Project 3: Assignment 5

**Idea 1: Property Value Adjuster**

Description:

An event-handling service for any individual wishing to sell their house. They will fill out information with their name, email, address, city, state, and square footage. The real estate agent will get the X and Y coordinate for that address and calculate the base cost of the house and adjust it based on crime rates. The resulting quote is displayed back to the homeowner who wants to sell for their review which they can either approve and have listed or deny. If they choose to list, the listing will also show an attached recommendation rating for wind and/or solar energy for this property.

Real Estate Agent:

Event handler

End User:

Wishes to sell house

Workflow 2:

3. Add Property price to a listing.

4. Add recommendation ratings for the property using 2 services:

Solar and Wind Energy

5. Add additional information for interested buyers utilizing 2 services:

Nearest stores to the property

5-day weather forecast for conducting tours

Send quote of the house value back to the end user.

User Accepted

User Rejected:

Program terminates

If

Workflow 1:

1. Calculate base value of the house.

2. Adjust the value based on 2 services:

Crime rate and Natural Disaster rating

Crime Rate Service

GeoCode service for getting X and Y coordinates

Solar Energy Service

RESTful Service for Text Document of property listing

Wind Energy Service

Output Property Listing

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| --- | --- | --- | --- | --- |
| Service Directory: The team plans to complete the following services. | | | | |
| This service directory will be deployed at this address: http://webstrar26.fulton.asu.edu/index.html | | | | |
| Team Name: site26 (Noel Wilson) | | | | |
| Provider Name | Service Name, with Input and Output Types | TryIt Link | Service Description | Planned Resources Needed to Implement the Service |
| Noel | Crime Data Service  **Input:** double longitude, double latitude  **Output:** int number of crimes | <http://localhost:54863/Service1.svc>  http://webstrar26.fulton.asu.edu/  page1/Service1.svc | Returns crime data for a given location. Use this information to adjust the price of a piece of property near the given location. | API key and the GeoCode service output. |
| Noel | GeoCode Service  **Input:** string street address, string zip code  **Output:** double Longitude, double Latitude | <http://localhost:54863/Service1.svc>  http://webstrar26.fulton.asu.edu/  page1/Service1.svc | Returns the given position(latitude, longitude).  Use this to perform other services. |  |
| Noel | Wind Data Service  **Input:** double longitude, double latitude  **Output:** double index rating | <http://localhost:54863/Service1.svc>  http://webstrar26.fulton.asu.edu/  page1/Service1.svc | Returns the current wind index rating for a given location(longitude, latitude).  Output a recommendation for wind energy on the property listing. | Api\_key and  GeoCode Service Output |
| Noel | Solar Data Service  **Input:** double longitude, double latitude  **Output:** double index rating | <http://localhost:54863/Service1.svc>  http://webstrar26.fulton.asu.edu/  page1/Service1.svc | Returns the current solar irradiation index rating for a given location(longitude, latitude).  Output a recommendation for solar energy on the property listing. | Api\_key and GeoCode Service Output |
| Noel | Simple RESTful GetPriceAdjusted.  **Input:** int square feet, double crimeNum  **Output:** string adjustedPrice | <http://localhost:55289/Service1.svc>  http://webstrar26.fulton.asu.edu/  page2/Service1.svc | Returns the base cost of that property based on national average cost of a house per square foot and the square footage entered. Adjusts that price up or down based on the number of violentCrimes from the FBI. | Output from the CrimeData service |
| Noel | Simple RESTful GetPriceListing  **Input:** string targetFilePath, string fullAddress, int sqft, double basePrice, double adjustedPrice, double solarRating, double windRating, int numCrimes  **Output:** string Boolean-style message, txt file to a specified location | <http://localhost:55289/Service1.svc>  http://webstrar26.fulton.asu.edu/  page2/Service1.svc | Takes list of inputs that need to be reported on the property listing and outputs that listing in a text file to the specified file path from input. Also outputs a message letting the user know if there was an issue or if the file was successfully created. | Output from all other GUI buttons, input into all text boxes including a specified File Path for your Property Listing text file. |