



## Simplify Your **Shift Management**

Workshop: Cloud computing

Supervisor: Yogev Shani

Project Number: 15006010

By Ben Cohen, David Weiss and Izabella Svavolya

# The Problem

Our idea started with the understanding that there is a lack of communication through the process of filling shifts in organizations, especially non-profit ones. inspired by our personal experience as volunteers in Magen David Adom. In most cases the process of filling in shifts is conducted via WhatsApp groups or Excel tables, which doesn't always provide an immediate solution to the issue of a currently absent worker/volunteer. Additionally, this kind of approach is inefficient, complex, and disorganized, hence requires constant intervention from the managers.

MAGEN  
DAVID  
ADOM  
IN ISRAEL



מגן דוד  
אדום  
בישראל



איחוד הצלה  
UNITED HATZALAH





Smart Calendar



Easy Shift Switch



AI Assistant



Location Mapping



Push Notifications



Organizational Customization

## The Solution



# How it works

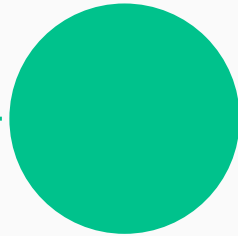
## Step 1

Sign up as organization



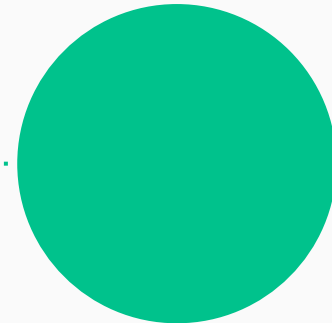
## Step 2

Set the environment



## Step 3

Start managing shifts!



[Home](#)

## Create Account

Fill in your details to get started

Full Name

Email

Phone Number

Password

Confirm Password

Sign Up

[Already have an account? Login](#)

[Home](#)

## Login

Email

Password

Login

[Still dont have an account? Sign Up](#)

[Home](#)

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Email

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[Already have an account? Login](#)

## SHIFT MANAGEMENT SYSTEM

[All Shifts](#)[Requested](#)[Accepted](#)

Current Employee

John Doe

[Create Dummy Employee](#)[Previous Week](#)[May 12 - May 18, 2025](#)[Next Week](#)**Mon**

