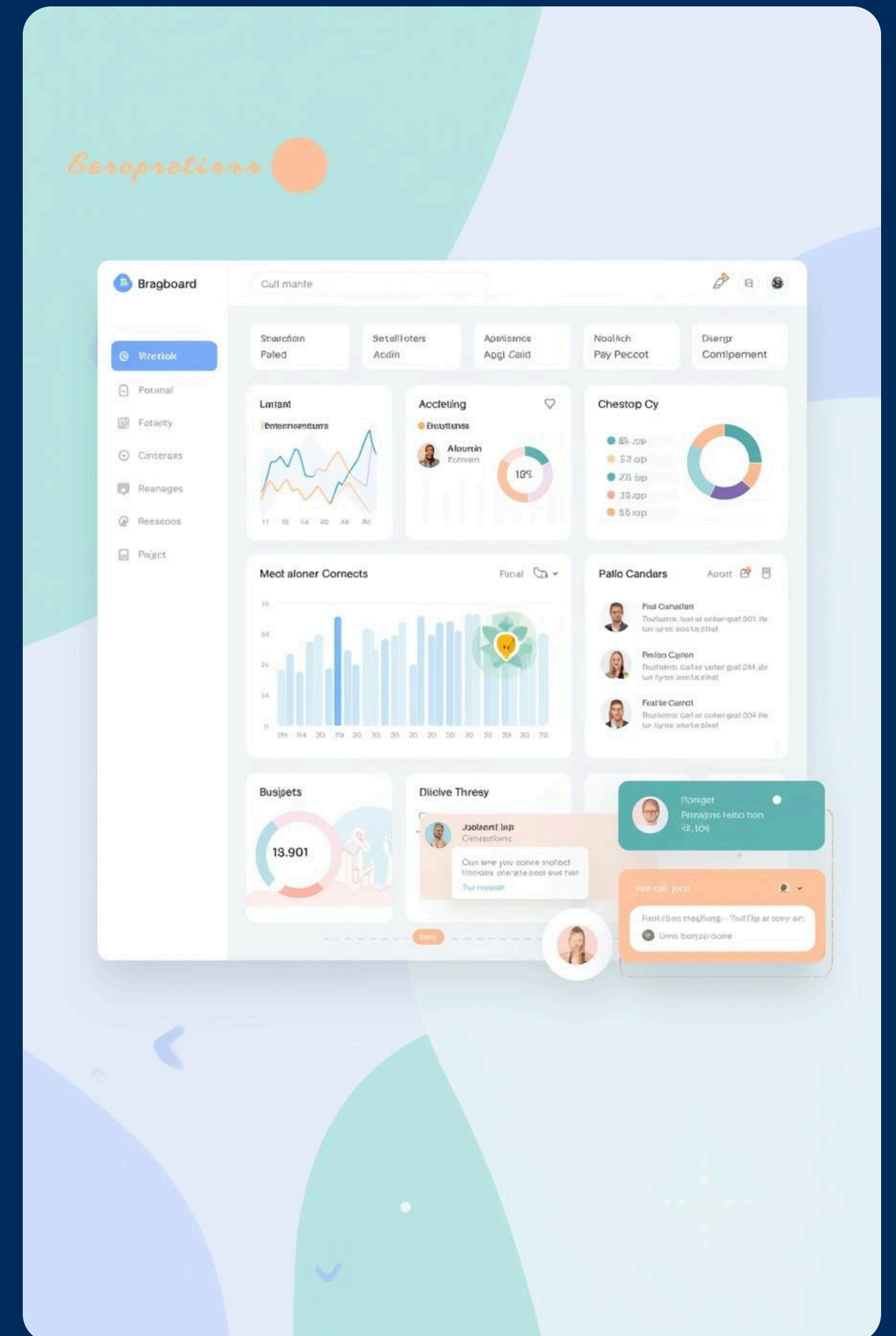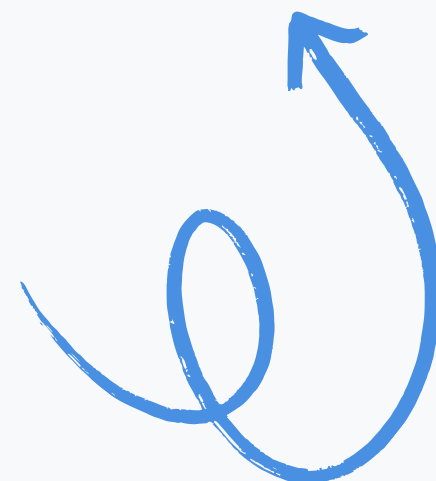# Bragboard

