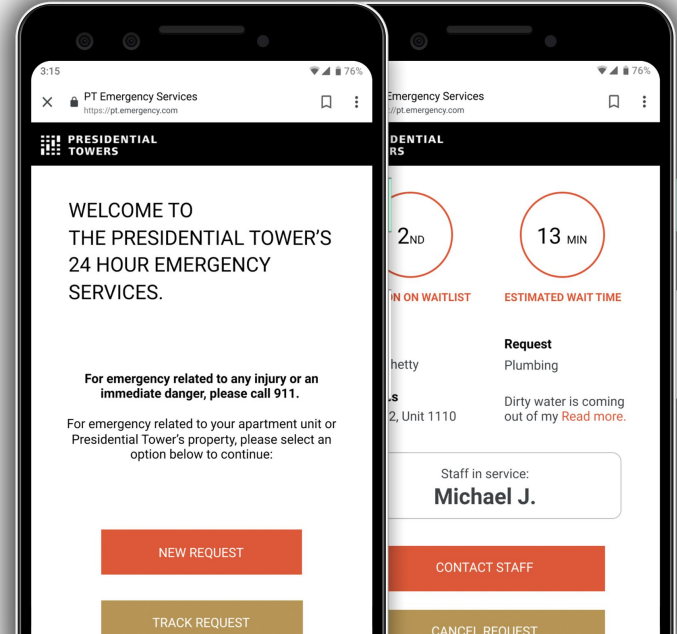


Urgent Service Request Portal For a residential community



Introduction

A standard residential community provides a variety of amenities and a dedicated staff responsible for maintaining a great resident and guest experience. Service and maintenance is an important aspect of such communities.

Our hypothesis: There isn't a straightforward solution for community members to communicate urgent problems to the management, resolution of the issues can be delayed and often lead to sub par service experiences for the residents.

Context: Presidential Towers, is a multi-tower residential apartment complex in downtown Chicago. It has 2208 individual condominiums, occupied by people from diverse demographics.



The Presidential Towers in Chicago.

Central question

Based on our the context and hypothesis, we started the project with the following central question:

How might we help the residents of an expansive housing community, efficiently request urgent services?

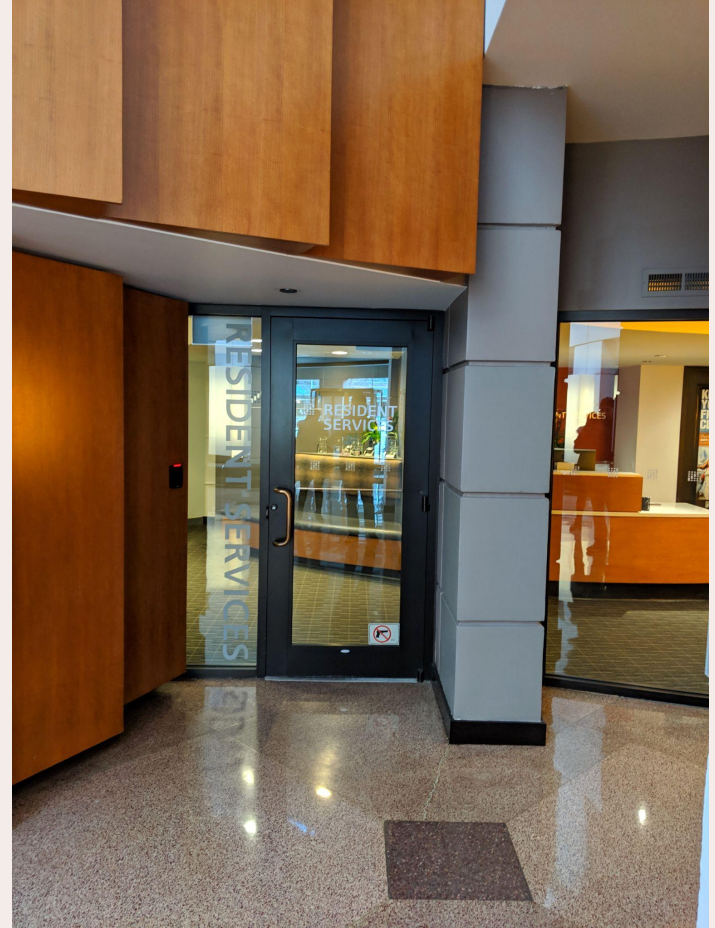
Secondary Research

Narrowing down the scope of the problem,

We started with secondary research around services offered to the residents of PT and studied the different channels that the residents use for accessing activities around the complex, including the **online resident portal**.