May 12

**Tue**

May 13

07:10 - 21:00

Request Approved

08:00 - 17:20

[Request](#)**Wed**

May 14

**Thu**

May 15

07:10 - 21:00

Pending

[Cancel Request](#)**Fri**

May 16

09:00 - 17:00

Shift Denied

17:00 - 21:00

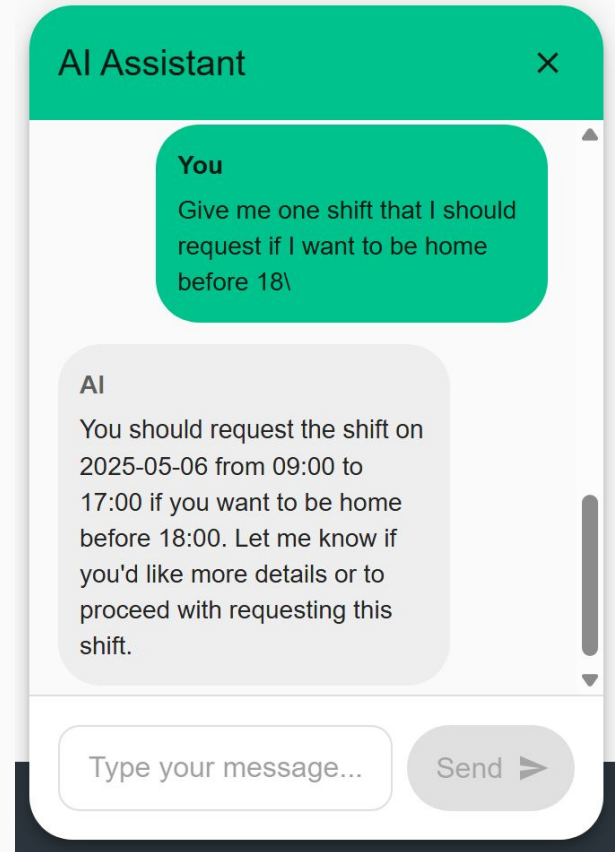
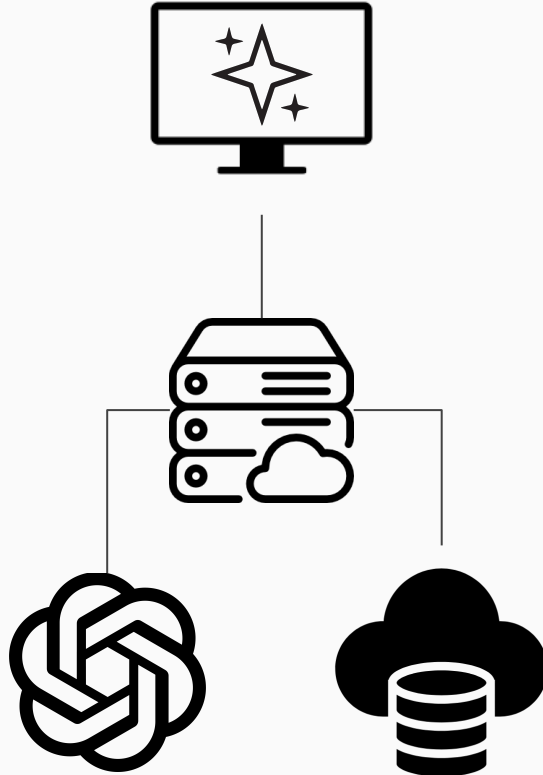
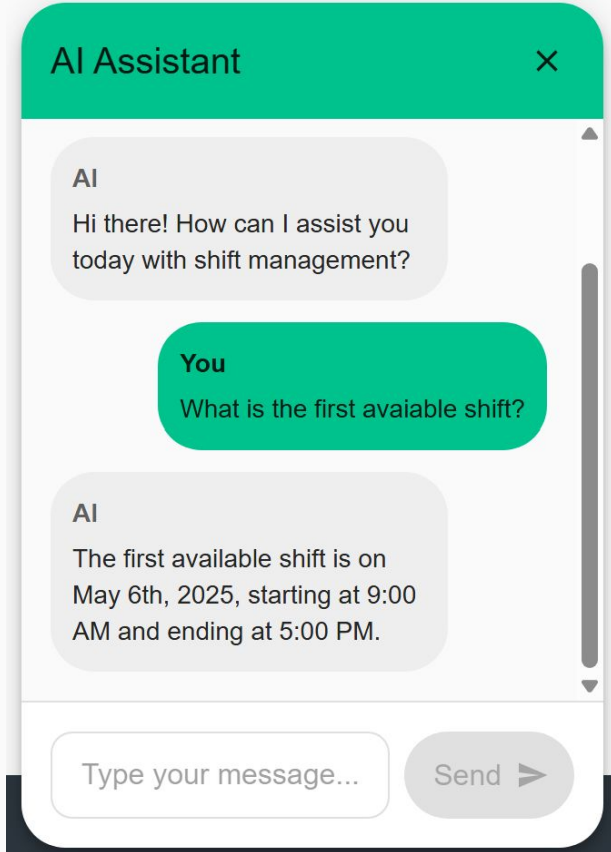
[Request](#)**Sat**

