

BragBoard: Internal Employee Recognition Wall

Project Statement: BragBoard is an internal recognition tool for workplaces that lets employees appreciate their colleagues by posting shout-outs. It promotes a culture of appreciation by allowing tagging, commenting, and company-wide visibility. Admins can monitor engagement and moderate flagged content.

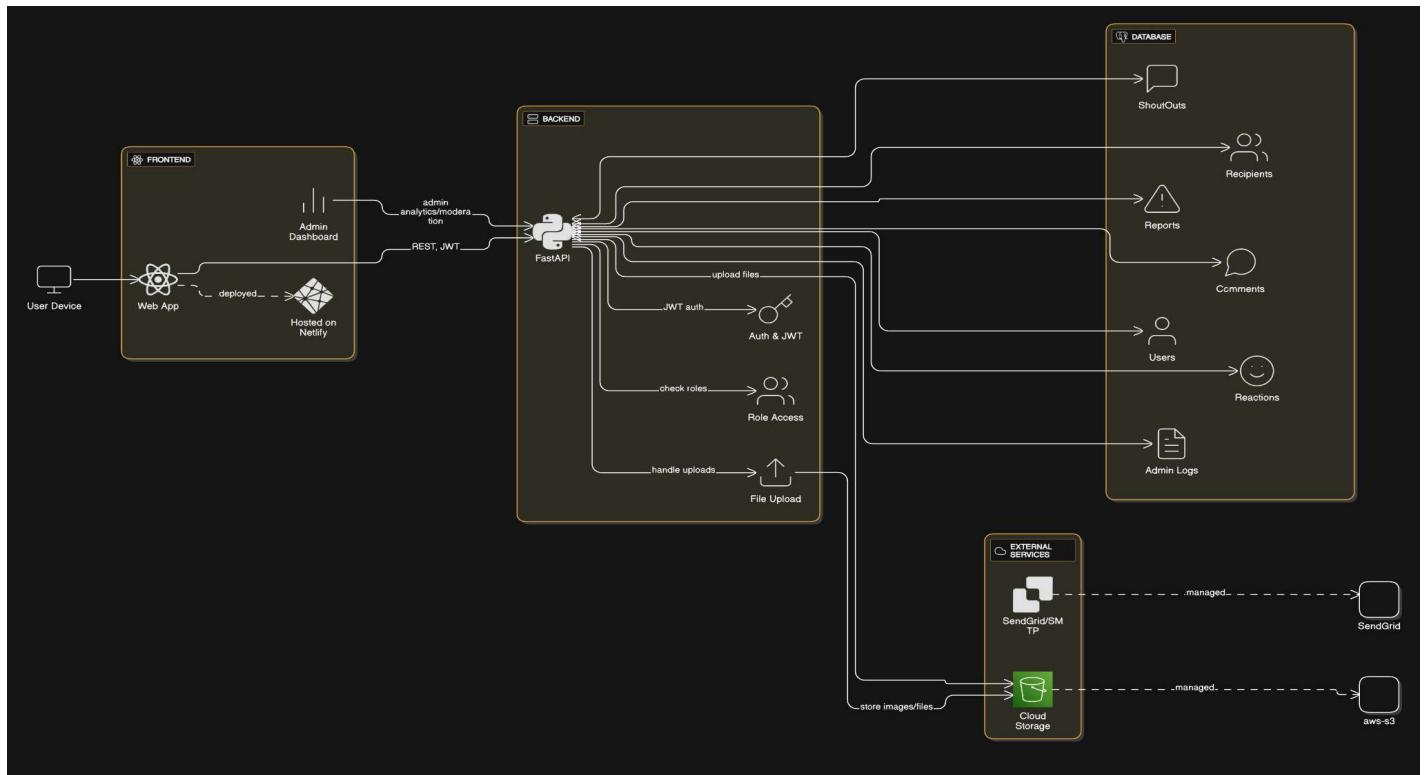
Key Features:

