

The Condo Management Company



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Bitharas



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THE CONDO MANAGEMENT COMPANY

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THE CONDO MANAGEMENT COMPANY



Introduction

The Condo Management System is a comprehensive solution for all our users to centralize the way all services related to condos rentals and listings are managed.

It is tailored for our users including condo owners, rental users and management companies.



Benefits

- ❑ Streamlines all operations
- ❑ Enhances community engagement
- ❑ Accessible across multiple platform
- ❑ Enhances user experience
- ❑ Provides user transparency
- ❑ Intuitive and user friendly platform



Implemented user stories

1. User Profile Authentication
 - 1.1. Validate unique profile
2. Condo Owner's Dashboard
 - 2.1. Display profile information
 - 2.2. Overview of owned properties
 - 2.3. Financial status
 - 2.4. Requests submitted
3. Condo Management Company Profile
 - 3.1. Property Profiles
 - 3.2. Uploading condo files
 - 3.3. Include detailed information for condo units
 - 3.4. Arrange exchange of registration keys
4. Financial System
 - 4.1. Setting condo fees
 - 4.2. Condo fee calculation
 - 4.3. Record operational budget
 - 4.4. Generate annual financial reports

UU

Welcome

Manage Your Profile

First Name

Last Name

test230@gmail.com

no. (123)-456-789

Street Address

Postal Code

Province

City

user Type

employee

Save Changes

My Properties



Address: 1412 Test Road

Occupied: Yes
Rent Paid: Yes
Tickets Open: 0

View Tickets



Address: 1412 Test Road

Occupied: Yes
Rent Paid: Yes
Tickets Open: 0

View Tickets



Address: 1412 Test Road

Occupied: Yes
Rent Paid: Yes
Tickets Open: 0

View Tickets

Financial System

Fee per Square Foot

Fee per square foot

Parking Fee

Enter fee per parking

Update Fees

Cost Description

Cost Description

Cost Amount

Cost Amount

Add Cost Entry

Cost Entries

Operational Budget

Report

Generate Annual Report

Implemented user stories

5. Reservation System

- 5.1. Setup common facilities
- 5.2. Interface for reservations
- 5.3. Availabilities for the listed facilities
- 5.4. Implement first-come-first-serve functionality

6. Employee Role Management System

- 6.1. Define employee roles
- 6.2. Assigning roles to employees

7. Request Management System

- 7.1. Implement different request types
- 7.2. Assign requests to employees

[illegible]

Implemented user stories

8. Notification Page

- 8.1. Create a notification page.
- 8.2. Display the latest activities and requests

9. Additional Features

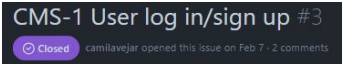
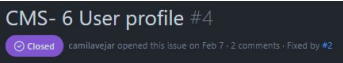

- 9.1. Develop user forum functionality
- 9.2. Create an events page to organise events and invite users.
- 9.3. Develop a functional discount and offer list

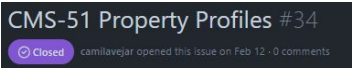

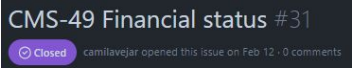
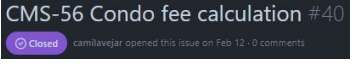
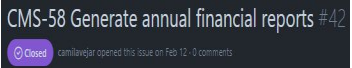
10. Bonus Features


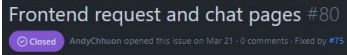

- 10.1. Cross-platform accessibility
- 10.2. Multilingual
- 10.3. User login using various accounts like Gmail, SSO etc.

The image displays two overlapping user interface mockups. The background mockup is a dark-themed profile page for a user named Amar Mahmoud. It includes a 'Welcome' message, a 'Manage Your Profile' section with fields for name, email, phone, and address, a 'Save Changes' button, a 'Language Preferences' section with a dropdown set to 'English', and a 'Reset Your Password' link. The foreground mockup is a 'Requests' form, also in dark theme. It features a 'Select Request Type:' dropdown menu, a 'Message:' label, a large text input area with the placeholder 'Enter your request message', and a 'Send' button. At the bottom right of the foreground mockup is a 'Notifications' section with a 'UU' icon and the text 'No new notifications'.

