

## Real Estate (Property Selection)

### Introduction

The API `/virtualbot/best_option/` is a tool designed for the selection and evaluation of properties in the real estate sector. It receives data in JSON format and attachments, allowing the analysis and comparison of real estate properties based on factors such as price, location, size, amenities, and potential for appreciation. This API is essential for real estate companies, investors, and buyers, helping to optimize decision-making and maximize long-term return on investment.

### Common Use Cases:

#### 1. Property Evaluation for Purchase or Rent

The API `/virtualbot/best_option/` can analyze multiple properties available on the market, identifying those that best match the user's purchase or rental criteria. Factors such as price, size, amenities, and proximity to essential services like public transportation, schools, and shopping centers can be compared.

Application: Automatic selection of properties offering the best value based on the user's needs.

#### Request Example:

```
{
  "user": "investor@company.com",
  "type": "property",
  "prompt": "From all available properties for purchase, determine which has the best location and a price within the $200,000 to $300,000 range."
}
```

#### 2. Comparison of Properties in Terms of Location, Price, and Appreciation Potential:

The API can compare properties based on location, price, and appreciation potential, using data from attached files. This analysis helps identify properties with a higher likelihood of increasing in value over the long term.

Application: Identification of properties with high appreciation potential in emerging areas.

#### Request Example:

```
{
  "user": "buyer@realestate.com",
  "type": "property",
  "prompt": "From all available properties, determine which has the greatest appreciation potential and is located in a growing economic area."
}
```

### 3. Identification of Properties with Highest Long-Term Profitability:

The API /virtualbot/best\_option/ analyzes properties in terms of potential profitability, considering market demand, rental income, and maintenance costs. This helps identify properties with a good long-term return on investment.

Application: Selection of properties with high rental yields and low maintenance costs.

#### **Request Example:**

```
{  
  "user": "investor@company.com",  
  "type": "property",  
  "prompt": "From all available properties for investment, determine which has the greatest profitability potential in terms of rental income and low maintenance costs."  
}
```

### **Specific API Functions for Real Estate:**

#### 1. Location Evaluation and Proximity to Services:

The API can analyze property locations and proximity to essential services, using data from attached files, such as public transport, schools, hospitals, and shopping centers.

Application: Identification of properties in high-demand areas due to proximity to essential services.

#### 2. Price and Value Per Square Meter Comparison:

The API can compare properties in terms of price and value per square meter, considering amenities, size, and age, based on the received files.

Application: Analysis of property value based on price per square meter.

#### 3. Appreciation Potential Analysis:

The API can predict the appreciation potential of properties based on economic and urban development factors in the area, using attached data files.

**\*\*Application:\*\*** Identification of properties in emerging areas with high appreciation potential.

#### 4. Rental Income Profitability Evaluation:

The API analyzes the potential rental income of properties, evaluating demand, prices, and maintenance costs, helping to select the best investment options.

Application: Selection of investment properties with high rental income potential.

#### 5. Identification of Properties in Growing Areas:

The API can identify areas with high economic growth, where properties are more likely to appreciate, based on attached data and real estate market analysis.

Application: Selection of properties in economically growing areas with appreciation potential.

### **Extended API Request Examples:**

- Property Selection by Location and Proximity to Services:

A buyer is looking for a property close to essential services like public transport and schools.

**JSON Request:**

```
{
  "user": "buyer@company.com",
  "type": "property",
  "prompt": "From all available properties, determine which has the best location and is closest to essential services like schools and public transport."
}
```

- Appreciation Potential Analysis in Properties:

An investor is seeking a property with high appreciation potential in a growing area.

**JSON Request:**

```
{
  "user": "investor@company.com",
  "type": "property",
  "prompt": "From all available properties, determine which has the greatest appreciation potential in a growing area."
}
```

- Property Comparison by Long-Term Profitability:

An investor is looking for properties with high rental income and low maintenance costs.

**JSON Request:**

```
{
  "user": "investor@company.com",
  "type": "property",
  "prompt": "From all available properties, determine which has the greatest potential for rental income and low maintenance costs."
}
```

- Property Comparison by Price and Value Per Square Meter:

A buyer wants to purchase a property with a competitive price in relation to the value per square meter.

**JSON Request:**

```
{
  "user": "buyer@company.com",
  "type": "property",
  "prompt": "From all available properties, determine which offers the best value per square meter compared to its price and features."
}
```

**Real-World Applications in Real Estate:**

- Investment Property Selection:

The API /virtualbot/best\_option/ helps analyze multiple properties and select those with the best appreciation potential or rental income.

Example: A real estate agency uses the API to recommend properties in emerging areas with high appreciation potential to investors.

- Property Comparison for Home Buyers:

The API allows comparing properties based on location, price, and features, helping buyers find the right home.

Example: A real estate portal uses the API to provide personalized recommendations based on the buyer's budget and preferred location.

- Identification of Properties in Growth Areas:

Investors use the API to identify areas with high economic growth and select properties with higher appreciation potential.

Example: A real estate investment fund uses the API to select properties in expanding cities.

- Optimization of Rental Income:

The API helps investors select properties that generate rental income, evaluating local demand and comparable prices.

Example: A property management company uses the API to identify properties with high rental income potential and low tenant turnover.

### **Benefits of Using the API in Real Estate:**

- Automation of property evaluation:\*\* Quickly analyzes large volumes of properties.
- Selection of properties with high appreciation potential: Identifies properties in emerging or growth areas.
- Optimization of rental income: Helps identify properties with good rental yield.
- Precise location evaluation: Analyzes property proximity to essential services.
- Accurate comparison of prices and features: Provides clear insights into value per square meter and comparisons with similar properties.

### **Relevant Use Cases:**

- Comparison of Properties for Real Estate Investment:

Real estate companies and investment funds use the API to compare properties in terms of appreciation potential and rental profitability.

- Property Selection for Residential Buyers:

Homebuyers can use the API to find properties offering the best location, price, and features.

- Identification of Growth Opportunities in Emerging Areas:

Investors use the API to identify areas with high economic growth and select properties with appreciation potential.

- Optimization of Rental Income in Investment Properties:

Property management companies use the API to identify properties that maximize rental income.

**Summary:**

The API /virtualbot/best\_option/ for real estate property selection offers an advanced solution to evaluate properties based on factors such as location, price, appreciation potential, and rental profitability. By automating the analysis process, the API helps buyers, investors, and real estate agencies make more informed decisions, optimizing investments and ensuring selected properties offer the highest long-term value.