

Easy Rec

An escrow file server for letters of recommendation



Developed By Team Easy Rec

Members: Henry Eigen, Jovan Hernandez, Ria Patel, & Ross Ketron

— INTRODUCTION

Current Problem:

- A job candidate needs a letter of recommendation for each position
- A candidate can't manage his/her own letter since they are not allowed to read the contents

Current Solution:

- A candidate asks the recommender to send the letter to each position applied for

— INTRODUCTION

Referrer Problems:

- Tracking written letters
- Have to write letter for each applicant for each company
- Time Consuming

Applicant Problems:

- Have to rely on recommender to resend letter for each company
- Recommender can forget or miss deadline
- No control over letters

— SOLUTION

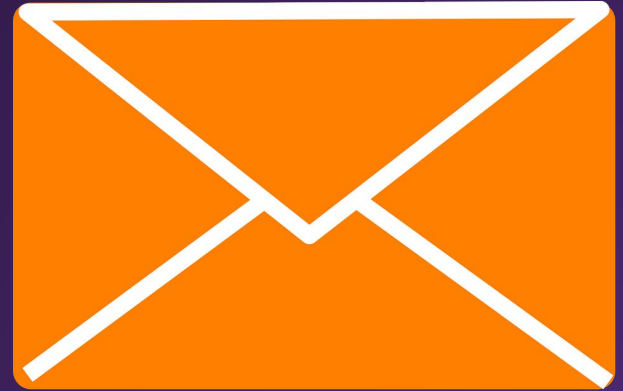
EasyRec solves the problem of managing letters applicants can't read by providing an escrow process which handles file references without file access

Easy Rec:

- Upload letter once, send letter forever
- Easily manage and track uploaded letters
- Sends letters easily to hiring agents from organizations all in the same place