Internal Employee Recognition Wall

A Full-Stack Web Application using React, FastAPI & PostgreSQL

Key Challenges

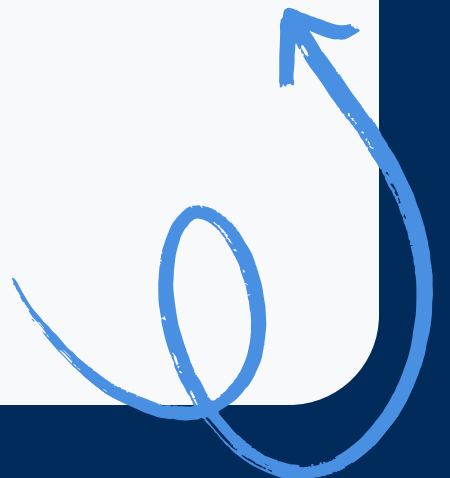## Encountered During Development Process

Secure Authentication

Ensuring that only authorized users
can access Bragboard was critical
to protect sensitive employee data.

Real-time Updates

Providing instant updates for
reactions and comments required
efficient backend handling.

Moderation System

Admins needed tools to manage
reported content while maintaining
a positive workplace culture.

Technical & Design Challenges

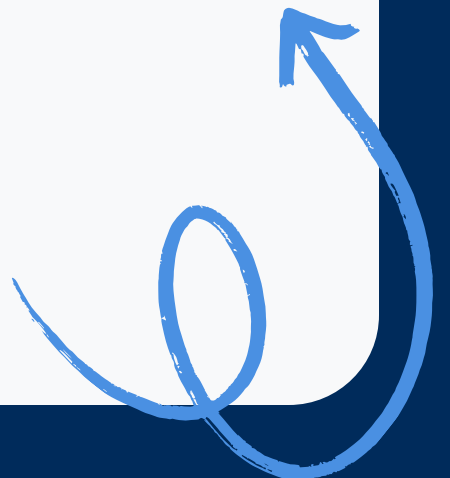**Addressing scalability and user experience**

Scalability

Designed the system to handle growing users while maintaining performance during peak usage.

Intuitive UI/UX

Focused on clean layout and simple navigation to ensure ease of use for all employees.

Data Consistency

Ensured consistent and accurate data across users through proper API design and testing.

Core Features

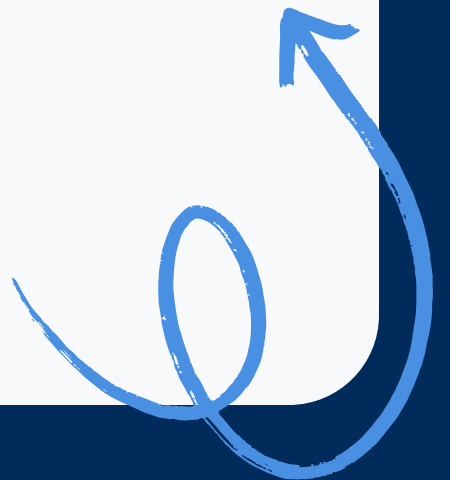## Key functionalities of the Bragboard

Shout-outs

Employees can send **personalized shout-outs** to teammates, fostering a culture of appreciation and recognition. This feature encourages positive interactions and boosts morale within the organization.

Tagging System

The tagging system allows users to include multiple recipients in their shout-outs, ensuring that all contributors are acknowledged and celebrated, creating a sense of community and teamwork.

Reactions

Users can express their support through various reactions such as likes, claps, and stars. This engagement feature promotes interaction and helps cultivate a vibrant workplace culture.

Core Features

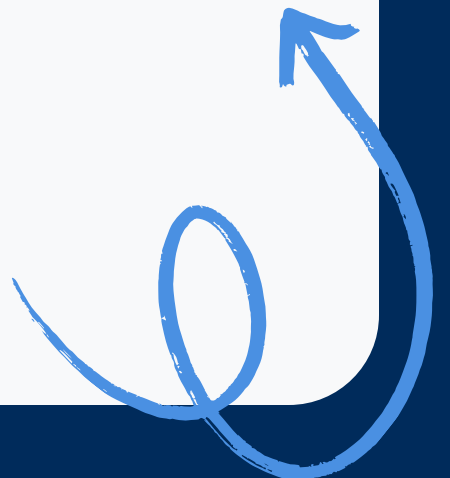## Key Functionalities of Bragboard

Admin Dashboard

The **Admin Dashboard** provides a comprehensive view of user engagement, analytics, and moderation tools, allowing administrators to effectively manage content and monitor platform activity in real-time.

