

Landlord - Tenant App

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Motivations/Goal of the App

- Design an app that facilitates communication between a landlord and each of his or her tenants.
- The app would permit tenants to complete tasks such as send messages to the landlord, file requests for maintenance and utilities issues, view or pay the current bill, and give feedback to the landlord about general things.
- The landlord will have the ability to view all of the current tenants residing in the building, view the status of all of the tenants' current bills, check to see all of the requests made for maintenance and approve requests in order to resolve the issue, as well as send messages to any of the tenants.
- By having all of the necessary information and the ability to remotely complete basic tasks like paying bills and requesting fixes for utility issues, the app aims to bridge any gaps of communication between a landlord and the tenants and make the management of the tenants easier for the landlord.



Software Design

- One of the main aspects is a login page that is shared between the tenants and landlord. Based on the username and password, a respective UI is shown after a successful login depending on the account type.
 - Nearly every feature of the app has a separate UI for the tenant or landlord. For example, for the maintenance feature, tenants see a screen that allows them to send maintenance requests to their landlords, and landlords see a screen that displays requests made by tenants and mark the status of these requests.
- All of the information such as usernames/passwords, personal information, and all requests/messages is stored in a online Firebase database for easy access since this avoids storing the data locally.
- The app takes advantage of Firebase's asynchronous and real-time functionalities to ensure that users receive immediate updates -- landlords are notified right away of new changes and request made by tenants and vice versa.

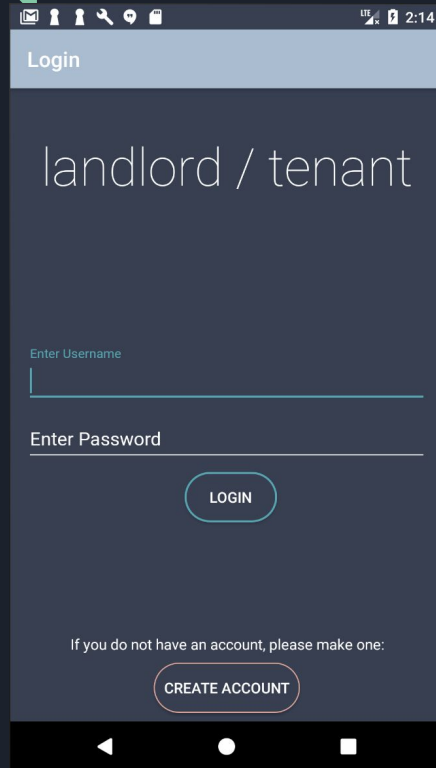


Software Design (cont.)

- The main goal of the UI design was to create a layout that is easy to navigate, easy to understand, and does not require much effort to become accustomed to the overall flow of the app.
- The main homepage interface for both the landlord and the tenant presents a button in order to navigate to the activity for the desired purpose and any other general information that is useful such as the current date.
 - For example, a button allows the tenant to navigate to the activity to file a request to fix a utility.
- Each subsequent interface for the respective purpose, such as viewing all the tenants as a landlord, is presented in the most efficient way, providing the most pertinent information and making the interface easy to read.
 - For example, viewing all of the tenants in the building presents a table with each tenant and information on each tenant such as name, phone number, email address, and any overdue charges.