CUSTOMER VALUES

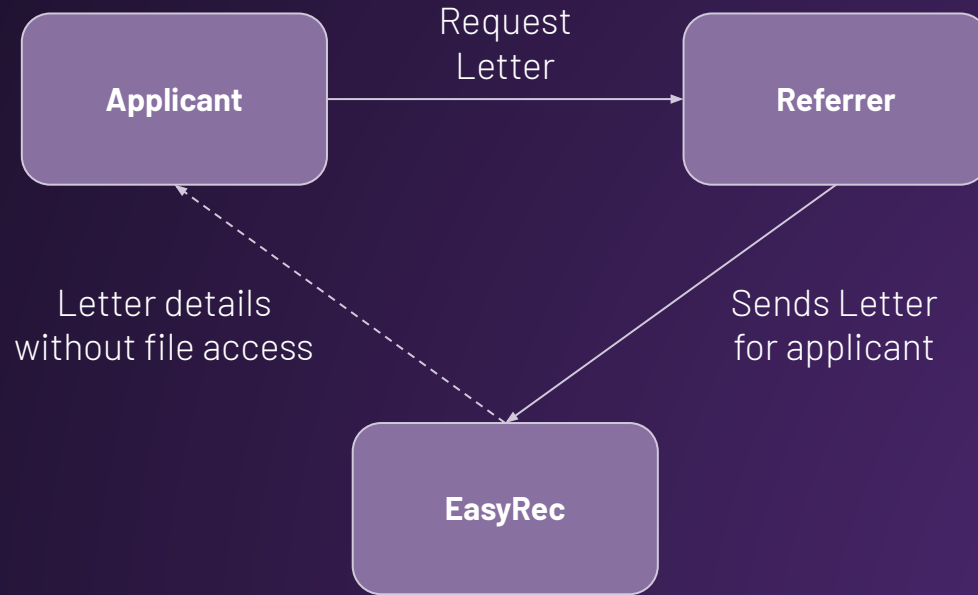
What we accomplish for our users



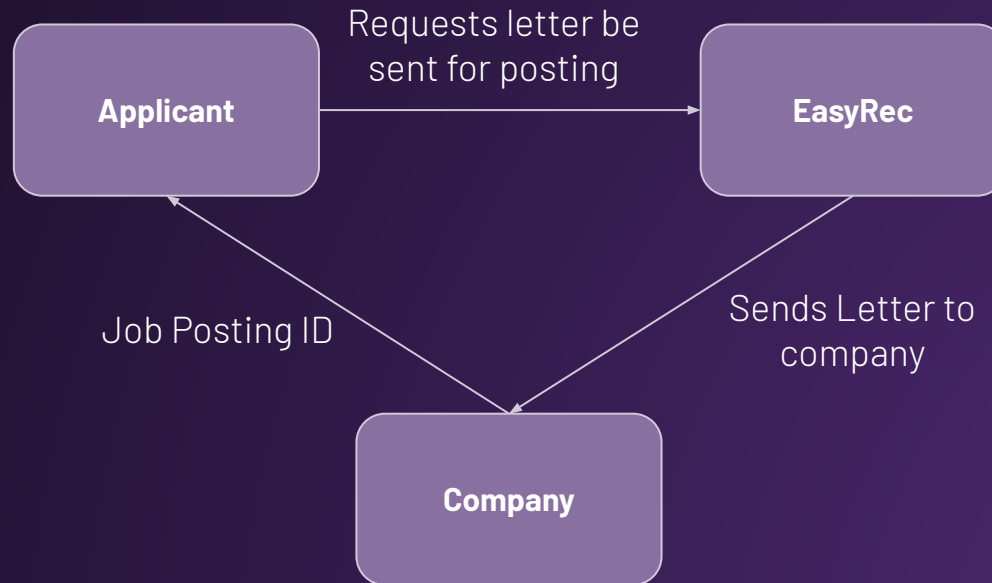
— CUSTOMER VALUES

- Primary users include current students and early career professionals
- Applicant can track when the rec letters have been sent
- Referrers only have to upload one rec letter
- Hiring agents can organize and manage campaigns to receive letters

— CUSTOMER VALUES (LETTER UPLOAD)



— CUSTOMER VALUES (LETTER POSTING)

