

## AUTHORS

Bryce Barbee  
Nathan Smalling  
Austin Garlick  
Abbey Griffith  
Sharlotte Holmes

## AFFILIATIONS

Utah Valley University  
CS-4450  
Cody Anderson  
JP Tang

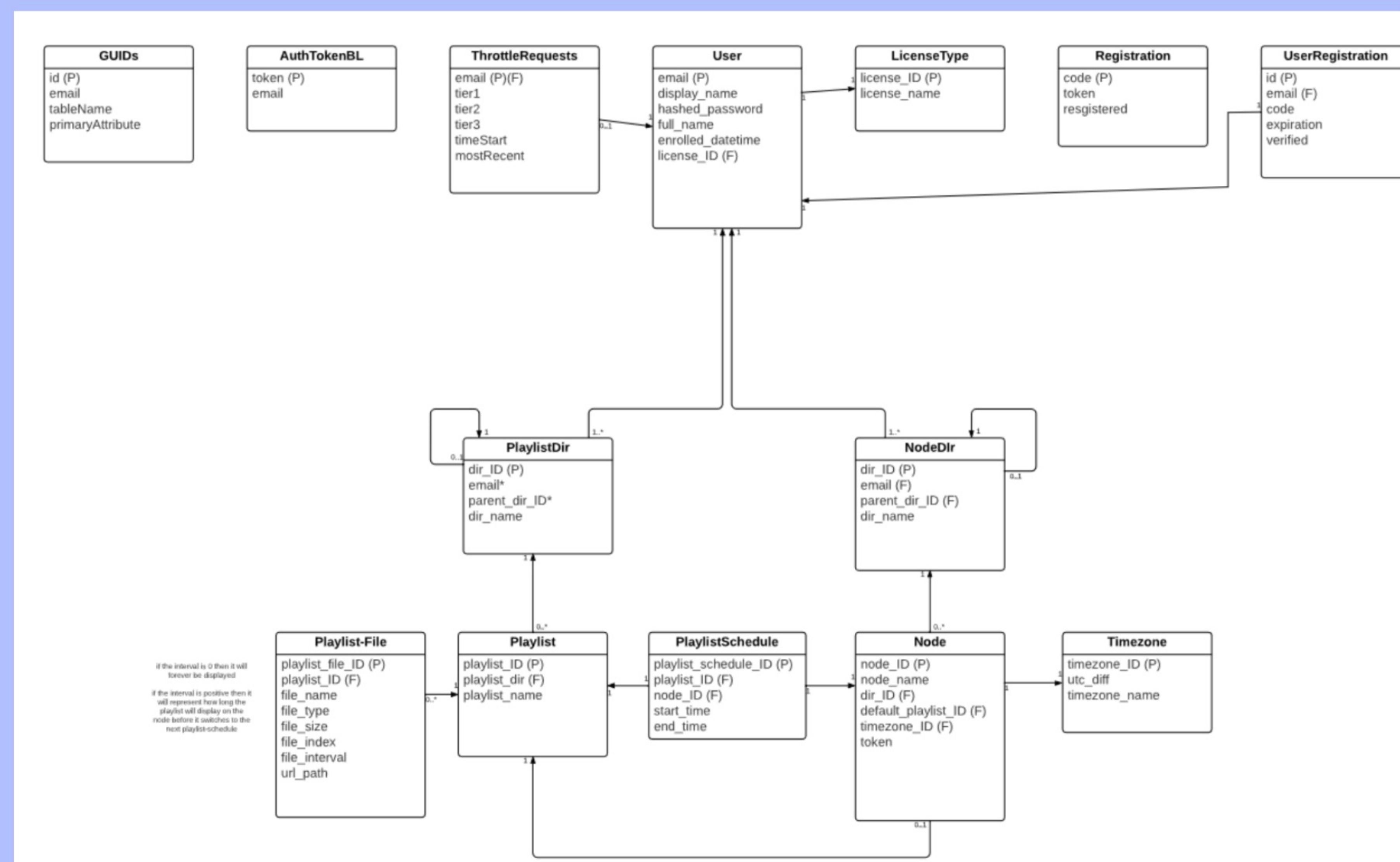
# Display Vantage

*Digital Signage made easy and accessible for Everyone*

## 1. Introduction

Display Vantage enables users to create, schedule, and monitor content across displays using a secure, scalable, and cloud-native platform built entirely on Cloudflare.

