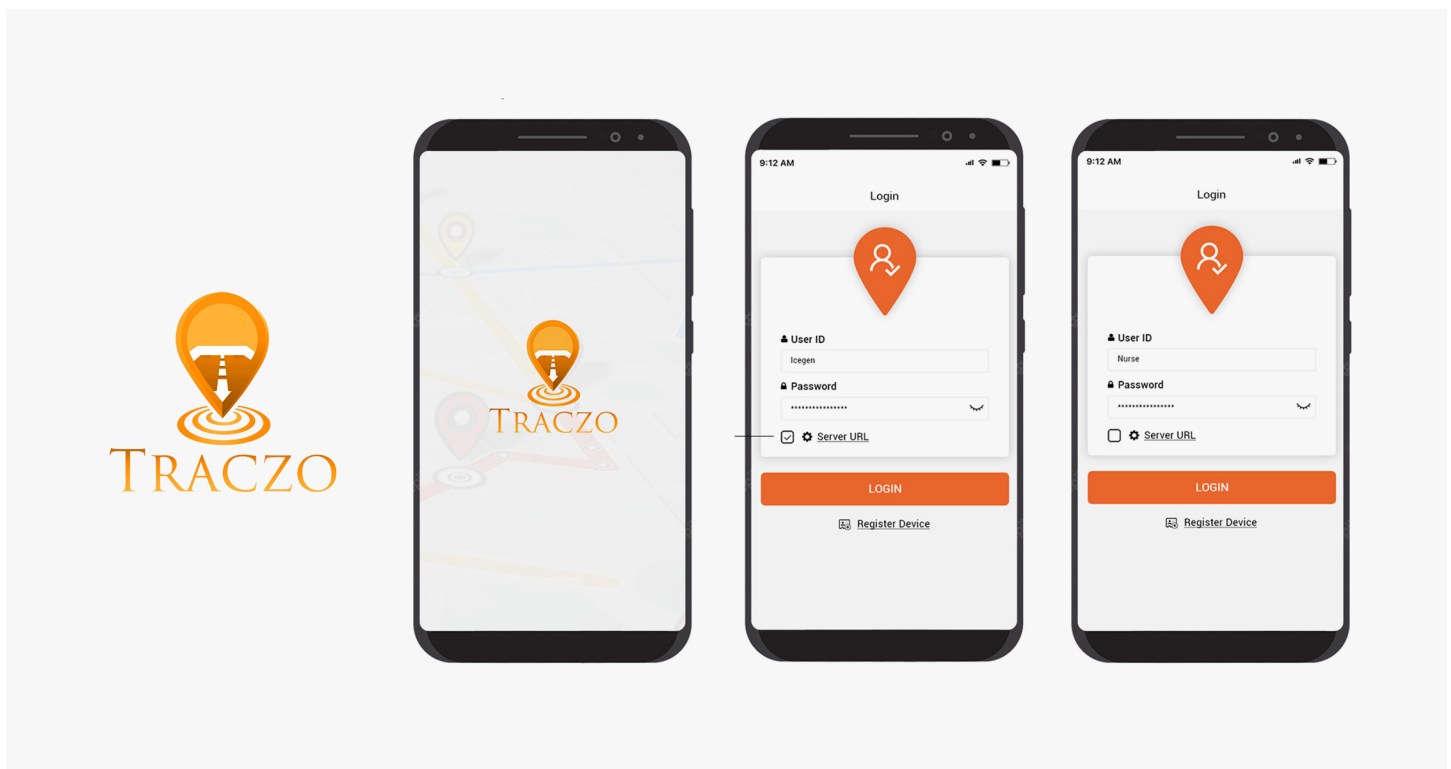CASE STUDY: TRACZO

Revolutionizing Hospital Staff Management with Traczo: Secure Task Allocation and Real-Time Tracking Solution

Introduction

Traczo is an advanced staff management platform tailored for hospital environments. Designed as dual Android applications—one for the admin and one for hospital employees—Traczo streamlines task management, location tracking, and secure access, ensuring hospital operations run smoothly and efficiently.