It helped us identify the primary stakeholders and exposed us the experience of availing urgent services.

While there is a Resident Service office, it has limited resources as well as restricted timings, adding to the inconvenience.



Resident Services office at the Presidential Towers.

PAYMENTS LEASE MAINTENANCE REQUEST

Logged in as: Harsh Wardhan - 555 West Madison #4212

MAINTENANCE REQUEST

Submit Maintenance Request Request History

Category* Locks/Keys

Sub Category Make Keys

Full Description*

1499 characters remaining

Access Instructions

Permission to Enter* No

Attachment i Choose File No file chosen

Presidential Tower's Resident Portal's maintenance request portal - Form

PAYMENTS LEASE MAINTENANCE REQUEST

Logged in as: Harsh Wardhan - 555 West Madison #4212

MAINTENANCE REQUEST

Submit Maintenance Request Request History

My Requests already on file.

10 records per page

Request #	Requested	Category	Description	Status	Date Completed
1783418	3/10/2019	Electrical	The light at the entrance of the apartment does not work.	Web	

Showing 1 to 1 of 1 entries

+ Previous 1 Next +

RESERVE PARKING NOW

Presidential Tower's Resident Portal's maintenance request portal - Request History

All service requests are treated equally and there is no option to mark anything urgent. Once the request is in, there is no option to follow up or track the request.

Key Findings

- **Limited Service Hours and Resources:** The existing Resident Services office has restricted operating hours and limited on-site resources, which adds to the inconvenience for residents needing urgent services.
- **Lack of Urgent Request Features:** The current online portal does not allow residents to mark requests as urgent, nor does it provide any means to follow up or track the status of requests once submitted.
- **Confusing Request History:** The online system combines current requests and request history in a single tab, which can be confusing for users trying to navigate or find specific information.
- **Service Availability:** Services are only available from Monday to Saturday, limiting access for residents who may encounter urgent issues outside of these times.
- **No Direct Communication:** There is no direct or efficient way for residents to communicate with the service providers, leading to delays and potential miscommunications.
- **Service Request Handling:** All requests, including those marked as urgent, are processed as regular maintenance work orders.

Additional Note: *There is no mobile application available for the residents of Presidential Towers to facilitate these services, indicating a gap in accessibility and convenience.*

Primary research



Heejung Wee - Resident,

“Once I went to the reception to collect a dinner order delivery at around 10.00 pm. Unfortunately, I had forgotten my keys and was locked out of my apartment. I was stranded outside my house for more than one hour to wait for the staff who would help me get in, only because the staff at the service desk could not get in touch with the key guy. It was very frustrating.”

Methodology:

For primary research, we conducted interviews and contextual inquiry. We started with a grounded theory approach to pinpoint the problem.

We interviewed a total of 19 participants, that included 12 residents split evenly across all four towers and 7 staff including 2 night shift service staff.



Krish Shetty - Resident

“The heating system had stopped working in our apartment one day during the polar vortex last month. We called the service desk four times before somebody came. Every time they said that someone would be there in the next 30 minutes. I would have gone to my friend’s place rather than freezing in the cold, had I known that it would take this long.”



Julie - PT Resident Service Staff

"It becomes difficult when there are more than 2 or 3 residents with any complaints. We cannot provide exact time about when will their problem be solved and that makes some people anxious. This is because we do not have any system; we can only call the service providers, which is not always possible"

Key findings

From Staff interviews:

- Residents find the services offered by the Resident Services Office to be mostly efficient.
- It gets difficult to get help from the Resident Services outside service hours. In such cases, residents have to report issues to the 24/7 service desk which is essentially the building's reception, not as quick as Resident Services.
- There is no way for the residents to track their service request online, on the phone or in person.

