

Project

AI Property Due Diligence Assistant

- What: Users upload leases, financials, inspection reports → AI summarizes risk, flags issues (mold, zoning, hidden fees), suggests negotiation points.
- Value: Speeds up diligence for investors.
- Prototype: Very doable — contract analysis + summary.
- Differentiation: Add “go/no-go” scoring, renovation cost estimates.

Look at REITs and the financial aspect of growing new markets

Possibly look at Texas for growing market

Look for biggest spot for infrastructure development using financials

What places in the US have development happening and why?

Qbcosa?

Best indicator for rising real estate prices is a starbucks coming to the neighborhood

High school test scores or new high schools in general

Image recognition? Or Sound models?

HOA determines bylaws, bring that into our assumption of real estate prices

Sell it as a service or flip houses.

He said if we continue to go along with this, he would recommend us to big companies.
Looks like we have a startup guys lol

-> consider unstructured/external data as well

AI Property Due Diligence Assistant

An LLM-powered tool that helps real estate investors quickly evaluate property risks, financial viability, and negotiation opportunities.

1. What the Product Is (Clear Concept):

An AI assistant that takes all major property documents—lease agreements, rent rolls, financial statements, inspection reports, zoning documents, contractor bids, and even seller emails—and produces:

- ✓ A full due diligence summary
- ✓ A risk score across legal, operational, structural, and financial domains
- ✓ A revised valuation estimate or recommended purchase price
- ✓ Suggested negotiation points
- ✓ A final Go / No-Go decision framework

This tool augments the investor's due diligence process, helping them identify hidden issues earlier.

2. Who It's For (Target Customers):

- Small to mid-sized real estate investors
- New or part-time investors
- Commercial brokers
- Real estate private equity analysts
- Construction consultants
- House flippers & BRRRR investors

Why they care: Due diligence is expensive, slow, manual, and very fragmented.

3. Core Features (What the LLM Actually Does)

A. Document Ingestion & Understanding

Users upload:

- **Leases**
- **Rent rolls**
- **Inspection reports**
- **Seller disclosures**
- **Operating statements**
- **Zoning or permitting documents**
- **Photos or contractor estimates**

AI extracts key information:

- **Term length**
- **Rent increases**
- **CAM charges**
- **Renewal options**
- **Maintenance responsibilities**
- **Major inspection issues (HVAC age, roof problems, foundation cracks)**
- **Zoning compliance**

B. Multi-Category Risk Detection

AI flags issues in five categories:

1. Structural Risks

- **Roof age / expected remaining life**
- **Mold or water damage**
- **Electrical issues**
- **Foundation cracks**

2. Legal / Compliance Risks

- **Zoning violations**
- **Non-standard lease clauses**
- **Unassignable leases**
- **Unpermitted additions**

3. Financial Risks

- **Underreported expenses**
- **Unrealistic NOI**
- **Tenant delinquency**
- **Rent roll inconsistencies**

4. Operational Risks

- **High vacancy**
- **Weak tenant mix**
- **Deferred maintenance**

5. Market Risks

- **Rent above market**
- **Property type oversupply**

- Declining submarket
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C. Negotiation Strategy Generator

AI suggests:

- Points to negotiate (price, credits, repairs, closing costs)
 - Questions to ask the seller
 - Items that should be added to the contract
 - Repair concessions: “Request \$8,000 seller credit for HVAC replacement.”
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D. Valuation & Purchase Price Recommendation

AI calculates:

- Revised NOI after repairs
- Updated cap rate estimate
- Suggested offer range
- Sensitivity analysis

Example output:

“Based on inspection findings and deferred maintenance, a fair revised price is \$388,000–\$402,000.”

E. Go / No-Go Decision Engine

AI uses a scoring model:

Category	Score	Weight
Structural	3/5	30%
Financial	4/5	30%
Legal	2/5	20%
Market	4/5	20%

Produces:

Overall Go/No-Go Score: 62/100 → Proceed with caution; renegotiate price.

4. Prototype (What You Can Actually Build in GPT Builder)

VERY feasible prototype:

Upload inputs:

- Lease PDF
- Inspection text
- Rent roll in CSV
- Description of property

Outputs the model will generate:

- A summary of key facts
- Risk bullet points
- Negotiation arguments
- “Go / No-Go” scoring system
- Estimated renovation or repair costs (via prompt modeling)
- Suggested revised purchase price

You can simulate rent rolls or inspection summaries for demo purposes.

