**Problem Identification**

A prospective buyer has contacted a realtor for guidance on relocating within or to Miami, FL. The realtor aims to offer neighborhood recommendations tailored to the buyer's specific criteria. An analysis of housing data in Miami will be conducted to identify and recommend the top neighborhood(s) that best align with the buyer's preferences.

**Product Service Description**

Dream305 Neighborhood Finder is an innovative application designed to offer personalized neighborhood recommendations based on specific criteria provided by the user. Leveraging a sophisticated statistical model, the app delivers tailored suggestions, while also providing an interactive dashboard enriched with geospatial coordinates. This feature empowers users to delve deeper into neighborhood analysis by exploring associated zip codes, enhancing their overall experience and decision-making process.

**Features**

* Current features:
  + Recommendations based on unique criteria
  + User friendly interface that formats criteria as questions to user
  + Interactive dashboard that allows end user to conduct further analysis
  + Data source consisting of data related to Miami Dade demographics, financial indicators, and locational amenities
* Future enhancements:
  + Database that consists of current data source and additional data, as it pertains to stakeholder’s requirements, that refreshes with real time data to support model
  + Website utilizing API from deployed code and interactive dashboard
  + Provides quick links to related information for end users to conduct further research
  + Support stakeholder’s vision by providing contact information and real time access to property availability within portal

**Stakeholder**

* Michael E. Anderson, realtor, Berkshire Hathaway

**Target Customer(s)**

* Realtors licensed in Miami Dade County
* Prospective Homeowners
* Prospective Renters
* Casual Observers of the Miami Dade Housing Market

**Section I: Value Propositions**

**Our end-users seek a solution that:**

**1. Provides a personalized neighborhood recommendation**: Our end-users would like a customized neighborhood recommendation based on the following (current) criteria:

* *Commute Time Index: This score, standardized at the zip code level, encompasses the average commute duration to work, alongside commuting methods such as biking, public transportation, and walking.*
* *Railroad and Highway Index: Standardized at the zip code level, this score reflects the distance from the nearest railroad and highway, measured in feet.*
* *Central Index: This standardized score at the zip code level evaluates the proximity to both subcenters and the central Miami Business District, measured in feet.*
* *Amenities Score: This normalized score at the zip code level gauges the abundance of amenities, including bars, restaurants, supermarkets, and bakeries.*
* *Education Level: Normalized at the zip code level, this score represents the proportion of residents holding higher degrees, ranging from Associate to Doctorate qualifications.*
* *Aquatic Proximity Index: Standardized at the zip code level, this score measures the proximity to the ocean and other nearby bodies of water, expressed in feet.*
* *Property Affordability Index: This standardized score at the zip code level incorporates factors such as average home value, property tax rates, and rental costs to assess property affordability.*
* *Income Level: Normalized at the zip code level, this score considers the unemployment rate among residents aged 16 and above, as well as the median income.*
* *Marriage Status: Standardized at the zip code level, this score indicates the prevalence of married and single residents within the community.*
* *Age Range: Normalized at the zip code level, this score represents the median age of residents within the area.*
* *Housing Index: This indicator evaluates housing density at the zip code level.*
* *Households with Children: This indicator assesses the presence of households with children at the zip code level.*

**2. Utilizes an Advanced Analytical Approach:** The application utilizes a sophisticated statistical model to generate recommendations. This model incorporates numerous factors and data points to deliver accurate and relevant suggestions to the user.

**3. Utilizes an Engaging user Interface**: The application utilizes a question format to receive features to predict target within model.