From Staff interviews:

- The major bulk of the time that takes in solving a resident's problem is because the service request processing is done manually by the people at the Resident Service Office. Coordinating between the resident and the service provider staff is also a time taking process.
- Giving an estimate of time to the resident for the service to be resolved is not possible because it is hard to keep track of the provider staff.
- The service provider staff can be in any tower at a particular given time, and the only way to locate them is by a phone call, which may not be effective if they are in elevator or basement.

Research Insights



Efficiency of Current Services: Residents generally find the services provided by the Resident Services Office to be efficient but face challenges when issues arise outside of the office's operating hours.



Challenges with 24/7 Services: The 24/7 service desk, which operates as the building's reception, is not as quick or effective as the dedicated Resident Services, leading to frustrations during urgent situations.



Manual Processing Delays: The manual processing of service requests by the Resident Service Office is time-consuming, as it involves coordinating between residents and service providers, which delays resolution.



Tracking and Communication Issues: There is no current method for residents to track their service requests, which leads to uncertainty and dissatisfaction. Additionally, the lack of direct communication with service provider staff means residents cannot receive real-time updates or interact efficiently with those addressing their issues.



Provider Availability and Location Challenges: Service providers may be difficult to locate quickly if they are in another tower or areas like elevators or basements where communication via phone is ineffective.

Design Principles for the solution



Direct Communication

Enabling residents to directly contact service providers to reduce delays and improve response times.



Real-Time Tracking

Allowing residents to track the status of their service requests in real time, enhancing transparency and reducing anxiety.



Streamlined Request Processing

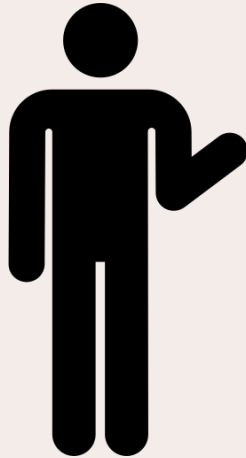
Developing a more automated and efficient system that minimizes manual entry and speeds up service provision.

Final Problem Statement

Refining the scope of this project, we decided pursue the problem for the edge case scenario of urgent cases outside Resident service office hours:

How might we **enhance the convenience and efficiency** for Presidential Tower residents and staff by **facilitating swift reporting and tracking of urgent issues** outside office hours?

Proposal



Users: PT residents

Scenario: An urgent situation related to PT resident's apartment unit or the property.

Solution: A mobile application for residents to quickly report and track urgent issues.

Solution: QuickFix PT Mobile Application



Initial proposal and designs:

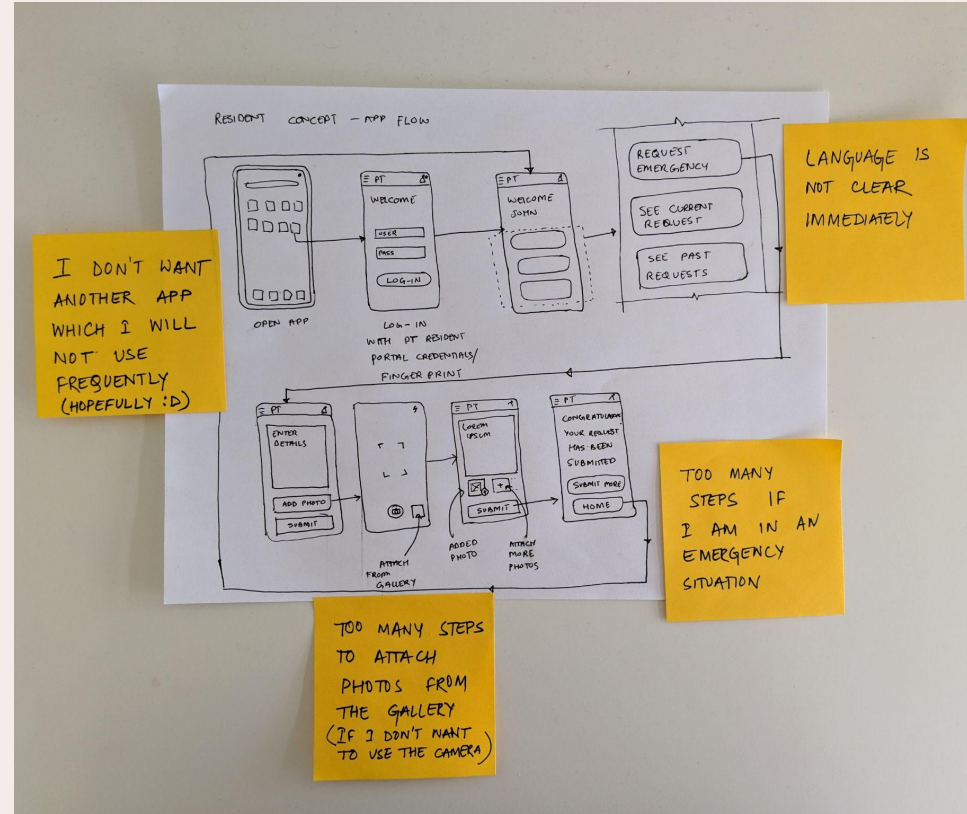
Our first approach was to develop a mobile application for the residents, since there was none available on either iOS or Android.