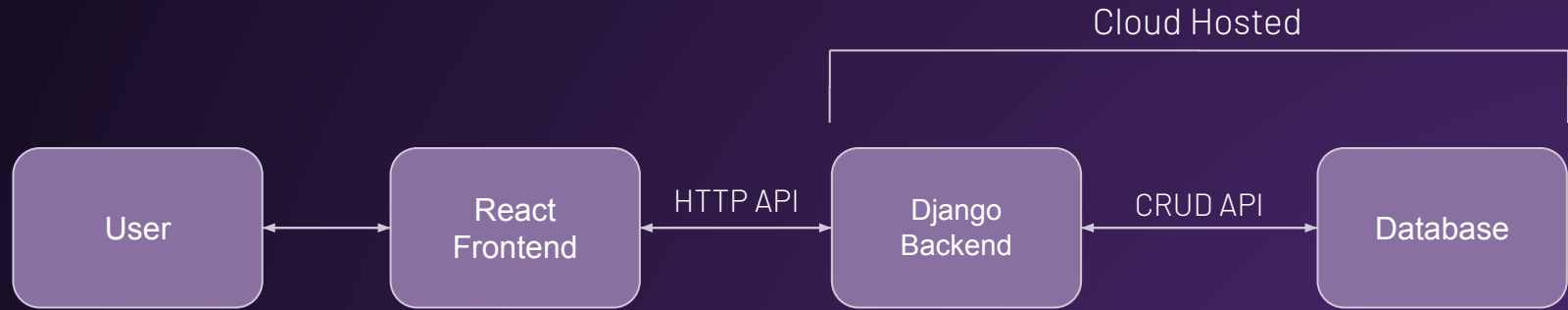


TECHNOLOGY

How we implemented Easy Rec



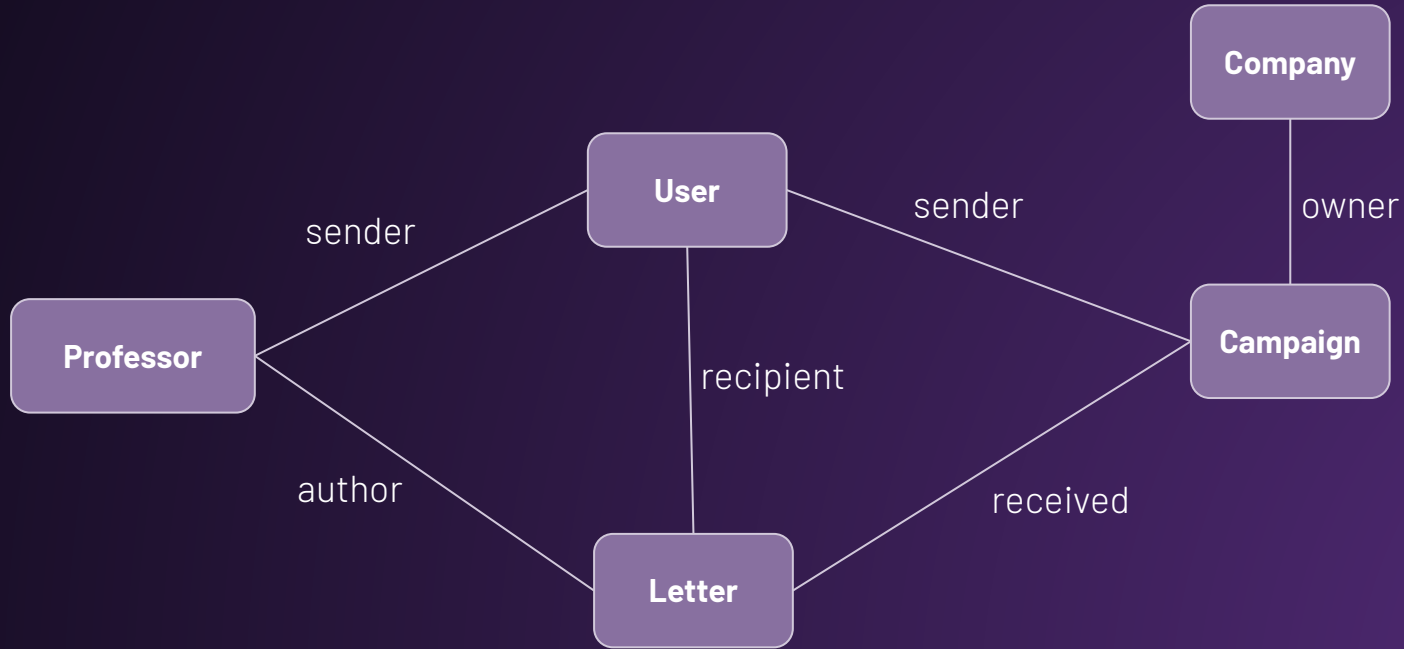
— TECHNOLOGY



Changes include:

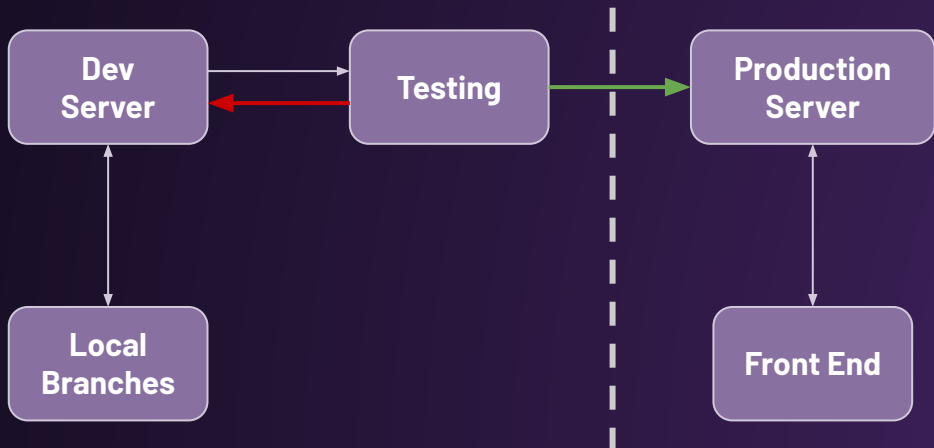
- Deployed backend to the cloud separately from the frontend purely to ease development.
- Stored everything in SQL database instead of a file server.
- Database schemas were adjusted as we progressed.
- Multiple user types were grouped under one struct.