## 4. Database Snapshot



### User

- email
- hashed\_password
- license\_ID

### Node

- node\_ID
- default\_playlist\_ID
- timezone

### PlaylistSchedule

- start\_time
- end\_time
- node\_ID

## 6. Testing Plan

Week 1-5  
Setup & Planning

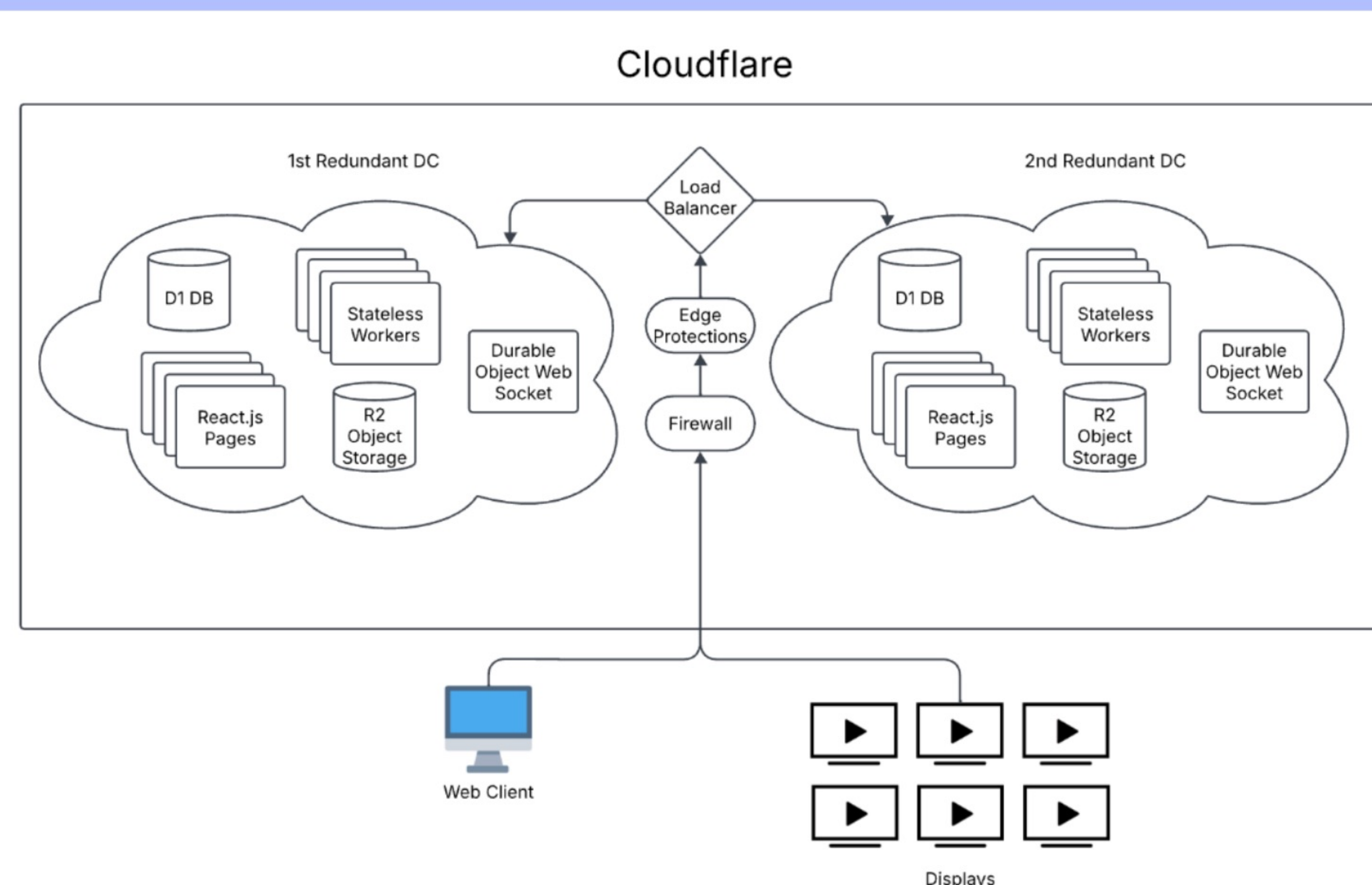
Week 6-12  
Unit + E2E

Week 13-16  
Bug Reports + Closure

✓ Testing Types  
White-box, Branch,  
Boundary, Randomized

🔧 Tools  
Vitest, Cypress, Postman

## 3. Cloudflare Architecture



## 5. Functional Requirements

### Web App

Account  
Project  
Scheduler  
Editor

### TV App

Login  
Layout  
Selection  
Default  
Project

## 7. Security & Performance

- 🔑 JWT + bcrypt
- 🔄 API throttling
- 🛡️ GDPR Compliance
- ⚡ <500ms response
- 📊 99.9% Uptime
- 📈 Scales to 5000+ users

## 8. Future Planning

- 📱 Mobile interface
- 🧠 AI content suggestions
- 🌐 Global deployment support

