-01

Floor Floor-01

Apartment A-1 Rent 22,000

Tenant  
Mohammad Ruhul Amin

Month February-22

Utilities

Utility Type

Electricity Bill

Amount

2000

BDT

Utility Type

Gas Bill

Amount

1050

BDT

+ Add Utility

Total = 25050

BDT

Generate Invoice ✓

12:30

← Invoice Report

Invoice - Unpaid

Billed to,  
Terry Baptista  
3455 Geraldine Lane,  
New York  
10013  
United States

Invoice number  
#00261  
Reference  
INV-057  
Invoice Date  
27 March, 2020

Due Date  
04 April, 2020

Monthly Rent

₹ 25,000.00

Gas Bill

₹ 1,050.00

Electricity Bill

₹ 2,000.00

Total

₹ 25,050.00

Mark Paid ✓

# User Roles