Department Filtering

Department Filtering enables users to easily navigate and view shout-outs specific to their teams, fostering a sense of community and recognition within various departments across the organization.

Exportable Reports

With **Exportable Reports**, administrators can generate detailed analytics in PDF or CSV formats, facilitating data-driven decisions and ensuring transparency regarding employee recognition and engagement metrics.

System Architecture Overview

React Frontend (UI Layer)

↓

FastAPI Backend (Business Logic)

↓

JWT Authentication Layer

↓

PostgreSQL Database

↓

Role-based Access (Admin / Employee)

The architecture of Bragboard emphasizes **modular development** and a clear separation of concerns, ensuring efficient communication between the frontend and backend while maintaining scalability and security throughout the platform.
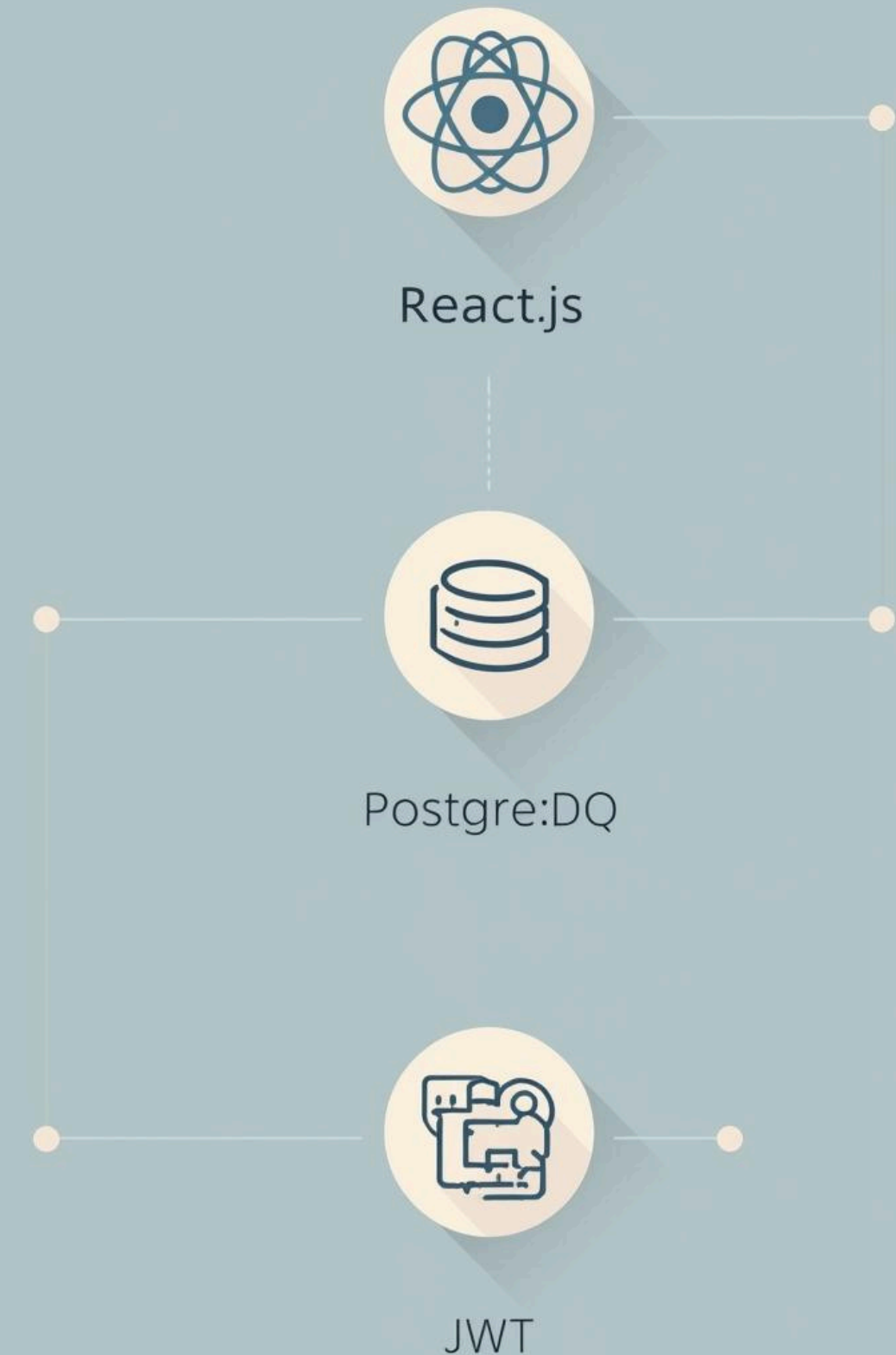
Secure Access with JWT Tokens

Implementing JWT tokens ensures robust security for user authentication, enabling stateless communication between the frontend and backend while streamlining the user management process for Bragboard's seamless operation.