Concept testing: Based on the insights, we developed wireframes and created **low fidelity mockups** to test with our pool of residents that we had interviewed.



Findings from **concept testing**:

- + The flow is easy to follow for users.
- - Residents may not want to install an application in their phone for occasional use.
- The number of steps can be reduced further.
- - Language needs to be more clear.
- - The user may not always remember their user id or password.
- - Just providing the phone number of the service provider may not work.





Additional considerations for the solution:

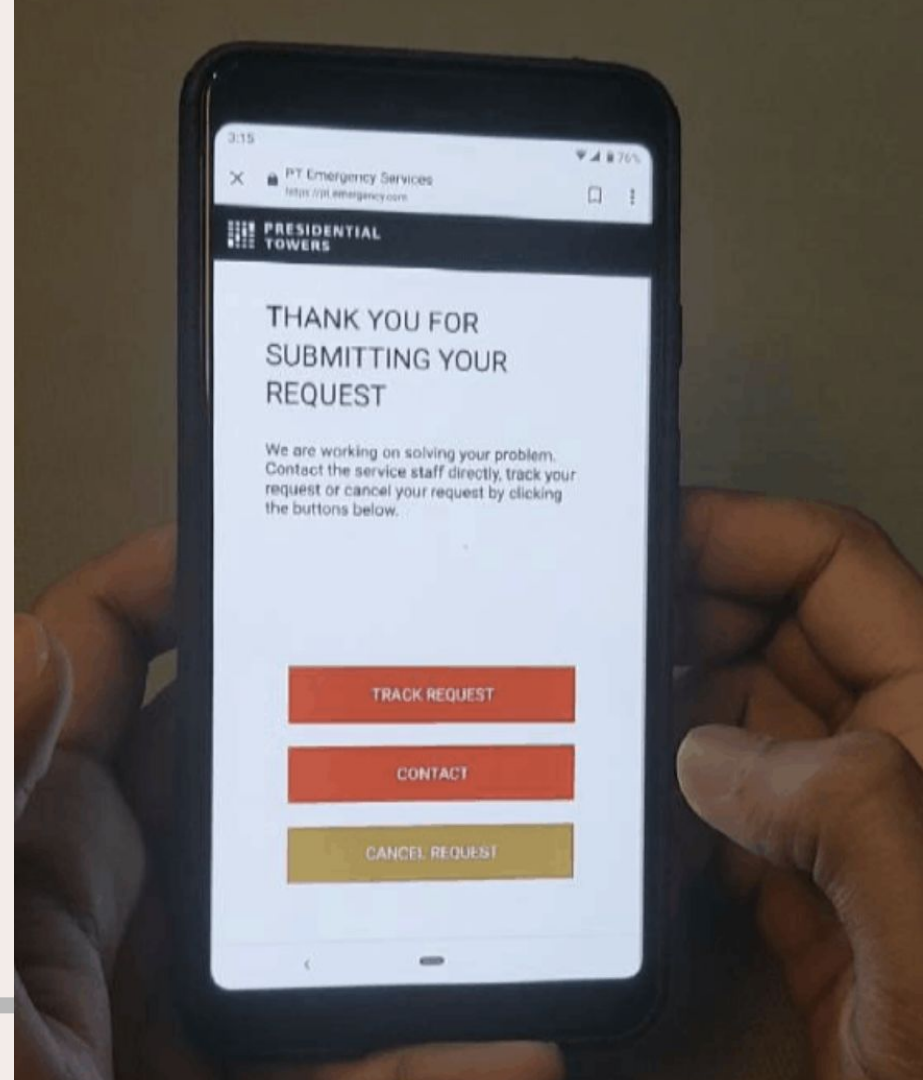
"QuickFix PT" is proposed to be integrated into a **larger digital ecosystem** for Presidential Towers, potentially linking with other residential services like rent payments and regular maintenance requests.