This hits the class requirements:

- Clear UI flow
- Shows real value
- Demonstrates LLM reasoning
- Uses document ingestion

5. Differentiation (How Your Product Stands Out)

A. Renovation Cost Modeling

AI estimates repair costs:

- “Mold remediation: \$3,000–\$5,000”
- “Roof replacement: \$12,000–\$18,000”
- “Foundation repair: \$8,000–\$15,000”

B. Automated Deal-Killer Detection

Flags critically dangerous issues:

- Unpermitted construction
- Failing septic systems
- Tenants with no leases
- Code violations

C. Real Estate Investor Mode

Preset options:

- Flip
- BRRRR
- Long-term rental
- Short-term rental

Each adjusts:

- Rent comps
- Repair budgets
- Cash flow analysis
- Projected returns (IRR, COCR)

D. Broker Integration (“Share Report” Mode)

Creates a clean PDF report investors can share:

- Executive summary
- Risk heatmap

- Price range
 - Negotiation points
 - Required repairs
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6. Business Model (For Your Pitch Deck)

Primary pricing options:

- \$20–\$50 per property report
- Subscription: \$49/month for unlimited reports
- Enterprise pricing for real estate teams

Targeted channels:

- Real estate investor forums
 - BRRRR Facebook groups
 - BiggerPockets community
 - Realtors
 - Hard-money lenders
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7. Ethical & Regulatory Considerations

Major concerns:

- AI hallucinating repair costs

- Misinterpretation of legal clauses in leases
- Unauthorized practice of law
- Privacy issues with uploaded documents

Mitigations:

- Strong disclaimers
 - Human-in-the-loop expectations (“Use this as a guide, consult experts”)
 - Model transparency
 - No final legal advice
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8. Why This Is a Great Project Idea

- ✓ Very clear LLM application
- ✓ Strong value proposition
- ✓ Simple prototype (text + PDFs)
- ✓ Strong business model section
- ✓ Real commercial demand
- ✓ Fits “Real Estate & Construction” perfectly
- ✓ Easy to explain, visually attractive
- ✓ Great for risk, ethics, and regulatory analysis

This could absolutely score top tier in your class if executed well.

National Territory Ranking Based on Aggregate Queried Data.

We also want to have an overall Texas map that will serve as an aggregate store of all data and is queryable to show the best locations to buy in Texas at a given time. This should be based on all Go or No go decisions. As you know, we calculate this Go/no-go feature based on many factors. We should set proper thresholds for these parameters

and if a given lease meets those criteria we should represent this visually on a map of Texas, showing which portions of the state are most attractive to buy. I am unsure how much data we have overall (leases, deeds, bids, general geospatial and property data), and we want this information to be accurate. So we can figure this out as we go.

Remember the overall point of this tool is to show real estate investors if a property is worth buying based on 1. The property itself (condition, value, commute to work, practicality, etc), the overall properties in its given area (local-scope, city-wide/town-wide scope, state-wide scope, and find areas of texas that are undervalued for real estate growth opportunities.

Info on Texas and Market Applicatbility

REITs/financial aspect of growing new markets

- REITs care about population and job growth. This leads to more renters, more demands for offices/industrial/logistics/warehouses. Texas, Florida, Tennessee, North Carolina, Arizona, and Georgia are all states where REITs have grown. They prefer the affordability, lower taxes, and business friendly environment (https://www.clarionpartners.com/cpinsights/Documents/us-sun-belt-boom-2024-clarionpartners.pdf?utm_source=chatgpt.com and https://irei.com/wp-content/uploads/2024/06/Jul-Aug-2024-RAA-ClarionPartners-Sponsor-Report.pdf?utm_source=chatgpt.com)
- REITs look for markets where cap rates are higher than gateway cities but fundamentals are strong (ex: Dallas and NYC). Look for progressing markets/suburbs in the Sunbelt States
- REITs look for places that construction cost is lower or similar to that of places of high volume. REITs prefer development spreads across states
- REITs are reallocating capital from slow-growth, high regulation coastal markets to high-growth Sun Belt metros, chasing better rent growth, population inflows and development yields

Texas is a large growing market

- Continues to post some of the strongest population growth in the U.S. driven by affordability, job growth, low/no income tax, and business relocations (Dallas suburbs/the larger metro area is growing significantly)
- Suburbs like Frisco, New Braunfels, McKinney are some of the fastest growing cities with strong single family and multifamily demand
- Texas' economy is still powerhouse, with strong employment growth and resilient sectors like energy, tech, logistics, and manufacturing.

