Comprehensive Testing Plan for AMDb App (Version 5.3)

1. Introduction
- **Objective**: Ensure that AMDb app version 5.3 functions correctly across all supported desktop platforms.
- **Scope**: Functional, performance, security, usability, and cross-platform compatibility testing.

2. Test Items
- **Standalone Executables**: Windows, macOS, and Linux installers.
- **Application Features**:
    - Movie search functionality
    - Movie details page
    - User reviews and ratings
    - Watchlist management
    - Admin panel (for adding/editing movies)
    - API key handling and encryption
    - Configurations via `config.ini`

3. Features to be Tested
- Installation and setup on each OS
- Search capabilities
- Filtering and sorting movies
- UI elements and their responsiveness
- API interactions and data integrity
- Configuration file handling and encryption verification

4. Test Types
- **Functional Testing**: Verify all features work as intended.
- **Performance Testing**: Ensure the app performs well under various conditions.
- **Security Testing**: Check for vulnerabilities, especially related to the encrypted API key.
- **Usability Testing**: Ensure the app is user-friendly.
- **Cross-Platform Testing**: Verify compatibility on different desktop OS.

5. Test Approach
- **Manual Testing**: For detailed and specific test cases.
- **Automated Testing**: For repetitive and regression tests.

6. Test Environment
- **Operating Systems**: Windows 10, macOS, Linux (Ubuntu)

7. Deliverables
- Test Plan Document
- Test Cases
- Bug Reports
- Test Summary Report

8. Schedule

- Draft Test Plan: Day 1
- Develop Test Cases: Day 2-3
- Setup Test Environments: Day 2-3
- Execute Tests: Day 4-7
- Report Findings: Day 8

9. Resources

- **Tools**: Selenium, JIRA, Postman
- **Team Members**: QA Lead, QA Engineers, Developers

10. Risks and Contingencies

- **Risk**: Delays in setting up test environments.
- **Mitigation**: Have backup environments and tools ready.

11. Approval

- **Sign-off by**: QA Lead, Project Manager

Detailed Test Cases

1. Installation Testing

- **Windows**: Verify the installer runs, installs the app, creates shortcuts, and the app launches successfully.
- **macOS**: Verify the .dmg file installs the app, the app is placed in the Applications folder, and launches correctly.
- **Linux**: Verify the installer script runs, installs the app, and the app launches correctly.

2. Functional Testing

- **Movie Search**: Verify search functionality with various search terms.
- **Movie Details**: Verify movie details are displayed correctly, including metadata and images.
- **Reviews and Ratings**: Verify adding, editing, and deleting user reviews and ratings.
- **Watchlist Management**: Verify adding and removing movies from the watchlist.
- **Admin Panel**: Verify adding, editing, and deleting movies via the admin panel.

3. Configuration Testing

- **config.ini Handling**: Verify that the application reads from and writes to the `config.ini` file correctly.
- **API Key Encryption**: Ensure the API key is encrypted in the `config.ini` file and the app can decrypt and use it.

4. Performance Testing

- Verify app performance with large movie libraries.
- Test the response time of search and filtering functionalities.

5. Security Testing

- Ensure the encrypted API key in the `config.ini` file is secure and cannot be easily decrypted by unauthorized users.

6. Usability Testing

- Evaluate the app's user interface for ease of use.
- Ensure all UI elements are intuitive and accessible.

7. Cross-Platform Compatibility

- Verify that the application performs consistently across Windows, macOS, and Linux.