This integration would promote higher engagement and utility, making the app a central part of the residents' daily interactions with their living environment.

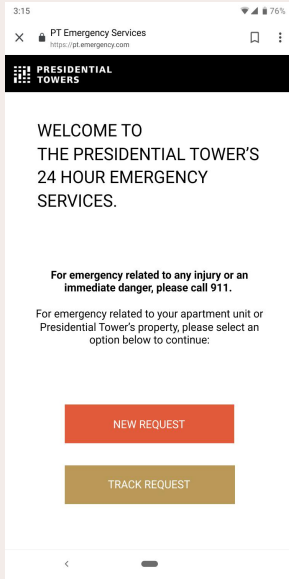
Refined proposal:

(based on the testing results)

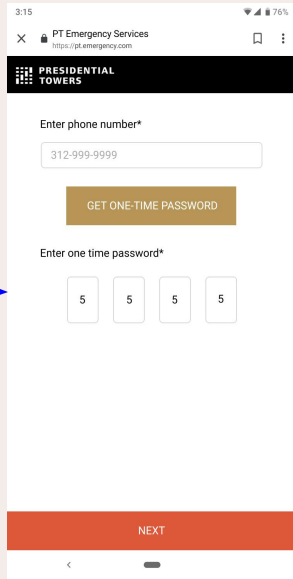
- A **web app** for the residents of the Presidential Towers, which can be accessed via phone or the computer.
- For easier access, phone number **verification through SMS** rather than id-password, in order to submit requests.
- **Chat functionality** as alternate communication channel rather than phone as the only channel.
- Separate access through **easy URL**.
- Link also available on the online resident portal as well as home-page of presidentialtowers.com



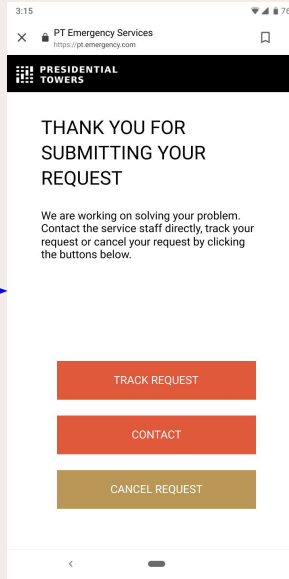
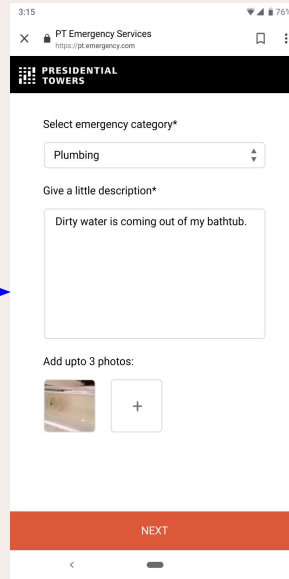
Final web-application flow: Urgent Request Submission-



The homepage is kept simple and focussed with only two buttons for submitting a request and tracking request.



The user does not need to log in using his resident portal user ID anytime. They can use their phone number and one-time password to create request and track their urgent requests. This reduces the cognitive load on the user, of remembering the user id and password as well as makes the process faster.