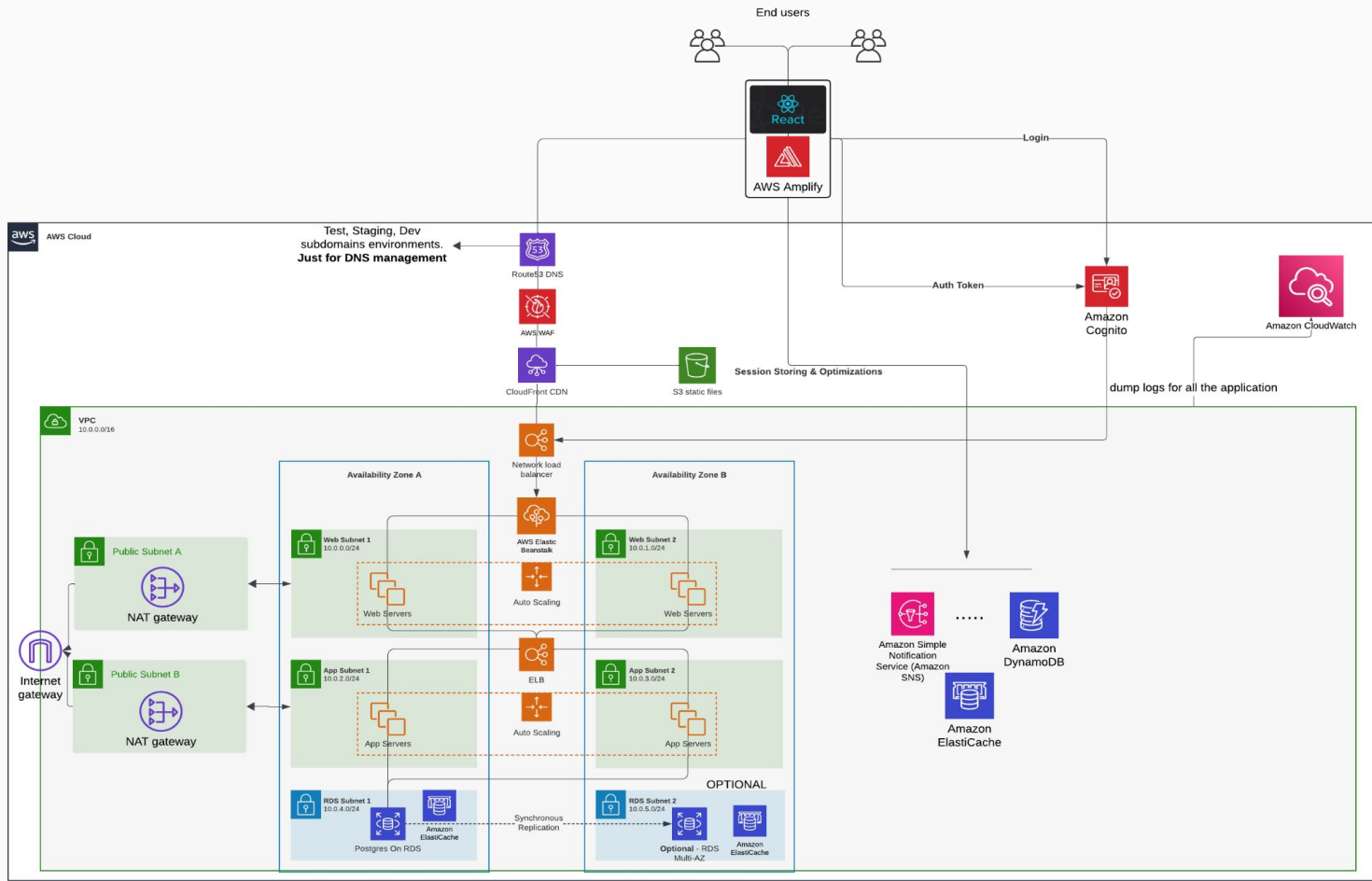
May 17

09:00 - 17:00

[Request](#)**Sun**

May 18





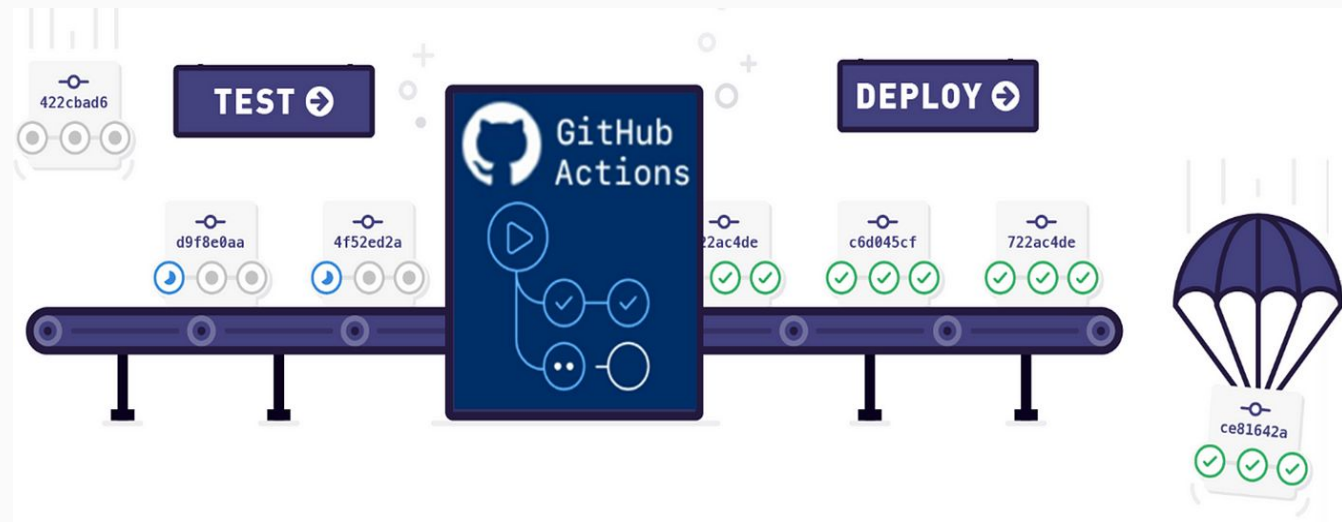


# Actions

New workflow

All workflows

- Backend - Build & Deploy
- Backend LocalHost - Build & Deploy
- Frontend - Lint & Amplify Build
- Infra - Terraform
- Nuke-Everything-Cleanup
- Provision-Build-Deploy



# Infrastructure Pipeline

# Backend Pipeline

# Frontend Pipeline

## terraform

succeeded 2 weeks ago in 9m 5s

- > Set up job
- > Run actions/checkout@v4
- > Run aws-actions/configure-aws-credentials@v2
- > Write sensitive variables
- > Run hashicorp/setup-terraform@v3
- > Terraform init
- > Terraform validate
- > Terraform fmt
- > Terraform plan
- > Terraform apply
- > Capture EB bucket name
- > Upload tfstate to S3 on failure
- > Post Run aws-actions/configure-aws-credentials@v2
- > Post Run actions/checkout@v4
- > Complete job

## build-deploy

succeeded 2 weeks ago in 1m 8s

- > Set up job
- > Run actions/checkout@v4
- > Run actions/setup-node@v4
