



Senior Project, 2018, Summer BreazeHome v5.0 – Chat System

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Problem

- Clients communicating with the right agent that fits his/her needs is integral in the service BreazeHome provides

Current System

- BreazeHome did not provide a system to aggregate agent data so this information could not be easily found
- It was not possible to sort or filter through agents

Solution

- Create a page that aggregates agent data and allows for clients to easily find the agent they're looking for
- Provide clients the option to filter and sort list of agents to further ease the process

Screenshots



Fig 1. Filter Expanded

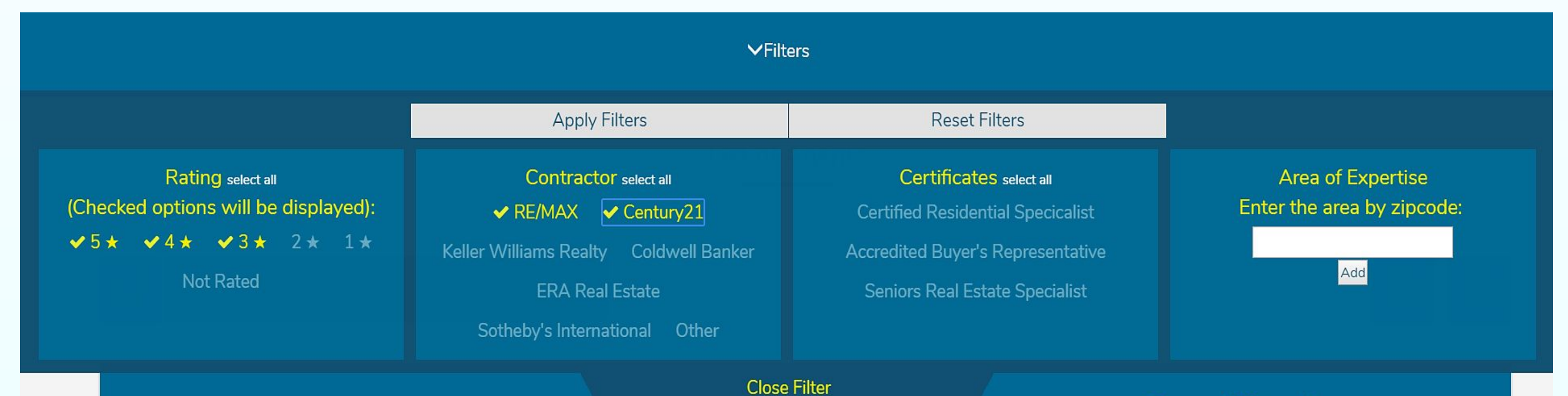


Fig 2. Apply button shows only when changes are made