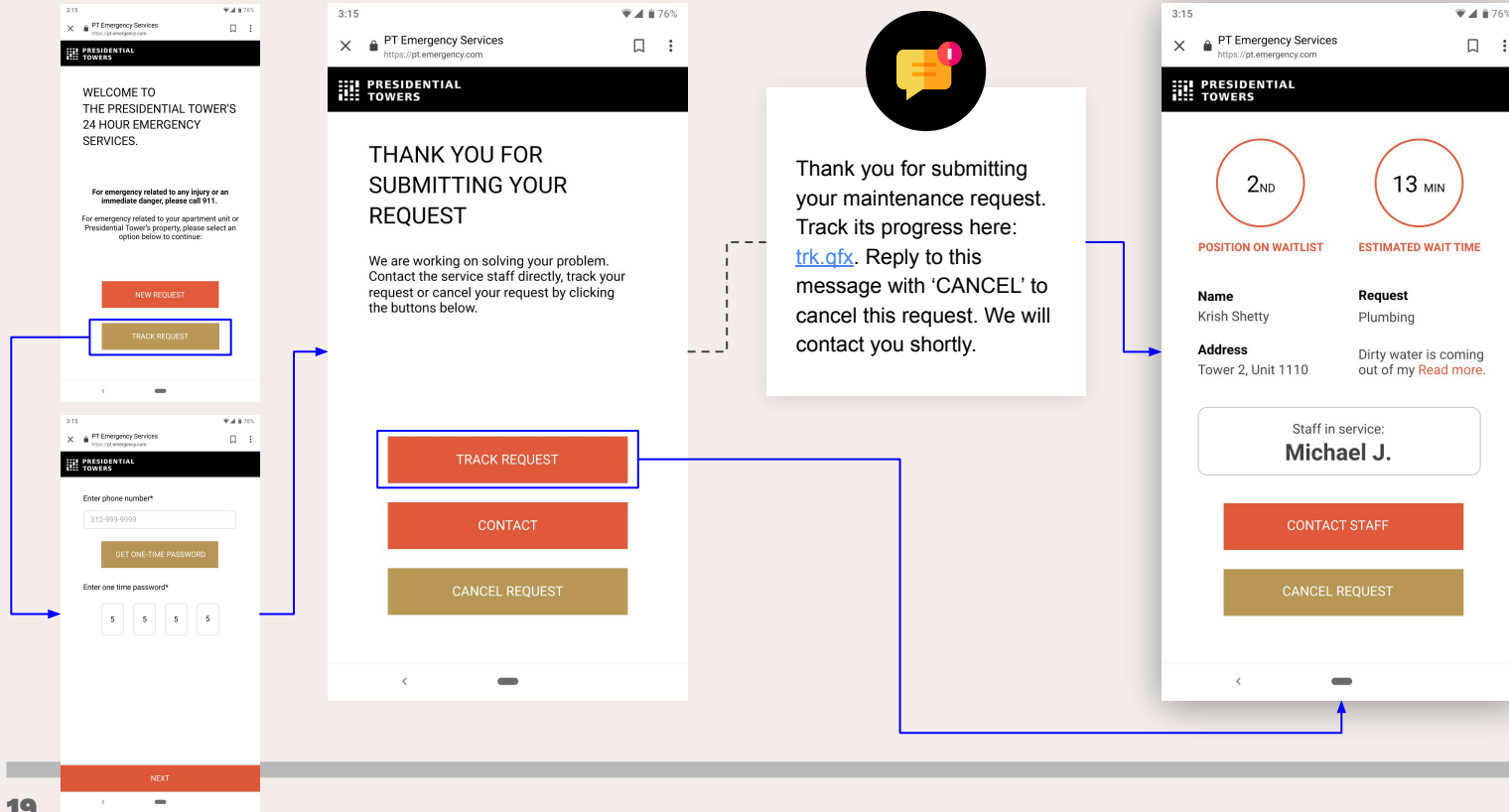
Through this solution, user is able to submit the request in 3 quick and easy steps, with further option to track or cancel request. Or contact the service provider.



Thank you for submitting your maintenance request. Track its progress here: [trk.qfx](https://pt.emergency.com/trk.qfx). Reply to this message with 'CANCEL' to cancel this request. We will contact you shortly.