Technology Stack Overview

The Bragboard project utilizes **cutting-edge technologies** including React.js for the frontend, FastAPI for the backend, PostgreSQL for data management, and JWT for secure authentication, ensuring a robust performance.

React.js

Postgre:DQ

JWT

Measurable Outcomes and Positive Impact

Increased Employee Engagement

The platform has significantly improved employee participation in recognition activities, leading to higher morale and motivation across teams.

Reduced Manual Recognition Effort

Automation of shout-outs, tagging, and reactions has minimized manual coordination, making appreciation faster and more consistent.

Enhanced Workplace Transparency

Public recognition and department-wide visibility have created a more transparent culture of appreciation and collaboration.

Future Enhancements for Bragboard

Planned upgrades include a **mobile app integration**, AI-driven sentiment analysis, customizable push notifications, and seamless HR system integration to enhance user experience and engagement throughout the platform.

These enhancements ensure long-term scalability and adoption.
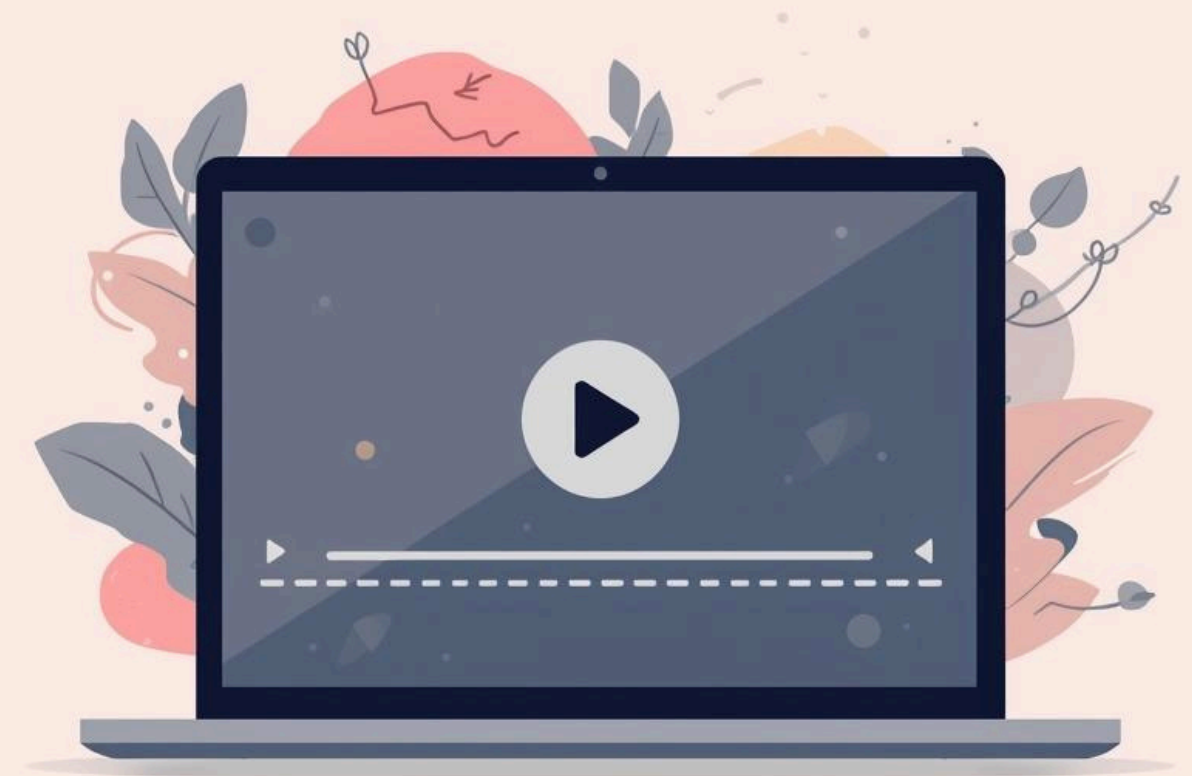
Meet Our Team Members