— Tangled Relationships



— API Continuity

- Tests for each API
- Ensures non breaking commits
- Prevents backend dev changes from interrupting frontend dev



```
Testing User Registration:
100%|██████████| 30/30 [00:07<00:00, 4.16it/s]
Successfully registered: ✓ (30/30)

Testing User Login:
100%|██████████| 30/30 [00:06<00:00, 4.33it/s]
Successfully logged in: ✓ (30/30)

Testing Letter Upload:
100%|██████████| 30/30 [00:05<00:00, 5.70it/s]
Successfully uploaded: ✗ (28/30)

Testing Retrieve Letter:
100%|██████████| 30/30 [00:05<00:00, 5.94it/s]
Successfully retrieved: ✓ (30/30)

Testing campaign creation:
100%|██████████| 30/30 [00:05<00:00, 5.92it/s]
Successfully created: ✓ (30/30)

Testing Campaign Lookup:
100%|██████████| 30/30 [00:05<00:00, 5.98it/s]
Successfully searched: ✓ (30/30)

Testing Send Letter:
100%|██████████| 30/30 [00:05<00:00, 5.93it/s]
Successfully sent: ✗ (24/30)

Deleting Dummy Users:
100%|██████████| 30/30 [00:05<00:00, 5.62it/s]
Successfully deleted: ✓ (30/30)

Verifying Letters Automated Cleanup:
100%|██████████| 30/30 [00:05<00:00, 5.17it/s]
Successfully verified: ✓ (30/30)

Verifying Campaigns Automated Cleanup:
47%|██████████| 14/30 [00:02<00:03, 5.15it/s]
```

— DEVELOPMENT

Did go well:

- Mapped out ahead of time
- Development pipeline worked well
- Separation of frontend and backend

Issues:

- Cloud deployment issues

TEAM

An introduction to our members



— TEAM

Back-end Development:

- Henry Eigen
 - Roles: Wrote backend API's, designed SQL schema, managed cloud hosting of backend
 - Skills: Python, Django
- Ria Patel
 - Roles: Project Manager, assisted with back-end, assisted with mock ups, status reports
 - Skills: Python, Javascript

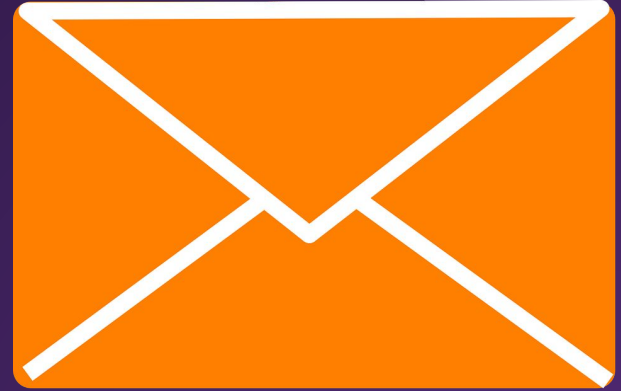
— TEAM

Front-end Development:

- Ross Ketron
 - Roles: collaborated on React components, assisted with mockups, front-end testing
 - Skills: HTML, CSS, Javascript, React, MaterialUI
- Jovan Hernandez
 - Roles: collaborated on React components, assisted with mockups, front-end testing
 - Skills: HTML, CSS, Javascript, React, MaterialUI

PROJECT MANAGEMENT

Reaching our goals



— PROJECT MANAGEMENT

Time Management:

- Unforeseen challenges meant development schedule was fluid
- Certain features were put off until later
- Others were addressed earlier than planned (e.g. cloud deployment)
- Most unforeseen challenges came in frontend/backend integration

We completed all features for a minimum viable product

— PROJECT MANAGEMENT

Future features:

- Separate account types (student vs. professor vs. company)
- API Authentication for security
- Email integration for letter requests
- Permissions for letters (e.g. "Notify me before letter is sent")
- Human verification for company sign up

DEMO TIME

Video demonstration of our app

https://drive.google.com/file/d/1w5gZ3oCgeSLsjlcYJ4TuM_Ktm1Xo20Vh/view