- > Run aws-actions/configure-aws-credentials@v2
- > Run aws-actions/amazon-ecr-login@v1
- > Backend - npm ci
- > Backend - tsc & eslint
- > Set image tags
- > Build & push Docker image
- > Prepare Dockerrun.aws.json
- > Run zip -r eb-deploy.zip Dockerrun.aws.json .ebextensions
- > Run aws s3 cp eb-deploy.zip s3://\*\*\*/eb-deploy.zip
- > Run VERSION\_LABEL="v-\${GITHUB\_SHA::7}"
- > Run DOMAIN=\$(aws amplify get-app \
- > Update EB env (FRONTEND\_URL + healthcheck)
- > Post Run aws-actions/amazon-ecr-login@v1
- > Post Run aws-actions/configure-aws-credentials@v2
- > Post Run actions/setup-node@v4
- > Post Run actions/checkout@v4
- > Complete job

## build

failed 2 weeks ago in 47s

🔍 Search logs

- > Set up job
- > Run actions/checkout@v4
- > Run actions/setup-node@v4
- > Run npm ci
- > Run npm run lint
- > Run aws-actions/configure-aws-credentials@v2
- > Trigger Amplify build
- > Post Run aws-actions/configure-aws-credentials@v2
- > Post Run actions/setup-node@v4
- > Post Run actions/checkout@v4
- > Complete job