- D. **Devi Lakshmi**
- M. **Sri Lakshmi Prasanna**
- **MS Sanjay**

The Bragboard project was brought to life by a dedicated team each contributing their unique skills and expertise to ensure its success.
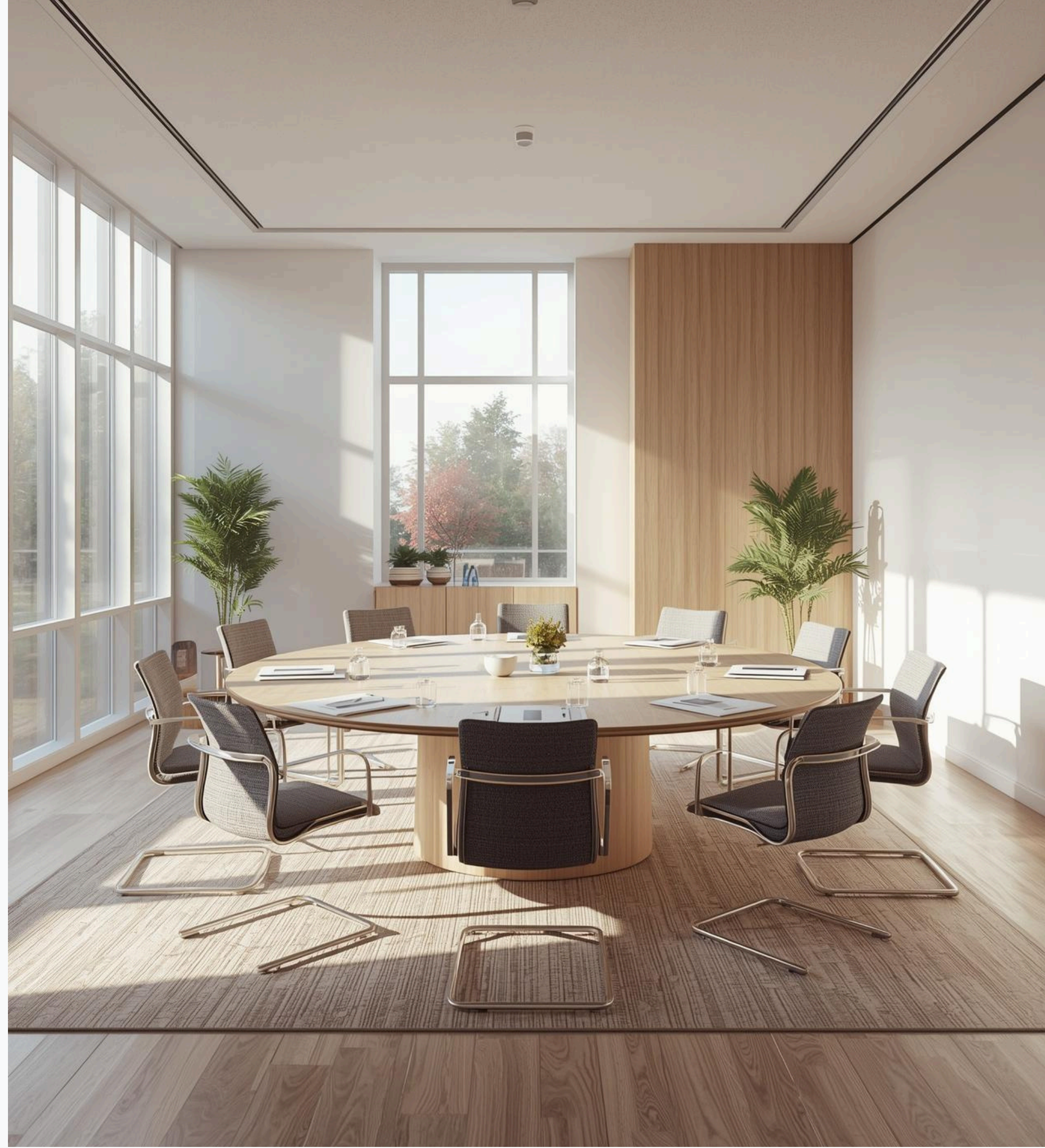
Project Presentation Video Link

Watch the full project presentation to gain insights into the Bragboard initiative, its functionality, and the value it brings to employee recognition and engagement within the organization.

Questions & Answers

We welcome your questions about the Bragboard project. Your feedback and inquiries are vital for our continuous improvement and we look forward to engaging in a meaningful discussion with you.

Thank You!

We appreciate your attention today