Search Functionality Enhancements - January 10, 2025

Overview

This update introduces enhanced search functionality for land properties, including ordering capabilities and filtering for properties that are for sale. The changes maintain backward compatibility while adding new features through V2 versions of existing functions.

Major Changes

1. Search Manager Updates

- Added `executeSearchV2` method to handle enhanced search functionality
- Implemented NFT price enrichment using ReservoirAPI
- Added filtering for properties that are for sale based on `salesOnly` parameter
- Fixed imports for `ReservoirAPI` and `LandPlotMemoryNFT`

2. Database Adapter Enhancements

- Created `searchLandByMetadataV2` with support for ordering
- Fixed SQL ORDER BY clauses for proper numeric sorting:
  - Changed JSON path operators from `->>'` to `->'` for numeric fields
  - Added `NULLS LAST` to ensure consistent ordering
  - Fixed ordering for plotArea and price fields

3. Interface Updates

- Updated `ILandDataProvider` interface to include V2 methods
- Added `searchLandByMetadataV2` to PostgresLandDataProvider implementation

4. Query Extraction Improvements

- Updated query extraction prompt to prioritize recent user messages
- Switched query extraction to use `ModelClass.LARGE` for better accuracy
- Added logging for query extraction context
- Enhanced prompt to better handle ordering preferences and sales filtering

5. Memory System Updates

- Added `searchPropertiesByParamsV2` to support ordering functionality
- Integrated with updated database adapter methods

Technical Details

SQL Query Improvements

```
-- Before
ORDER BY (content->'metadata'->>'plotArea')::float DESC

-- After
ORDER BY (content->'metadata'->'plotArea')::float DESC NULLS LAST
```

Type System Updates

- Added `OrderByParameter` enum for sorting options
- Updated `QueryExtractionResult` to include `salesOnly` and `orderByParameter`
- Added `LandPlotMemoryNFT` type for NFT-enriched results

Testing Notes

- Ordering functionality has been tested with various parameters
- Sales filtering verified with NFT price data
- Backward compatibility maintained for existing search functions

Known Issues

None currently identified.

Future Improvements

- Consider adding more ordering options
- Potential optimization of NFT price fetching
- Consider caching mechanisms for frequently accessed data

Breaking Changes

None. All new functionality has been implemented in V2 versions of existing methods to maintain backward compatibility.