# Proposal for Wealth Map Challenge

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Submission Date: May 7, 2025

#### 1. Introduction

We are excited to submit our proposal for the Wealth Map Challenge. Our team aims to develop an advanced, secure, and user-friendly corporate platform-**Wealth Map**-that empowers organizations to explore property ownership and net worth data across the US. Leveraging interactive mapping, robust search, and seamless third-party integrations, our solution will provide actionable insights and set a new benchmark for property intelligence platforms.

#### 2. Problem Statement

Organizations need a centralized, reliable, and intuitive tool to visualize, analyze, and report on property ownership and wealth data at scale. Current solutions are fragmented, lack real-time integrations, and often fall short in usability, collaboration, and data privacy.

# 3. Our Solution: Wealth Map

**Wealth Map** will be a web-based platform providing:

- An interactive US property map with advanced visualization and clustering
- Detailed property and owner profiles, including net worth analysis and ownership history
- Powerful search and filtering by address, owner, property characteristics, and wealth metrics
- Integration with leading third-party data providers (<u>Here.com</u>, PitchBook, Wealth Engine, Zillow, etc.)
- Secure, role-based access for company administrators and employees
- Exportable, customizable reports and collaborative features for teams

## 4. Key Features & User Stories

Feature Area	User Story Example	Acceptance Criteria Highlights	
Company Registration/Admin	As an admin, I want to register my company and manage users.	Register company, invite/revoke employees, set permissions, monitor activity, set data preferences	

Feature Area	User Story Example	Acceptance Criteria Highlights	
Employee Onboarding	As an employee, I want a smooth onboarding experience.	Email invites, secure sign-up, MFA, onboarding tutorial, notification settings	
Property Map Interface	As a user, I want to explore properties on an interactive map.	US map, property markers, zoom/pan, satellite/standard views, efficient data loading, filtering, save map views	
Property Information Display	As a user, I want to view detailed property and ownership info.	Click for details, expanded info, images, ownership history, bookmarks, export data	
Owner Wealth Analysis	As a user, I want to assess property owners' net worth.	Net worth estimates, confidence scores, data sources, breakdowns, owner comparisons	
Third-Party API Integration	As a user, I want comprehensive, up-to-date data from multiple sources.	Integrate at least 3 APIs, handle rate limits, authentication	
Search & Filtering	As a user, I want to search/filter for properties and owners.	Search by address/owner, filter by value/size/type/net worth, save filters, auto-suggestions, dynamic updates	
Data Export & Reporting	As a user, I want to export and share property/owner reports.	Export in multiple formats, custom/scheduled reports, visualizations, sharing, export history	[1] [2]

# 5. Technical Approach

• Front-end: React.js with MapBox or Leaflet for interactive mapping

• Back-end: Node.js (Express) RESTful API

• Database: PostgreSQL with PostGIS for geospatial queries

• Authentication: OAuth 2.0, MFA, role-based access

• Cloud Hosting: AWS or GCP for scalability

• API Management: API Gateway for secure third-party integrations

• Caching: Redis for fast map/data loads

• Version Control: GitHub for codebase management [1] [2]

#### 6. Team Roles

• Sajid: Team Lead, Backend/API Integration

• **Hemanth:** Frontend/UI/UX Lead

• Arun: Data Engineering, Third-Party Integrations

• **Greeshma Dj:** QA, Documentation, Reporting Features

## 7. Development Timeline

Week	Milestones	
1	Planning, requirements, system architecture, basic UI/UX prototyping, third-party API research	
2	Core feature development (map, search, authentication), API integrations, initial testing	
3	Advanced features (reporting, export, collaborative tools), performance optimization, documentation	
Final	User testing, pitch deck, demo video, submission	[1] [2]

# 8. Judging Criteria Alignment

- **Technical Implementation (30%):** Scalable, secure architecture, clean code, robust API integrations
- User Experience (25%): Intuitive, responsive map UI, clear workflows, accessibility
- Feature Implementation (25%): Complete mapping, search, reporting, and data integration features
- Business Viability (20%): Market fit, scalability, privacy compliance, unique value proposition [1] [2]

# 9. Risks & Mitigation

- API Rate Limits: Implement caching and fallback strategies
- Data Privacy: Encrypt sensitive data, comply with regulations
- Performance: Optimize queries, use clustering, and CDN for assets

## 10. Why Our Team?

Our team brings together expertise in backend, frontend, data engineering, and QA. We are committed to delivering a robust, innovative solution aligned with the challenge vision and are eager to leverage mentorship for maximum impact.

#### 11. Conclusion

Wealth Map will set a new standard for property and wealth intelligence in the enterprise sector. We look forward to your feedback and the opportunity to build this transformative platform.

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