* *On a scale of 1 to 3, how would you like the commute time to work from a neighborhood to be like? (1: Low, 2: Fair, 3: High):*
* *On a scale of 1 to 3, how central would you like a neighborhood to be a subcenter and the Miami central business district? (1: Close, 2: Intermediate, 3: Far):*
* *On a scale of 1 to 2, rate the quantity of amenities (bars/restaurants/supermarkets/bakeries) you would like in your neighborhood? (1: Low, 2: High):*
* *On a scale of 1 to 3, how close do you want a body (or bodies) of water to a neighborhood? (1: Close, 2: Intermediate, 3: Far):*
* *On a scale of 1 to 3, rate your expectation for the property affordability in a neighborhood? (1: Low, 2: Fair, 3: High):*
* *On a scale of 1 to 3, what is your expectation for income status of most individuals in a neighborhood? (1: Poor, 2: Fair, 3: Wealthy):*
* *On a scale of 1 to 2, what is your expectation for marital status of most individuals in a neighborhood? (1: Mostly Single, 2: Mostly Married):*
* *On a scale of 1 to 2, what is your expectation for age in a neighborhood? (1: Younger, 2: Older):*
* *On a scale of 1 to 3, what is your expectation for the number of houses (housing density) in a neighborhood? (1: Low, 2: Medium, 3: High):*
* *On a scale of 1 to 3, what is your expectation for households with children in a neighborhood? (1: Low, 2: Medium, 3: High):*
* *On a scale of 1 to 3, what is your expectation for distance from railroads and highways in a neighborhood (1: Nearby, 2: Intermediate, 3: Far):*
* *On a scale of 1 to 3, what is your expectation for education level among most individuals in a neighborhood? (1: Highly Educated, 2: Educated, 3: Less educated):*

**4. Employs interactive visualization for further analysis:** The app features an interactive dashboard enriched with geospatial coordinates. This allows users to visualize and explore neighborhoods in a dynamic and engaging manner, enhancing their overall experience.

**5. Fosters interaction with housing**: Dream305 facilitates engagement with the Miami-Dade housing market by providing valuable insights into neighborhoods and enabling interaction with relevant stakeholders.

“Dream305 looks to provide significant insight to end users regarding the Miami-Dade housing market and is not intended to violate the seven protected classes under the Fair Housing Act.”

**Key Features:**

**1. User-Friendly Interface**: The Dream305 website boasts a user-friendly interface, meticulously crafted to provide seamless navigation and an intuitive experience. With its clean layout and intuitive design, users can easily access the features they need, whether it is exploring neighborhood recommendations, analyzing data through interactive visuals, or engaging with relevant stakeholders.

**2. Real-time Data Integration:** Dream305 seamlessly connects to a dynamic database, ensuring that information is continuously updated and refreshed. Regular maintenance guarantees a smooth flow of data, providing users with the most accurate and up-to-date insights into their housing preferences.

**3. Secure Access Anytime:** Dream305 provides seamless and secure access to the end user.

“Guiding Your Neighborhood Journey: At Dream305, we recognize the unique challenges of finding the perfect community. Our mission is to provide personalized recommendations through data science, empowering users to explore neighborhoods with confidence. With our intuitive interface and powerful insights, we are here to make your neighborhood search a seamless and enriching experience.”

**Section II: Customer Segments**

*Target Segment: licensed realtors in the state of Florida (independent or a part of firm), older individuals accompanied by family members and are looking to settle down, affluent individuals with backgrounds in marketing and media, college students, young professionals embarking on their careers, singles exploring vibrant city life, individuals seeking entertainment and excitement, individuals seeking heavy Latin American and Carribean influences, individuals seeking a tropical terrain (highlighted by beaches, numerous bodies of water and warm weather)*

**Realtors licensed in Miami-Dade County:** Realtors play a pivotal role in assisting clients with buying or renting properties in Miami-Dade County. Dream305 caters to this segment by providing realtors with a powerful tool to enhance their services. By leveraging Dream305's personalized neighborhood recommendations and interactive dashboard, realtors can offer their clients valuable insights and data-driven advice, improving their overall customer experience and increasing client satisfaction.

**Prospective Homeowners:** Prospective homeowners seeking to buy a property in Miami-Dade County represent another key customer segment for Dream305. These individuals or families are looking for neighborhoods that align with their preferences, such as commute time, amenities, safety, and school districts. Dream305 addresses their needs by offering tailored neighborhood recommendations based on specific criteria, helping them find the perfect place to call home.

**Prospective Renters:** Similarly, prospective renters in Miami-Dade County are also targeted customers for Dream305. Renters often prioritize factors like proximity to work, public transportation, entertainment venues, and affordability when searching for rental properties. Dream305 assists them by providing personalized neighborhood recommendations that meet their criteria, making the rental search process more efficient and effective.

**Casual Observers of the Miami Dade Housing Market:** These individuals may not be actively searching for properties but are interested in staying informed about the real estate market trends in Miami. Dream305 provides them with valuable insights and updates, allowing them to stay connected and informed about the evolving real estate landscape in the area.

By targeting these customer segments, Dream305 aims to provide a comprehensive solution that caters to the diverse needs of individuals from all backgrounds involved in the real estate market in Miami-Dade County.