Traceability Matrix

Req ID	Requirement	Description	Related Github Issue	Related Testing
1	User Registration	User would like to sign in and create profile with picture and information.	 & 	In Sprint 2 Testing report, Test #1 and #2 show the successful testing of the sign in functionality.
2	Condo Owner Dashboard	As condo owner, access to dashboard with information about my properties, profile and financial status		In Sprint 3 Testing report, Test #3 to #5 show successful testing of this requirement

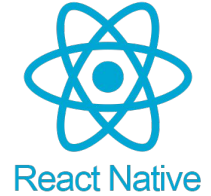
3	Property Profile Creation	As a condo management company I want to create a profile for all properties under my management and show their essential information		In Sprint 3 Testing report, Test #11 verifies this requirement
4	Uploading Condo Files	As a condo management company, want to upload condo files for each property		In Sprint 3 Testing report, Test #11 verifies this requirement
5	Financial System	As user, would like to see financial status like due fees, expenses and financial reports.	  	In Sprint 3 Testing report, Test #12 to #15 verify successful working of this requirement

6	Reservation System	As a condo owner/renter, want to be able to reserve a facility available through a calendar-like interface		In Sprint 4 Testing report, Test #6 to #8 are used to test this requirement. The test passed resulting in successful execution
7	Request/Messaging System	As condo owner/renter, want to be able to make requests related to condo matters and communicate with the relevant person	 	In Sprint 4 Testing report, Test #4 and #5, successfully test this requirement

Development process



Frontend



- ❑ Tools used: Expo and React Native
- ❑ Pros:
 - Clean, reusable components
 - Expo -> web, IOS and Android builds under one codebase
 - Speed up development process
- ❑ Challenges faced:
 - Expo build to APK hard to wrap around / error messages (fixed)
 - State management and consuming APIs
 - New concept for many in the team
 - Backend dev had to help setup the frontend

Backend



- ❑ Tools used: Express, TypeScript, and Postman
- ❑ Pros:
Tools quickly setup and test endpoints
Typescript -> type checking and preventing bugs
- ❑ Challenges
Not many were familiar with backend concepts