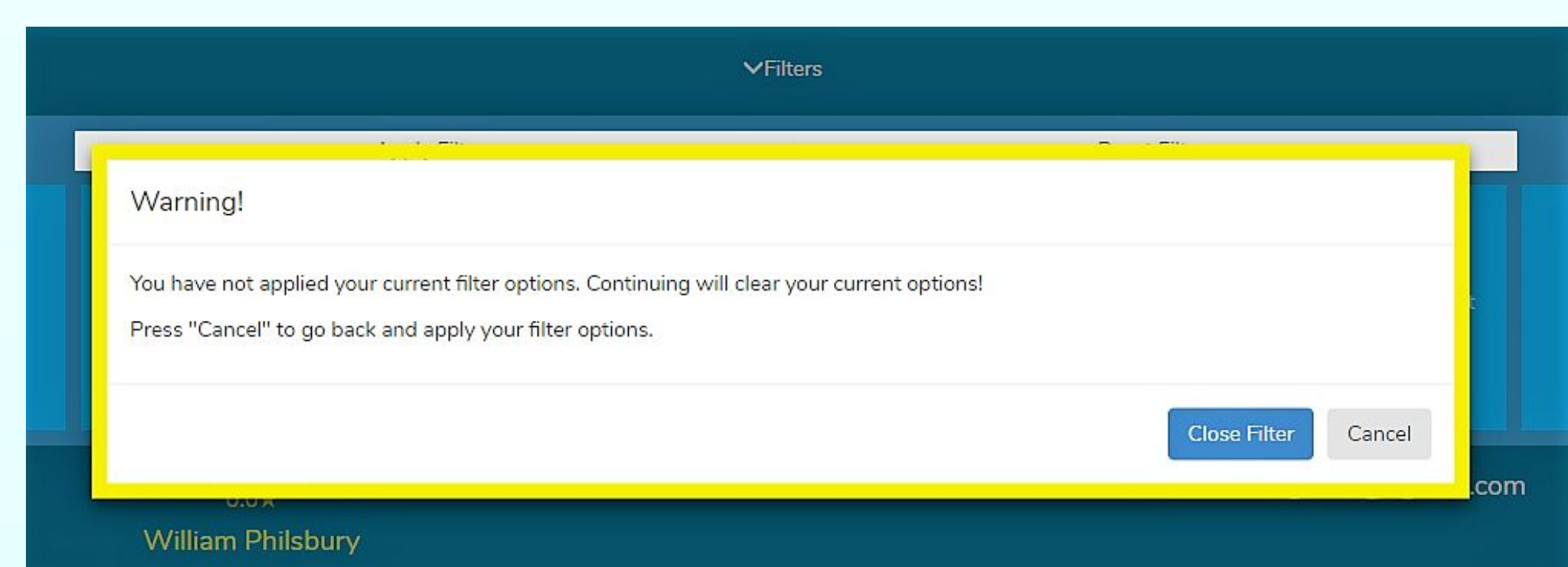


Fig 3. Warning to client when changes haven't been applied

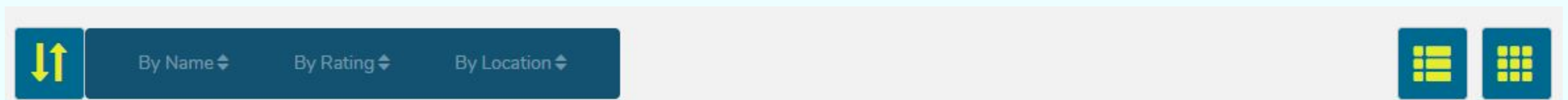


Fig 4. Sort panel expanded



Fig 5. Sort panel option selection

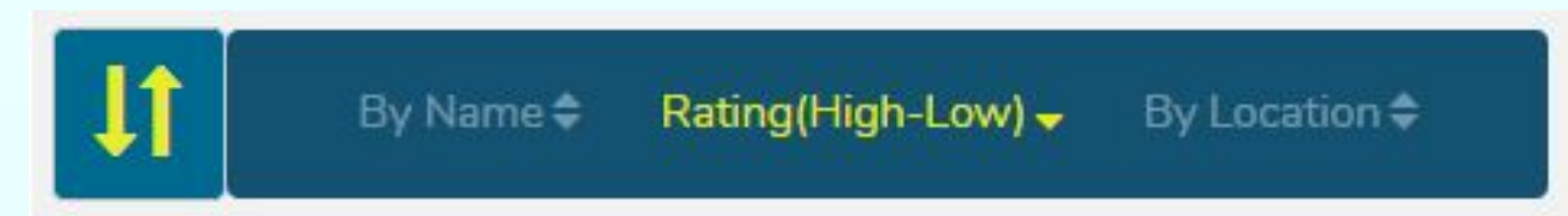


Fig 6. Sort panel option selection



Fig 7. Sort panel option selection

Requirements

- The filter must allow a user to narrow agent data according to selected options
- The filter must be intuitive and unambiguous in its representation
- The filter must watch for any changes between its current and previous state
- The filter must warn a client if an attempt is made to close without applying the selected changes
- Sorting should sort the agent data according selected options

