

Kuberns Full Stack Assessment – Project Documentation

Task Time Breakdown:

- Frontend: 1.5 hours (including API integration)
- Backend: 3 hours
- Deployment/Infrastructure: 1 hour
- Documentation + Testing: 30 minutes

1. Introduction

The Kuberns Full Stack Assessment is a full-stack application replicating the onboarding flow for deploying applications. It includes a React frontend, Django REST API backend, async deployment simulation, and structured documentation.

2. System Components

Frontend:

React, Vite, Tailwind, Zustand, React Hook Form, Axios, ShadCN UI, Framer Motion

Backend:

Django, DRF, Celery, Redis, PostgreSQL, boto3, drf-spectacular

Deployment/Infra:

Redis, PostgreSQL, Celery worker, local dev setup, environment configs

3. Features Implemented

Frontend:

- 2-step wizard UI
- Form validation
- API integration (create WebApp, poll status, fetch logs)
- Zustand global state
- Responsive UI + animations

Backend:

- CRUD for WebApp, Environment, Instance, DatabaseConfig
- Async deployment simulation

- Deployment logs
- Status updates
- API documentation

Infra:

- Redis for task brokering
- Celery worker
- PostgreSQL setup

4. Documentation & Testing

Documentation created in PDF:

- Architecture
- API usage
- Setup instructions
- Deployment workflow

Testing:

- Manual testing using Postman
- curl tests
- Frontend form testing
- API validation

5. Time Summary

Total estimated time: 6 hours

6. Conclusion

This assessment demonstrates full-stack capabilities across UI, backend engineering, async task execution, API integration, deployment setup, and project documentation.