1. Employees can send shout-outs to teammates
2. Recipients can be tagged (multi-select)
3. Reactions: like, clap, star
4. Commenting system for shout-outs
5. Admin dashboard for insights and moderation

Tech Stack:

- Frontend: React.js + Tailwind CSS
- Backend: FastAPI
- Database: PostgreSQL
- Authentication: JWT (access + refresh)

Architecture Diagram:



Modules:

- Module A: User Management & Authentication
 - Module B: Shout-Out Creation & Feed
 - Module C: Tagging, Reactions & Comments
 - Module D: Admin Tools & Analytics
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8-Week Milestone Plan

Milestone 1: Weeks 1–2 – User System & Basic UI

Week 1:

- Set up project structure (React + FastAPI)
- Create database models for users
- Implement user registration/login with JWT

Week 2:

- Build a basic layout with Tailwind CSS.
- Display the user dashboard after login.
- Set up department-wise scoping in the backend.

Expected Output:

- Secure auth with login/register
 - Basic React layout and routing
 - User role & department info captured
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Milestone 2: Weeks 3–4 – Shout-Out Posting & Feed

Week 3:

- Create a shout-out form with recipient tagging
- Store shout-out in DB with tagged users

Week 4:

- Display all shout-outs on the feed.
- Filter by department, sender, date
- Attachments or image uploads (optional)

Expected Output:

- Shout-out post from functional

- Feed showing all shout-outs by tag/time
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Milestone 3: Weeks 5–6 – Reactions & Comments

Week 5:

- Add reactions (like, clap, star) to posts
- Reaction counters + user-specific tracking

Week 6:

- Add a commenting system under shout-outs
- Show avatars, timestamps, and nesting (optional)

Expected Output:

- Reaction buttons with live updates
 - Comments with user info + moderation logic
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Milestone 4: Weeks 7–8 – Admin Tools & Analytics

Week 7:

- Admin dashboard: top contributors, most tagged
- Ability to delete posts/comments
- View and resolve reported shout-outs

Week 8:

- Export reports (PDF/CSV)
- Leaderboard for gamified appreciation
- Deployment (if needed) + testing & polish

Expected Output:

- Admin panel with moderation tools
 - Downloadable reports
 - Final working system with styling & QA
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Expected Project Outcome: By the end of Week 8, BragBoard will support:

- JWT-authenticated employee logins
- Posting, tagging, and reacting to shout-outs
- Comment threads and real-time feed updates
- Admin oversight and analytics reports

Database Schema:

Users:

- id (INT, PK)
- name (VARCHAR)
- email (VARCHAR, UNIQUE)
- password (VARCHAR)
- department (VARCHAR)
- role (ENUM: 'employee', 'admin')
- joined_at (TIMESTAMP)

ShoutOuts:

- id (INT, PK)
- sender_id (FK to [Users.id](#))
- message (TEXT)
- created_at (TIMESTAMP)

ShoutOutRecipients:

- id (INT, PK)
- shoutout_id (FK to [ShoutOuts.id](#))
- recipient_id (FK to Users.id)

Comments:

- id (INT, PK)
- shoutout_id (FK to [ShoutOuts.id](#))
- user_id (FK to [Users.id](#))
- content (TEXT)
- created_at (TIMESTAMP)

Reactions:

- id (INT, PK)
- shoutout_id (FK to [ShoutOuts.id](#))
- user_id (FK to [Users.id](#))
- type (ENUM: 'like', 'clap', 'star')

Reports:

- id (INT, PK)
- shoutout_id (FK to [ShoutOuts.id](#))
- reported_by (FK to [Users.id](#))
- reason (TEXT)

- created_at (TIMESTAMP)

AdminLogs:

- id (INT, PK)
- admin_id (FK to Users.id)
- action (TEXT)
- target_id (INT)
- target_type (VARCHAR)
- timestamp (TIMESTAMP)