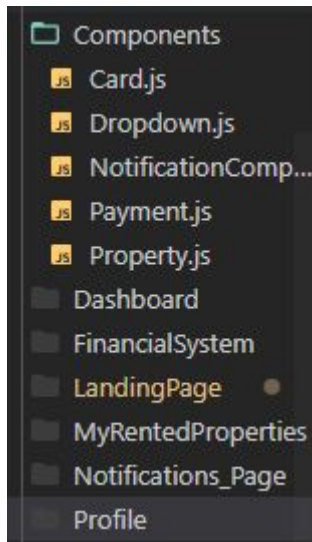


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Code quality - Frontend

- ❑ Styles page with predetermined color palette and fonts
 - consistent styling across all pages
- ❑ React allows for clean, reusable components
 - Separation of concerns
 - Screens in their own folders
 - Clean, intuitive development experience



```
whiteColor16Bold: {
  color: "FFFFFF",
  fontSize: 16,
  fontFamily: "SF_Compact_Display_Bold",
},

whiteColor20Bold: {
  color: "FFFFFF",
  fontSize: 20,
  fontFamily: "SF_Compact_Display_Bold",
},

whiteColor22Bold: {
  color: "FFFFFF",
  fontSize: 22,
  fontFamily: "SF_Compact_Display_Bold",
},

greenColor14Medium: {
  color: "#15D21E",
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  fontFamily: "SF_Compact_Display_Medium",
},

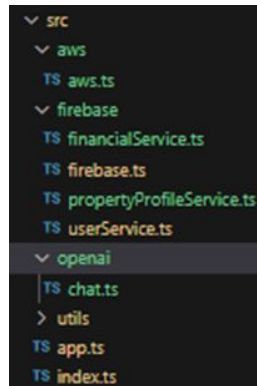
blackMicro: {
  color: "#B99802",
  fontSize: 25,
  fontFamily: "Sigmar_Regular",
},

blackToolTipText: {
  fontSize: 21,
  fontFamily: "SF_Compact_Display_Bold",
},
```

```
export const Colors = {
  lightBodyBackColor: "#E6E6FA",
  cardBackColor: "#F5F5F5",
  deepBlackColor: "#001421",
  deepCard: "#B374B8",
  bodyBackColor1: "#112F38",
  bodyBackColor2: "#112F38",
  blackColor: "#000000",
  whiteColor: "FFFFFF",
  primaryColor: "#00A099",
  grayColor: "#99A0A4",
  greenColor: "#15D21E",
  goldColor: "#FCE79A",
  secondaryGoldColor: "#D9D45D",
  errorColor: "#CC0000",
  successColor: "#5CB85C",
  whiteDark: "#E6E6FA",
  red: "#F08080",
  lightGreen: "#92D050",
  darkBlue: "#1D4E89",
  lightBlue: "#56CCF2",
  navyBlue: "#2F3E46",
  orangeColor: "#F2994A",
  pinkColor: "#E87575",
  purpleColor: "#8B8207",
  tealColor: "#56C8D8",
  darkGray: "#333333",
  lightGray: "#D3D3D3",
  mediumGray: "#A9A9A9",
  softPink: "#FAD2E1",
  deepPurple: "#8B51E8",
  lemonYellow: "#F2C94C",
  aquaBlue: "#209CDB",
  coral: "#FF69B4",
  midnightBlue: "#2E3192",
  forestGreen: "#22A666",
  oliveGreen: "#8B8B00",
  mustardYellow: "#E6D000",
  skyBlue: "#87CEEB",
  lavender: "#E6E6FA",
  maroon: "#8B0000",
  taupe: "#A0522D",
};
```

Code quality - Backend

- ❑ Follows controller/service structure
- ❑ Controllers inside app.ts
 - Imports functions from Service files
- ❑ Services contain bulk of the code / logic
 - Checks user is authenticated before allowing
 - Performs necessary actions
- ❑ Firebase.ts contains all code related to interactions with the database.



```
app.post('/initializeUser', async (req: Request, res: Response) => {
  if (req.body.tokenId && req.body.email) {
    try {
      console.log('Calling initializeUser endpoint')
      await initializeUser(req.body.tokenId, req.body.email, res)
    } catch (e) {
      console.log(e)
      res.status(500).send('Internal server error')
    }
  } else {
    res.status(400).send('Invalid request')
  }
})

app.post('/addPropertyFile', async (req: Request, res: Response) => {
  try {
    console.log('Calling addPropertyFile endpoint')
    const response = await addPropertyFile(req, res)
    res.status(200).send(response)
  } catch (e) {
    console.log(e)
    res.status(500).send('Internal server error')
  }
})

app.post('/addProperty', async (req: Request, res: Response) => {
  if (req.body.tokenId && req.body.propertyValues) {
    try {
      console.log('Calling addProperty endpoint')
      await addPropertiesOwned(req.body.tokenId, req.body.propertyValues, res)
    } catch (e) {
      console.log(e)
      res.status(500).send('Internal server error')
    }
  } else {
    res.status(400).send('Invalid request')
  }
})
```

Code quality - Linter & Prettier

- ❑ Linter: ESLint with *standard-with-typescript* configuration
- ❑ Allows us to avoid typical antipatterns
 - No unused variables
 - No multiline ternary
 - Maintaining code style (camelCase)