Multifamily / development:

- Texas leads the nation in apartment construction with 81k units expected to be built by end of 2025
- Austin and Dallas rank #3 and #2 for new apartments, and Houston and San Antonio are in top 20
- Texas sits at the intersection of high population growth, pro-business policy, and massive housing construction, making it one of the most important markets for REIT expansion and new development

Biggest spots for infrastructure development:

- Over 90+ semiconductor manufacturing projects and nearly \$450B in announced investments across 28 states since the CHIPS & Science Act was introduced. Biggest projects in Arizona, Texas, Ohio, and New York
- The Inflation Reduction Act + Bipartisan Infrastructure Law have catalyzed \$230B+ in energy manufacturing investment, with 900+ new or expanded energy manufacturing plants in the US as of early 2025
- States like Ohio, Michigan, and Indiana are becoming hotspots for fabs and supply chains, backed by state incentives and workforce partnerships

- These are attractive because they pull in federal subsidies + tax credits, which lowers projects costs. They also create new job clusters, which then drive housing, retail, logistics, and infrastructure demand which REITs and developers love

Where in the US is development happening and Why?

- Sun Belt & “18 hour cities” (Austin, DFW, Nashville, Phoenix, Raleigh-Durham, Orlando, etc) are consistently flagged as top growth markets because of:
 - Strong population inflows
 - Job diversification
 - More affordable housing vs. coastal gateways
 - Business friendly regulations and easier development environments
- Secondary markets and suburbs like Boise and Raleigh are benefiting from remote work, as households trade small, expensive coastal units for larger, cheaper homes

Development is clustering where three things overlap:

1. Demographics: net in-migration and younger populations (Sun Belt, Texas, Southeast, some Midwest Tech Hubs)
2. Economics: job growth, diversified economies, big capex projects (semiconductors, EVs, clean energy)
3. Policy & Regulation: pro-developing zoning, tax incentives, and relatively fast permitting

Prof Meeting Notes

Professor Meeting Notes

- Cubacosa: lidar on iphone to do spatial representations.
 - Clear Capital; add it to the valuation equation-Reno, Nevada.
- Areas
 - Job market, restaurants
 - Indication of Starbucks.
 - Think about the regulations.
 - Education.
- Sell it as a service or our own investment strategy
 - How to take it to market

DATA

I don't know if this is exactly what is needed or even if any of this will help

Annual Population and Migration - <https://www.census.gov/programs-surveys/popest.html>

Domestic Migration by County -

<https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html>

Building Permits Survey (Authorized) - <https://www.census.gov/construction/bps/>

Local Area Unemployment Statistics - <https://www.bls.gov/lau/>

Quarterly Census of Employment and Wages - <https://www.bls.gov/cew/>

Housing Market Data - <https://www.huduser.gov/portal/home.html> (tons of different data can be found here. I don't know what all we need so I just sent the general link)

Fair Market Rents - <https://www.huduser.gov/portal/datasets/fmr.html>

Zillow Research/Data hub - <https://www.zillow.com/research/data/> (data sets that may be helpful are: Zillow Observed Rent Index, Home Value Index, Affordability Measures, Inventory Levels)

Redfin Data Center - <https://www.redfin.com/news/data-center/> (Migration heatmaps, median sale price, days on market, inventory levels/new listings)

National Association of Realtors (Metro-level real estate market rankings, affordability, monthly data) - <https://www.nar.realtor/research-and-statistics> (metropolitan median home prices, residential real estate trends, migration and homebuyer trends)

CBRE (Construction Pipelines, absorption, rent growth, vacancy, cap rates) -

<https://www.cbre.com/insights> (US Multifamily Figures (quarterly), US construction Cost Index, US Market Outlook Reports (Multifamily, Industrial, Office), Top Markets for New Supply)

Yardi Matric (multifamily rent growth, absorption, supply, submarket-level analyses) -

<https://www.yardimatrix.com/news> (National Multifamily Report, Top Metros For Rent Growth, Supply Pipeline by Market)

ULI/PwC Emerging Trends in Real Estate Reports (Ranking of emerging markets) -

<https://americas.uli.org/research/emerging-trends-in-real-estate/> (top 10 fastest growing real estate markets, why investors, prefer certain metros, REITs' perspectives on growth vs. core markets)

Nareit REIT Industry Financials (REIT strategy, market exposure, financial performance) -

<https://www.reit.com/data-research/reit-market-data> (which markets REITs are overweight, FFO growth trends, why REITs focus on Sun Belt, supply and demand mismatches)