Project Overview

Traczo was conceptualized to improve task allocation, tracking, & reporting within hospitals. The main objective was to create an app that would allow the hospital admin to send tasks directly to staff members, monitor their locations, and ensure secure login, restricted to within the hospital premises. Additionally, the app needed to enable employees to update their task status, report the time taken, and upload supporting screenshots through the app.

The Challenge

The primary challenge was to develop a secure and user-friendly system that allowed real-time communication between the admin and hospital staff. The solution needed to incorporate:

☑ Geofencing for login restrictions within hospital premises.

☑ Real-time location tracking of employees.

☑ A straightforward interface for task updates, including time tracking and screenshot uploads.
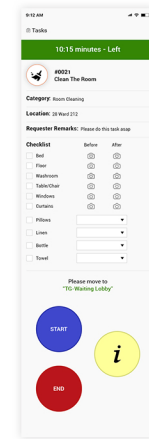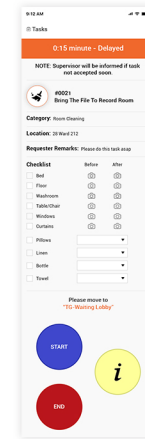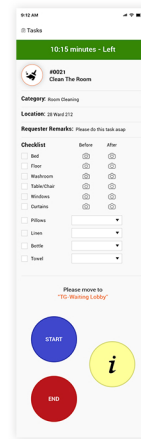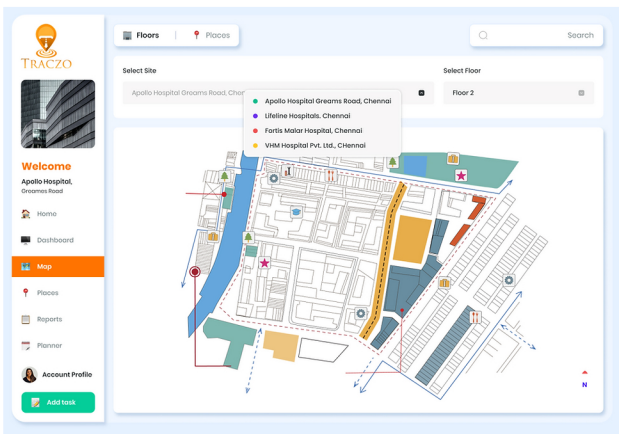
Client Expectations

Traczo aimed to provide hospitals with:

☑ An effective tool for task delegation and progress tracking.

☑ Enhanced security through location-based login protocols.

☑ A system that simplified the process of task updates, making them timely and transparent.

☑ Real-time data on task progress and employee movements within the hospital premises.

Approach

To achieve these objectives, we developed two Android applications with the following key features:

Admin App Features:

☑ **Task Assignment**

Admins can create and assign tasks to employees, complete with deadlines and task details.

☑ **Real-Time Location Tracking**

Ensures that the admin can monitor the movement of staff within hospital premises.

☑ **Geofenced Secure Login**

Employees are only permitted to log in when they are physically present on hospital grounds, enhancing data security.

Employee App Features:

☑ **Task Update Interface**

Employees can mark tasks as in progress or completed, log the time taken, and provide updates.
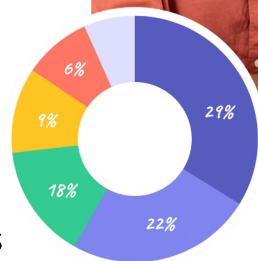
☑ **Upload Capability**

Employees can attach screenshots as proof of task completion.