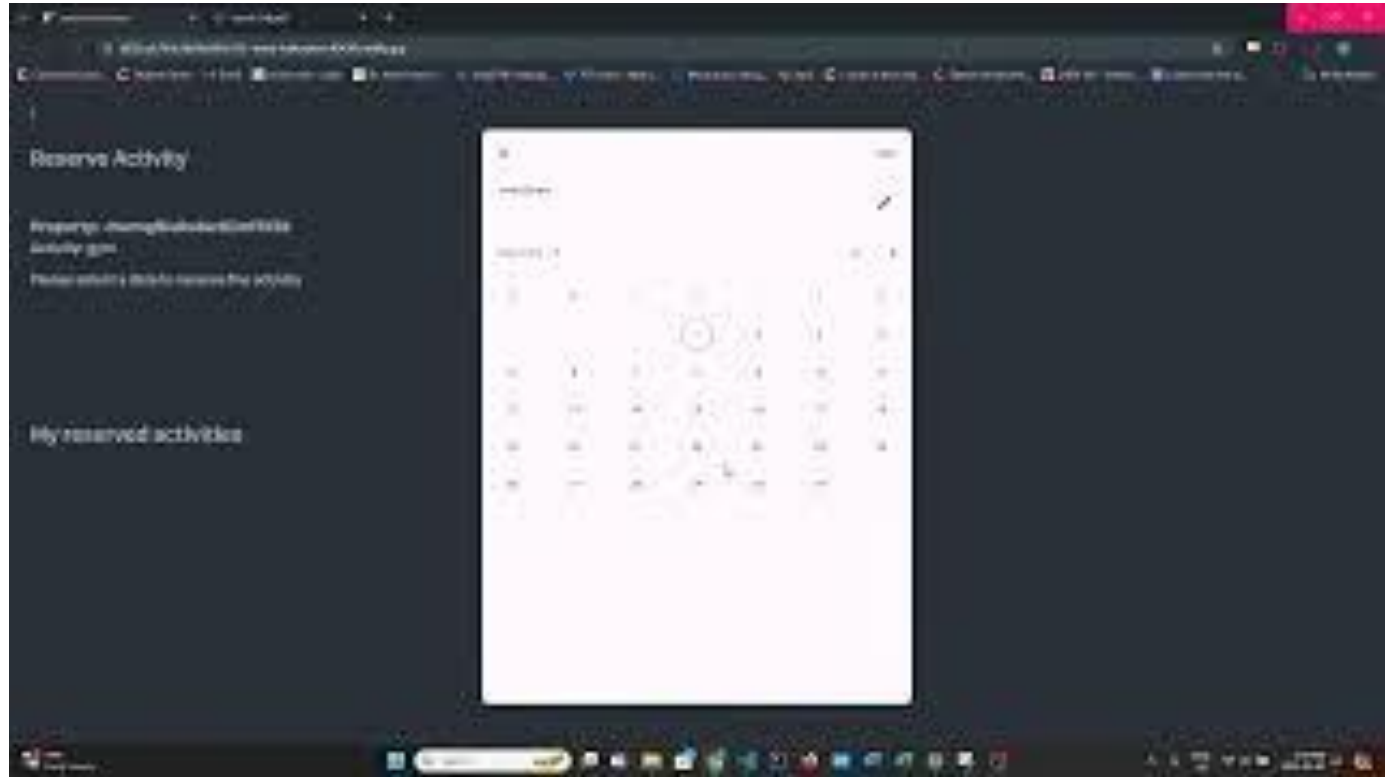


ESLint Report

0 problems - Generated on Wed May 01 2024 00:51:52 GMT-0400 (Eastern Daylight Saving Time)

[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\app.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\laws\laws.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\employeeManagement.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\financialService.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\firebase.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\propertyProfileService.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\rentingService.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\firebase\userService.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\index.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\openai\chat.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\src\utils\utils.ts	0 problems
[*] C:\Users\ichhuo\Documents\SOEN390\condo-backend\test\index.test.ts	0 problems

Demo



Hosting

<https://6631cdc7b1c1fb7fa941a152--neon-lebkuchen-4543ff.netlify.app/>

at:

APK

Apk

<https://drive.google.com/file/d/1JkKXvoUood2N5JfIRNkauglzODIe2qUj/view>

at:

Testing



❑ Tools used: Jest and Cypress

❑ 30+ tests completed over 5 sprints:
23 tests
8 Integration tests
7 Acceptance Tests

❑ Overall >80% achieved in unit Coverage testing

❑ Challenges faced
Unit testing: Difficulty onboarding
Cypress coverage not working: Instrument the code first with outside resource
Time management: Finishing stories too late into sprint to test in the same sprint

Overall Retrospective

1- The Bad

- We struggled a lot in managing our time throughout each sprint

2- The Good

- We communicated well with each other and made sure everyone had a task.

3- Observations

- Sprint 1&2 VS Sprint 3&4 VS Sprint 5.
- Direct link between early meeting, task division and time management.



Future Improvements ?

Team Side

- Improve overall time management

Product Side

- Include Single Sign On integration using Gmail, Apple ID or other similar accounts
- Proper implementation of additional languages

