Magna Legal Services  
  
AI Prompting / Observations  
  
I want to build a software system for a company that manages documents related to legal actions

## Business:

The company has three primary business functions

1. Business entities generate cases that case is related to a legal action it can be civil or criminal from the case they generate a request a request can have multiple sub requests.
2. The business fulfills all actions related to case they will retrieve the documents defined by a request or in a sub request this process can be a long running workflow.
3. The business builds a packet that includes all of the documentation retrieved for a request and or in case

There are three interaction models:

1. There is a customer portal where an individual can create a case create an account associate other individuals with a case define the requests and any sub requests approve funding and more.
2. There is an employee portal which is used to support all business functions this includes case management document retrieval billing administrative work and more
3. there is a custodial portal where respondents upload document

There are business workflows and business rules that govern the activities supported by the defined portals. The most complex area of the system is the employee portal.

## Problems:

* A case can be active for decades.
* The process obtaining the related materials is long running with multiple loop backs.
* The process for building the packet is complex as well.
* Not all of the business rules are known. Some are hidden inside stored procedures.

## Example Workflows:

1. New Case Order
   1. Status = Unsubmitted
   2. Client
      1. Define delegates
      2. Represented party
      3. Evidence request (from whom, where, etc)
      4. Provides billing information
      5. Provided payment
   3. Validate known entities.
   4. Continue with Case setup & review workflow.
2. Case Set-up and Review
   1. Docket check for case validation
   2. Set-up billing
   3. Review for information completeness
      1. AI opportunity
   4. If there are no problems
      1. Case status = New Request.
   5. Else
      1. Case status = OnHold
      2. OnHold status could be due to:
         1. missing attorney information
         2. missing required document
         3. client clarification needed.
         4. Missing court information
      3. Trigger follow-up actions.
3. New Request
   1. Request status = In-Progress
   2. Review request
   3. Verify location
   4. If Draft required
      1. Contact client
      2. Request state = WaitingForClient
      3. Client review will result in
         1. Approved
         2. Approved with changes
         3. Canceled
   5. Once this phase is completed
      1. Request state = In-progress
4. Submit request for records
   1. If Subpoena Request
      1. Follow Subpoena Workflow.
   2. If Authorization Request
      1. Follow Authorization Workflow
5. While “waiting”
   1. Determine if action required (rule-based)
6. Begin Packet Delivery Workflow

## Possible status change sequences for a Case

1. Basic:
   1. Unsubmitted
   2. New Request
   3. In-Process
   4. E-Filing
   5. Received
   6. Closed
2. Other
   1. Unsubmitted
   2. New Request
   3. In-Process
   4. E-Filing
   5. Received
   6. First Look
   7. Cancellation By One Attorney

## Existing and in-development software components.

* The existing customer portal is a react about on top of an ASP core Web API.
* The existing employee portal is a react website on top of an ASP core Web API.
* There is also a desktop application written in WinForms. This application is require for managing PDF files. Sluggish performance is why this app is required. It interacts with the WebApis.
* The custodial portal is a react website on top of an ASP core Web API
* This customer is a Microsoft shop and they host their assets in Azure the existing ecosystem is very old it needs modernization business rules are scattered across the organization in multiple expressions mostly in stored procedures

## Goals:

Build a proof-of-concept application to model the workflow for a case.   
Use Aspire, Orleans, and RulesEngine.   
Use Visual Studio.

I have access to the old code base but I prefer not to use it at this time I want to lay out an architecture that leverages Orleans and rules engine to model they personas and activities in the system the workflow is governed by rules the rules may have an affinity for a given actor type or they may be more general and spread across the entire organization I need to define a repository to store the rules engine artifacts I need the Orleans actors to be durable I want to include open telemetry

## Assumed Actors

* Client
  + A client is a business entity that requests services from the customer. A representative of the client will create a case, add other business entities, and/or individuals to a case for management purposes.
* Case
  + A case defines the parameters for a request.
  + A case follows a given workflow with multiple steps.
* Request
  + A request is a bundler of one or more sub-requests.
  + The client defines where the request can be fulfilled.
  + Sub-requests are targeted for specific types of evidence.
  + Requests have two types:
    - Authorizations
    - Subpoenas
* Organization
  + Has one or more locations.
  + Has one or more representatives.
  + Exist in the “rolodex”
  + Created frequently.
  + Can be small businesses, corporations, health care providers, one-person legal firms, federal state and local courts, insurance companies expert witnesses, doctors, engineers, and more.
* Individual
  + Can be an attorney, paralegal, a defendant, a plaintiff, etc.
  + Must be a member of one of more organizations.

## Assumed Rules:

* Has Court Hold
  + Is there a court ordered hold on moving forward with the workflows.
* Overlimit
  + Is a payment required to obtain evidence that exceeds limits defined by the client.
* Etc.