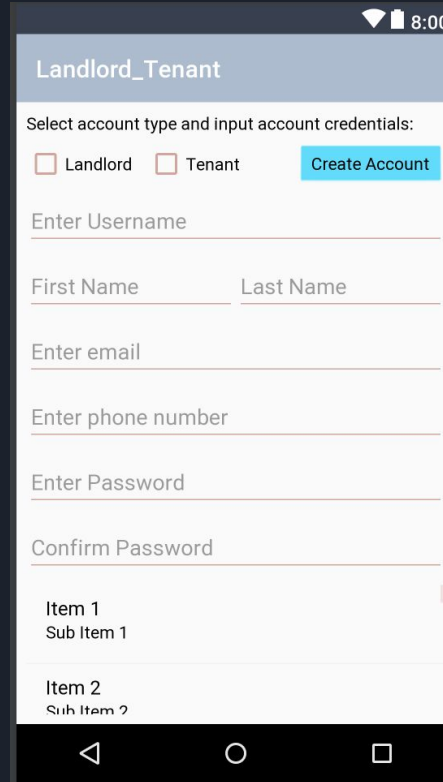
General UI

Login Page



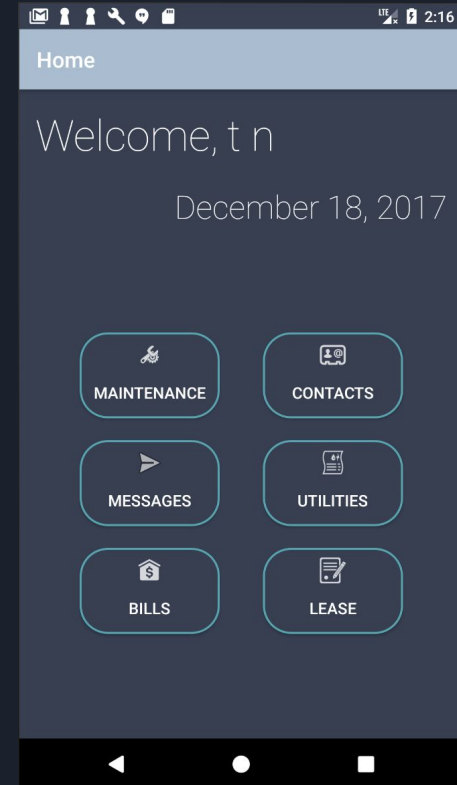
Mobile app login screen. The header is 'Login'. The main text is 'landlord / tenant'. Below this are two input fields: 'Enter Username' and 'Enter Password'. A 'LOGIN' button is positioned below the password field. At the bottom, there is a link that says 'If you do not have an account, please make one:' followed by a 'CREATE ACCOUNT' button. The status bar at the top shows the time as 2:14.

Create Account Page



Mobile app create account screen. The header is 'Landlord_Tenant'. The main text is 'Select account type and input account credentials:'. Below this are two radio buttons: 'Landlord' and 'Tenant', followed by a 'Create Account' button. The form includes input fields for 'Enter Username', 'First Name', 'Last Name', 'Enter email', 'Enter phone number', 'Enter Password', and 'Confirm Password'. At the bottom, there are two items listed: 'Item 1 Sub Item 1' and 'Item 2 Sub Item 2'. The status bar at the top shows the time as 8:00.

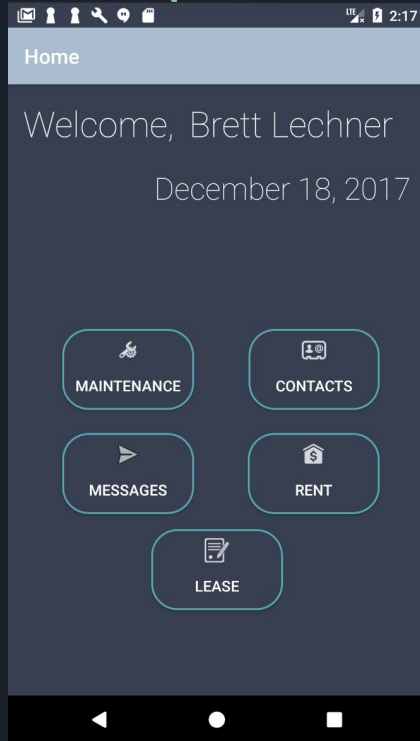
Tenant Homepage



Mobile app tenant homepage. The header is 'Home'. The main text is 'Welcome, t n' followed by the date 'December 18, 2017'. Below this are six buttons arranged in a 3x2 grid: 'MAINTENANCE', 'CONTACTS', 'MESSAGES', 'UTILITIES', 'BILLS', and 'LEASE'. The status bar at the top shows the time as 2:16.

General UI (cont.)

Landlord Home Page



Home

Welcome, Brett Lechner

December 18, 2017

MAINTENANCE

CONTACTS

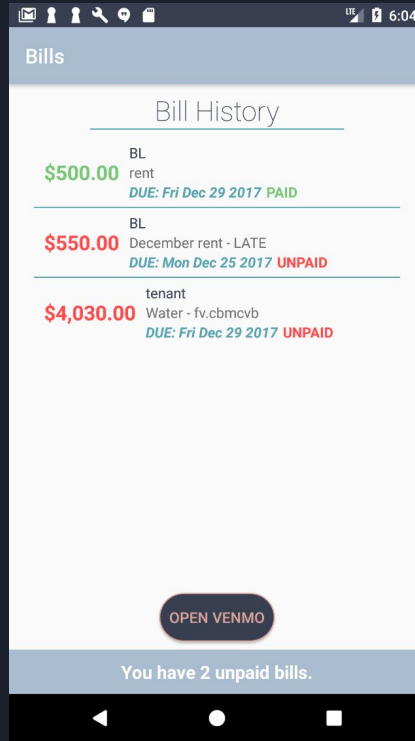
MESSAGES

RENT

LEASE

Android navigation bar at the bottom.