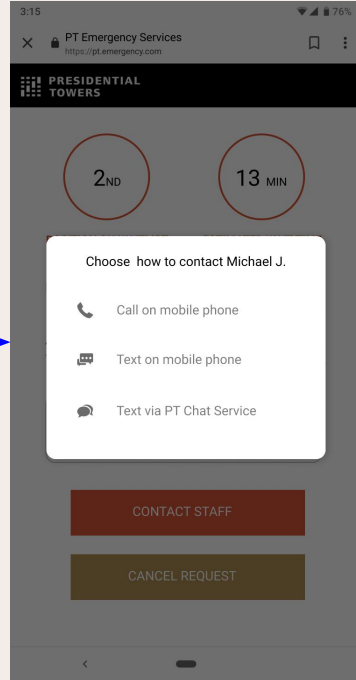
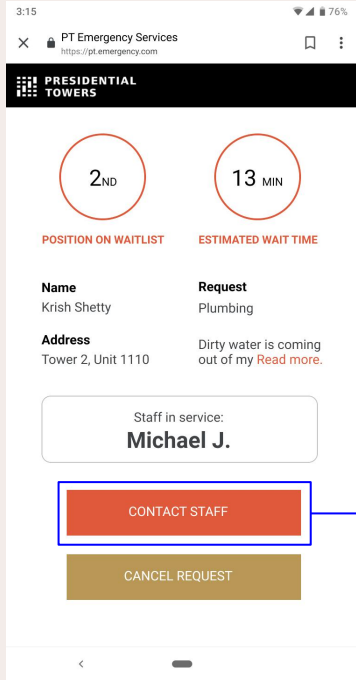
Users also get an SMS with the url to access and track their request.

Final web-application flow: Request Tracking-

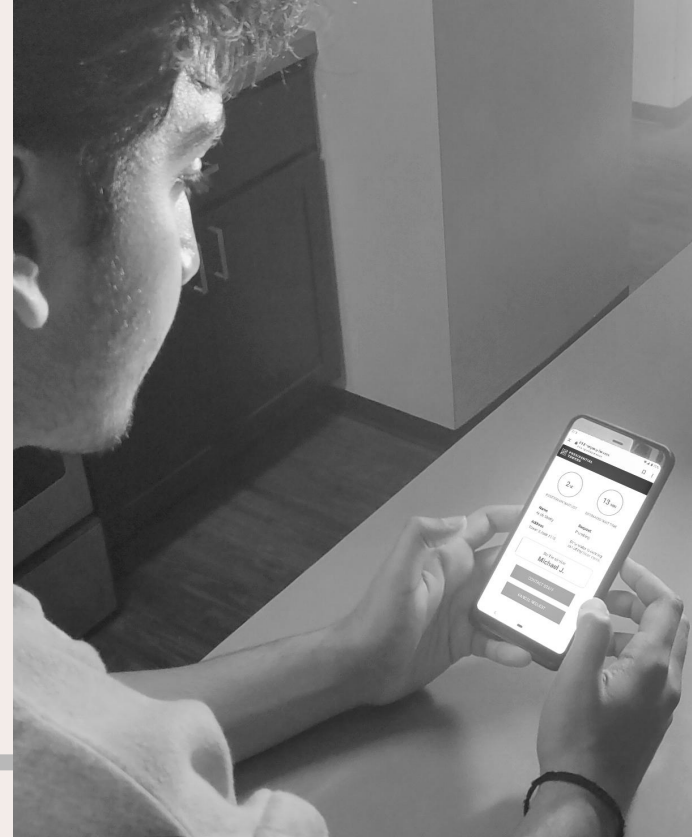


Users can easily track their service, see progress and the staff assigned to their request by logging into the portal or using the link delivered to them by SMS.

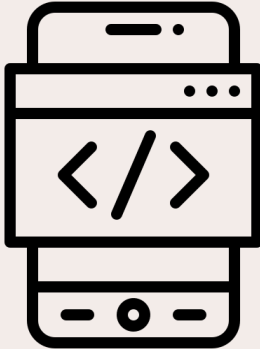
Final web-application flow: Contacting service staff-



Users can contact the staff assigned to their service request through three different channels - **text, call or online chat.**



QuickFix PT Web Based Application



The development of the "**QuickFix PT**" emergency service request web portal marks a significant advancement in enhancing resident satisfaction and operational efficiency at Presidential Towers. By integrating a comprehensive digital ecosystem, this project not only simplifies urgent service requests outside of standard office hours but also fosters a more connected and responsive service.

The proposed system **empowers residents with real-time tracking and direct communication channels**, ensuring that urgent needs are addressed promptly and effectively. Overall, "QuickFix PT" promises to elevate the living experience by making service requests more accessible, transparent, and efficient, thereby setting a new standard for residential service management.

THANK

YOU