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TITLE: AI AFFORDABLE HOUSE FINDER

PROBLEM STATEMENT:

"Many individuals and families struggle to find affordable housing options that meet their needs and budget constraints. Existing housing search platforms often provide limited filtering options, outdated information, and lack of transparency in pricing and amenities. As a result, homebuyers and renters spend significant time and effort searching for suitable properties, often with limited success.

TARGET AUDIENCE:

- Low to Middle-Income Individuals and Families
- First-Time Homebuyers
- Students and Recent Graduates
- Non-Profit Housing Organizations / Local Governments
- Essential Workers

OBJECTIVES:

- Leverage machine learning to recommend properties based on user preferences (budget, location, commute time, family size
- Show users areas with affordable housing relative to average income levels.
- Use AI to analyze trends in rental/sale prices, upcoming developments, and neighborhood changes.
- Reduce discrimination by anonymizing certain user data when matching with landlords.

DESIGN THINKING APPROACH:

EMPATHIZE:

Get a deep, emotional and practical understanding of people searching for affordable housing.

User Research: Conduct interviews and surveys to understand the needs, pain points, and behaviors of users searching for affordable housing.

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Identify User Personal: Create personas to represent the target audience, including first-time homebuyers, low- to moderate-income families, and individuals seeking affordable rental options.

DEFINE:

Define the problem statement based on user research, such as "Users struggle to find affordable housing options that meet their needs and budget constraints."

Identify Key Challenges: Identify key challenges, such as limited access to accurate and up-to-date information, inefficient search processes, and lack of personalized recommendations.

IDEATE:

Conduct brainstorming sessions to generate ideas for addressing the challenges and meeting user needs.

AI-Driven Solutions: Explore AI-driven solutions, such as:

- Personalized property recommendations
- Predictive analytics for property prices and rental yields
- Automated property matching
- Natural Language Processing (NLP) for search queries

PROTOTYPE:

Develop a prototype of the Affordable House Finder platform, incorporating AI-driven features and functionalities.

User Testing: Conduct user testing to gather feedback and iterate on the design.

TEST:

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- Conduct pilot testing with a small group of users to test the platform's functionality and effectiveness.
- Iterate and refine the design based on user feedback and testing results.

TESTING GOALS:

- Test the accuracy of personalized property recommendations generated by the AI model.
- Evaluate the performance of predictive analytics models in forecasting property prices and rental yields.
- Test the effectiveness of the AI-powered property matching feature in matching users with suitable properties.
- Collect user feedback on the platform's usability, usefulness, and areas for improvement.