Tenant Bill History Page



Bills

Bill History

\$500.00
BL
rent
DUE: Fri Dec 29 2017 PAID

\$550.00
BL
December rent - LATE
DUE: Mon Dec 25 2017 UNPAID

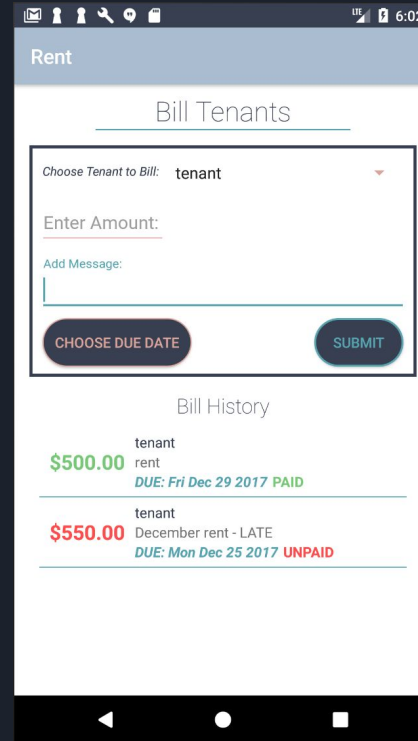
\$4,030.00
tenant
Water - fv.cbmcvb
DUE: Fri Dec 29 2017 UNPAID

OPEN VENMO

You have 2 unpaid bills.

Android navigation bar at the bottom.

Landlord Bill Request Page



Rent

Bill Tenants

Choose Tenant to Bill: tenant

Enter Amount:

Add Message:

CHOOSE DUE DATE

SUBMIT

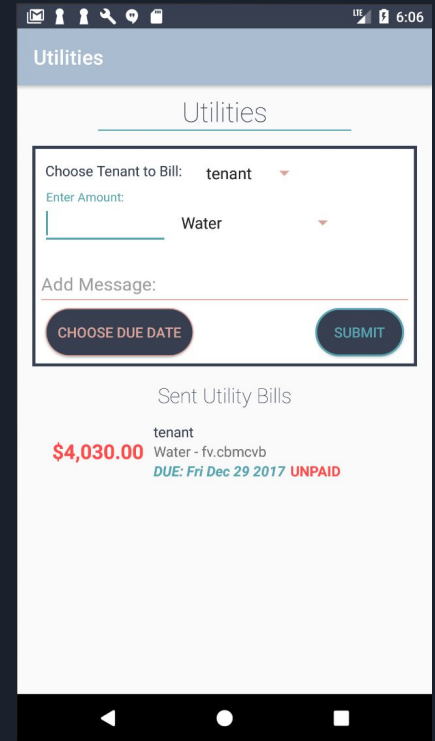
Bill History

tenant
rent
DUE: Fri Dec 29 2017 PAID

tenant
December rent - LATE
DUE: Mon Dec 25 2017 UNPAID

Android navigation bar at the bottom.

Tenant Utilities Page



Utilities

Utilities

Choose Tenant to Bill: tenant

Enter Amount:

Water

Add Message:

CHOOSE DUE DATE

SUBMIT

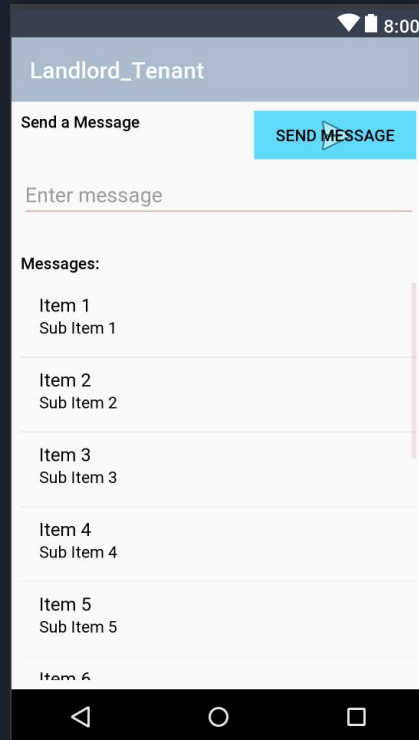
Sent Utility Bills

tenant
Water - fv.cbmcvb
DUE: Fri Dec 29 2017 UNPAID

Android navigation bar at the bottom.

