Project Name: Application Manager System

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Introduction

The **Application Manager System** is designed to manage job applications through a finite state machine (FSM) using different states (Review, Interview, Offer, etc.). This test plan aims to verify the correctness of transitions between states and to validate the reading and writing of application data through files.

How to Start the System:

1. Ensure all dependencies are correctly installed and that the project is imported into **Eclipse**.
2. Set the working directory to the folder containing test-files.
3. The main class to start the program is AppManagerGUI.
4. No command-line arguments are needed for this project.
5. If tests need to run individually, execute the corresponding JUnit test classes within **Eclipse**.

Instructions for Testers

1. Load **Eclipse** and ensure the working directory points to the **test-files** folder.
2. Run the main program using AppManagerGUI.
3. For individual tests, right-click the corresponding JUnit test files and select **Run as JUnit Test**.
4. Verify results by comparing actual and expected output files in the **test-files** folder.
5. Ensure that exception messages are displayed as described in the expected results.

Test Files

The following test files are needed for testing the system:

1. **test-files/app1.txt** - Valid application data
2. **test-files/app9.txt** - Application in invalid state
3. **test-files/exp_app_closed.txt** - Expected results for Closed state
4. **test-files/exp_app_offer.txt** - Expected results for Offer state
5. **test-files/app7.txt** - Non-existent file (testing error handling)

System Tests

Test ID	Description	Expected Results	Actual Results
T01	Preconditions: Ensure test-files/app1.txt exists with valid data 1. Run the system using AppManagerGUI. 2. Select Load Application List and choose app1.txt. 3. Verify the data is correctly loaded into the system.	All applications from app1.txt are listed without errors.	All applications from app1.txt are listed without errors.
T02	**Preconditions:** Ensure test-files/app9.txt contains an invalid state. 1. Run the system using AppManagerGUI. 2. Select **Load Application List** and choose app9.txt.	An IllegalArgumentException is thrown, displaying "Invalid state in file."	An IllegalArgumentException is thrown, displaying "Invalid state in file."

T03	**Preconditions:** Ensure test-files/exp_app_closed.txt contains expected results. 1. Create or transition an application to the Closed state. 2. Save the application list as act_app_closed.txt. 3. Compare act_app_closed.txt with exp_app_closed.txt.	The saved file matches the expected results exactly.	The saved file matches the expected results exactly.
T04	**Preconditions:** None. 1. Run the system using AppManagerGUI. 2. Select **Load Application List** and enter test-files/app7.txt.	An error message displays: "Unable to load file."	An error message displays: "Unable to load file."
T05	**Preconditions:** Ensure test-files/exp_app_offer.txt contains the correct format. 1. Transition an application to the Offer state. 2. Save the application list as act_app_offer.txt. 3. Compare act_app_offer.txt with exp_app_offer.txt.	The saved file matches the expected results exactly.	The saved file matches the expected results exactly.