## Development:

- PostgreSQL
- MongoDB
- NodeJS
- React
- OpenAI Responses API
- Redux

## Languages:

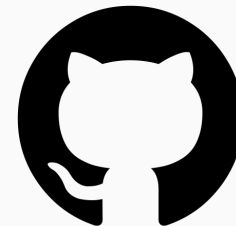
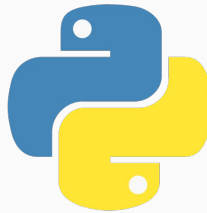
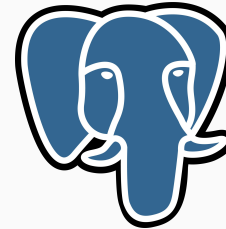
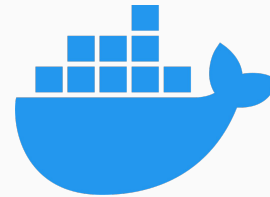
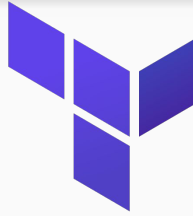
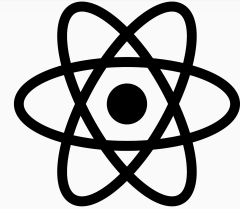
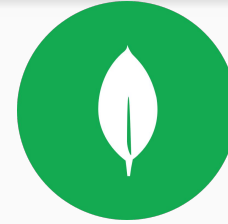
- TypeScript
- Python
- Terraform

## Deployment:

- AWS
- Docker
- GitHub Actions

## Collaboration :

- Git & GitHub
- Trello
- Discord

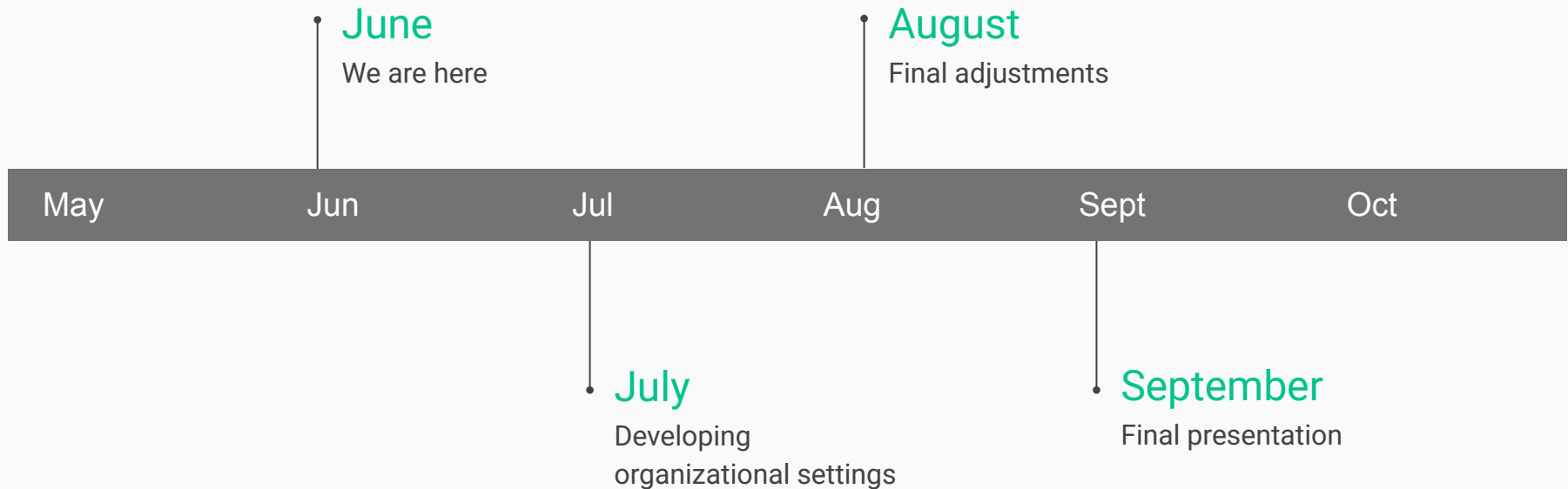


# Other Solutions



App / Feature	Smart Shift Calendar	Location Mapping	AI Assistant	Push Notifications	Org Templates
Fillit	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✓ Yes
ShiftOrganizer	✓ Yes	✓ Yes	✗ No	✓ Yes	● Limited
WhatsApp	✗ No	✗ No	✗ No	✓ Yes	✗ No
Excel	● Manual	✗ No	✗ No	✗ No	● Manual
Teams	● Basic	✗ No	✗ No	✓ Yes	✓ Yes
Monday.com	✓ Yes	● Add-on needed	● Limited	✓ Yes	✓ Yes
Hubstaff	✓ Yes	✓ Yes	● Limited	✓ Yes	● Limited

# Timeline



# The team



David Weiss

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**fillit**