

## Team 4 Refactoring History

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### Bug 1

- **Description:** Empty string in the name search box for movie search
- **Solution:** Added a check to the name search box to display an error message if empty.
- **Status:** FIXED
- **Related Classes:** Dashboard.java, SearchPanel.java, MovieService.java

### Bug 2

- **Description:** Unmatched search criteria returns empty movie results panel
- **Solution:** Added a check in `BrowseMovieUI.displaySearchResults(searchParam)` to inform the user of no matches.
- **Status:** FIXED
- **Related Classes:** Dashboard.java, BrowseMovieUI.java, SearchPanel.java

### Bug 3

- **Description:** Search by genre not working correctly
- **Solution:** Fixed the prepared statement in `MovieService.getMovies(params)` to match genres correctly.
- **Status:** FIXED

- **Related Classes:** Dashboard.java, BrowseMovieUI.java, MovieService.java

#### Bug 4

- **Description:** Movie Genre not included in movie details window
- **Solution:** Added genreLabel as an attribute in MovieUI class.
- **Status:** FIXED
- **Related Classes:** MovieUI.java, MovieService.java

#### Code Smell 1

- **Description:** Hard-Coded Logic - The recommendation logic is somewhat rigid, making it difficult to adjust factors like the number of recommendations or the weight of genres and ratings without modifying the code.
- **Recommendation:** Consider implementing a more flexible recommendation engine that can adapt to various factors dynamically. Using machine learning models, even simple ones, can significantly enhance recommendation relevance and personalization.
- **Status:** Open

#### Code Smell 2:

- **Description:** The addFriendButton and removeFriendButton action listeners have similar logic for adding/removing friends. This can be extracted into a common method to reduce duplication. Additionally, the constructor FriendsPanel and updateFriendsList method are quite lengthy and could be split into smaller, more

manageable methods. The FriendsPanel class handles multiple responsibilities including UI management, user interactions, and data retrieval. It could be split into smaller classes.

- **Recommendation:**

- Extract common logic for adding/removing friends into a shared method to reduce duplication.
- Refactor the constructor and updateFriendsList method into smaller, more manageable methods.
- Consider splitting the FriendsPanel class into smaller classes to handle specific responsibilities.

- **Status:** Open