Plan Analysis
Application
Cal State LA x LA County

LA County Liaison
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Team Members
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Regional Planning Department

- Is one of the smaller departments in LA county
- Regional Planning is the overseer to the unincorporated areas in the county
- LA county as a whole is 4,000 square miles
  - The county is split into 5 supervisorial districts
  - Each district has a separate supervisor assigned
Overview

Case Review
The user views a list of all the case records and has access to look into the case history.

Customer Counseling
Customers interact with the front desk to learn about the codes and regulations that are to be followed to submit application forms for permits.

Document Creation
The user adds information pertaining to the case for each permit form.
The Problem

- The process for Document Creation is outdated and less efficient
- Customers have to go through tedious permit processing
- The Department has to travel through many external sources to acquire information about a case
  - GIS (Geographic Information System) and EnerGov
Objectives

Create a user friendly web application

Streamline case processing for customers

Automate data entry with pre populated fields
Example

- Customer wants to create a case on putting up a fence on their property
  - Has to obtain the right forms and permits
  - Has to adhere to the guidelines within the specific region
  - Permits are completed manually
- The Plan Analysis Application will autofill permits adhering to guidelines and zone requirements
Our Start Up

- Got assigned our teams right before summer ended
- Learned of our advisor and liaison
- Figured out potential languages to develop the application
- Researched and practiced the most likely to be used language
- Introduced to them with the Senior Design Kickoff
- Gathered requirements
Incorporated Entities

- To make a working project we need data and forms
- Data obtained from various sources
  - LA County Database
  - EnerGov
  - GIS
- Forms obtained from LA County
Modules
Modules - Pre Populated Forms (Project Plan Search)
Technologies

- Javascript is the programming language used for creating the backend program
- Node allows us to run Javascript in the backend
- Express is a framework for creating Web APIs
Structure

- Backend program queries LA County Databases
- Exposes an API that the frontend can easily process and display
Web API (in progress)

- /api/plans?page=pageNumber
  - Returns list of plan ids for a page
- /api/plans/:planId
  - Returns informations for a plan
### Layers

<table>
<thead>
<tr>
<th>PLPLANID</th>
<th>ApplyDate</th>
<th>ExpireDate</th>
<th>CompleteDate</th>
<th>Description</th>
<th>ApprovalEx</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2002-07-03 00:00:00.000</td>
<td>NULL</td>
<td>2003-04-08 00:00:00.000</td>
<td>RECIPROCAL PARKING FOR EACH LOT</td>
<td>NULL</td>
</tr>
</tbody>
</table>

Plan information

**Plan Type:** Permits & Reviews  **Project:** 00-115  **Apply Date:** 2002-07-03T00:00:00

**Work Class:** Parking Permit  **District:** Blank  **Expire Date:**

**Plan Status:** Approved  **Assigned To:** Administrator, System  **Complete Date:** 2003-04-08T00:00:00

**Description:** RECIPROCAL PARKING FOR EACH LOT  **Approval Expire Date:**
Next Steps

- As more data needs to be pulled, more endpoints will be created
- Document generation
- Provide security

JWT
JSON Web Tokens
Fall 2019 Accomplishments

- Learning how to use React, Express, Node for the project
- Requirement gathering
  - Meetings with affiliated departments
- Form/Permit and Database gathering
- This presentation
Spring 2020 Plans and Expectations

- Autocompletion of forms
- A list of required permits for a couple of scenarios
  - i.e. when a case is being looked into for housing extension in a specific zone, list what other permits are needed
- Large scale demo
Questions?