Object Design

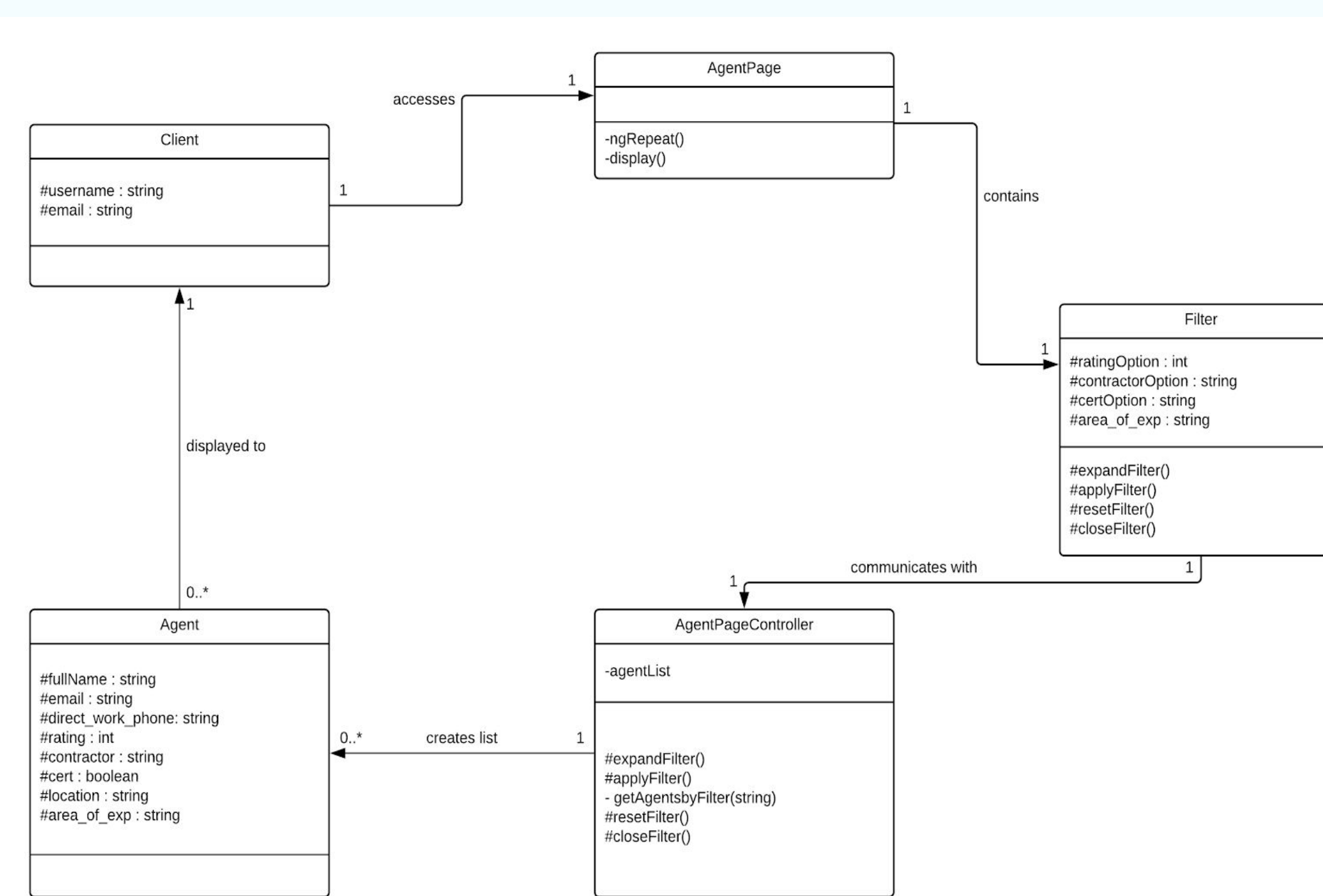


Fig 8. Filter Class Diagram

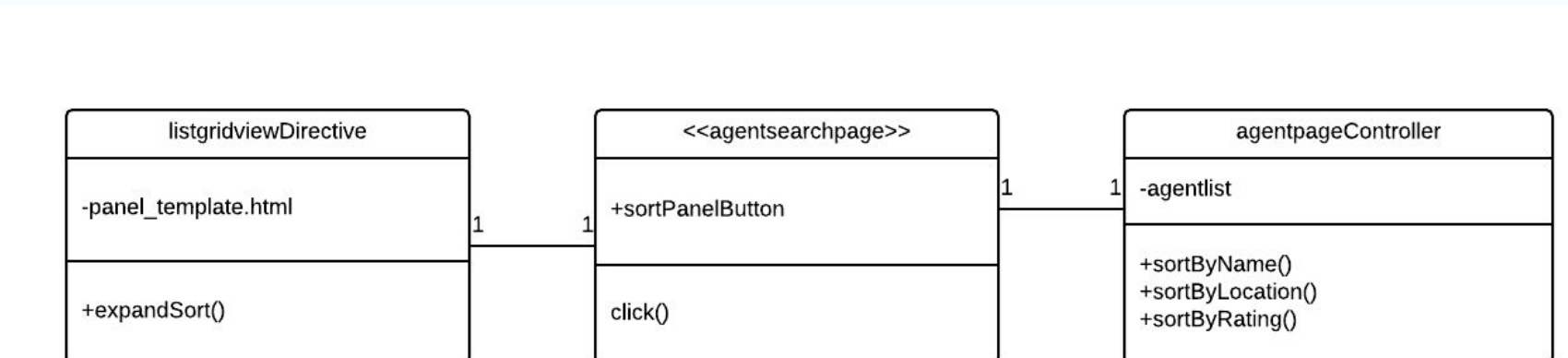


Fig 9. Sort Class Diagram

Verification

- Automated Unit Tests were carried out through the use of the Selenium WebDriver
- Integration Test: ensured that the filter and sort adjusted the agent data accordingly



System Design and Implementation

- **Frontend:** AngularJS, HTML, SCSS, Bootstrap Toolkit
- **Backend:** Django REST Framework, Python, Phoenix, Elixir
- **Database:** PostgreSQL
- **OS:** Linux, Windows
- **Version Control:** Git, Gogs

Summary

- Registered clients are now able to view agents
- Clients are now able to filter through agents
- Clients are now able to sort agents

Acknowledgement

The material presented in this poster is based upon the work supported by Dr. Masoud Sadjadi. I am thankful to the help that I received from my group members of the Chat System team, Luis Averhoff and Tariq Juman.