General UI (cont.)

Messaging Page



Landlord_Tenant

Send a Message SEND MESSAGE

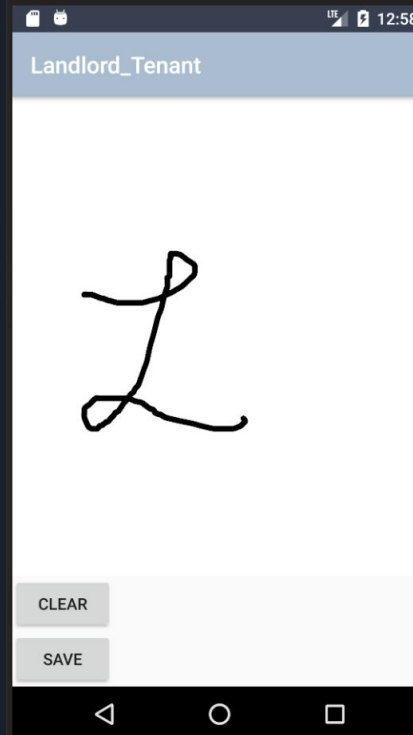
Enter message

Messages:

- Item 1
Sub Item 1
- Item 2
Sub Item 2
- Item 3
Sub Item 3
- Item 4
Sub Item 4
- Item 5
Sub Item 5
- Item 6

The mockup shows a messaging interface with a header 'Landlord_Tenant', a 'Send a Message' section with a 'SEND MESSAGE' button, a text input field 'Enter message', and a list of messages under the heading 'Messages:'. The list contains six items, each with a main title and a subtitle. The bottom of the screen features a standard Android navigation bar.

Signature Page



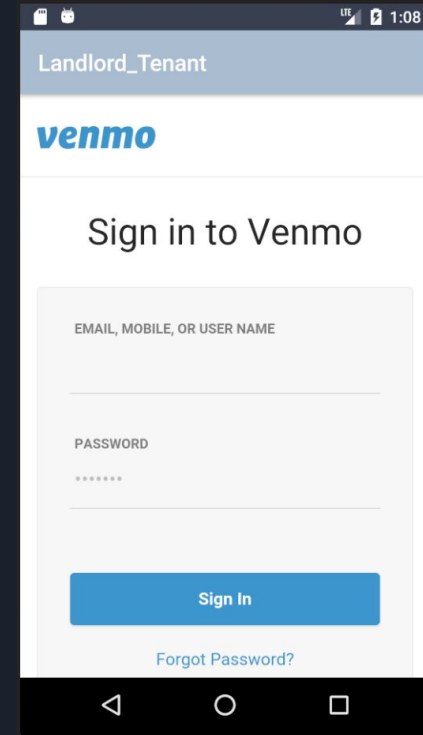
Landlord_Tenant

Handwritten signature: L

CLEAR SAVE

The mockup displays a signature page with the header 'Landlord_Tenant'. The main area contains a large, handwritten letter 'L'. At the bottom, there are two buttons: 'CLEAR' and 'SAVE'. The bottom of the screen features a standard Android navigation bar.

In-app Browser Page



Landlord_Tenant

venmo

Sign in to Venmo

EMAIL, MOBILE, OR USER NAME

PASSWORD

Sign In

[Forgot Password?](#)

The mockup shows an in-app browser page for Venmo. It has the header 'Landlord_Tenant' and the Venmo logo. The main heading is 'Sign in to Venmo'. Below this are two input fields: 'EMAIL, MOBILE, OR USER NAME' and 'PASSWORD'. A blue 'Sign In' button is positioned below the password field. A link for 'Forgot Password?' is located at the bottom of the form. The bottom of the screen features a standard Android navigation bar.