☑ **Location Validation for Login**

Ensures that employees can only access the app within authorized areas.
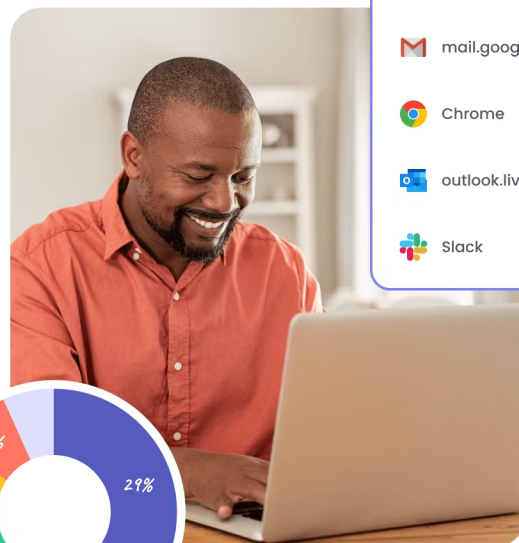
| Zoom | 2h 15m |
mail.google.com	1h 47m
Chrome	45m
outlook.live.com	30m
Slack	21m

# How We Helped Traczo Enhance Operations

By integrating robust task management and location-tracking features, we helped Traczo optimize the hospital workflow. This solution improved the transparency and accountability of staff members, allowing administrators to focus on critical decision-making without micromanagement.
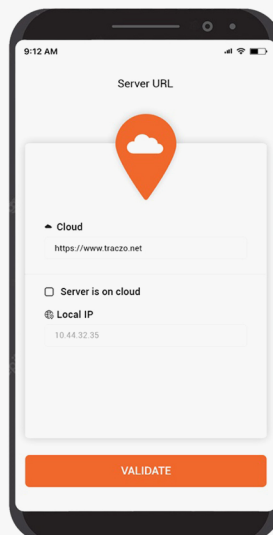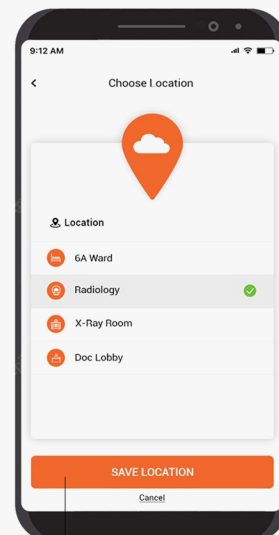

Splash Screen
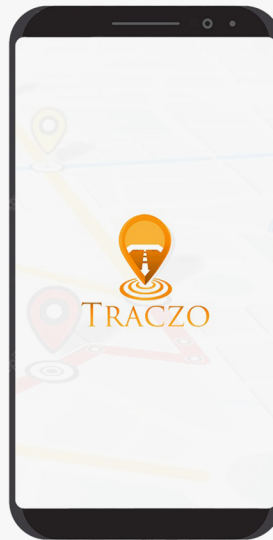
Server URL Registration
Step 1
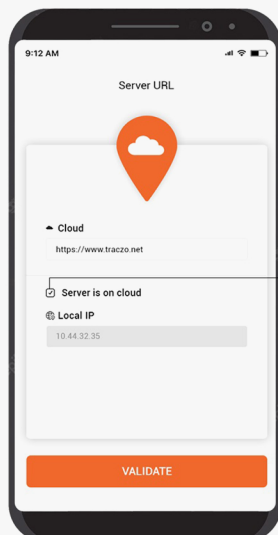
Server URL Registration
Step 2

Server URL Registration
Step 3

Platforms and Technologies Used

Android

Kotlin

Java

Tangible Results

☑ **Improved Operational Efficiency**

Task assignment and tracking processes became seamless, reducing delays and manual follow-ups.

☑ **Enhanced Security**

Location-based login improved the protection of sensitive information.

☑ **Higher Task Accountability**

The ability to track and report task updates through screenshots increased employee diligence.

Client's Perspective

Traczo's management system provided hospitals with the ability to oversee tasks and staff activities in real-time. The intuitive interface and secure login features met the need for both ease of use and data protection, contributing to an efficient, well-managed workforce.

Insights and Lessons Learned

✅ Emphasis on Security

Geofencing played a crucial role in ensuring that app access remained restricted to hospital premises.

✅ Employee Usability

A user-centric design was vital for quick adoption by staff, allowing for intuitive task updates and reporting.

✅ Transparent Tracking

Real-time location tracking and progress updates proved invaluable for operational oversight.