**Experiment Report - 04 – test4\_RegistrationScreen**

1. **Summary Table of Errors Found**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Error ID | Line Number | Error Type | CSCR? | Self-Detected? | LLM? |
| E01 | Line 7 | Semantic | × |  | × |
| E02 | Line 20 | Semantic | √ |  | × |
| E03 | Line 36 | Logic | √ |  | √ |
| E04 | Line 43 (66) | Semantic |  | √ | √ |
| E05 | Line 55 (78) | Syntax |  | √ | √ |

Additional Errors Found by Self: 0

CSCR Rate: 67%

Self-Review Detection Rate: 100%

LLM Rate: 60%

1. **Source Code**
2. import javax.swing.\*;
3. import java.awt.\*;
4. import java.awt.event.ActionEvent;
5. import java.awt.event.ActionListener;
6. public class RegistrationScreen extends JFrame {
7. private JTextField useridField;
8. private JPasswordField passwordField;
9. private JPasswordField confirmPasswordField;
10. private AccountManager accountManager;
11. private boolean isUserRegistration = true;
12. public RegistrationScreen(AccountManager accountManager) {
13. this.accountManager = accountManager;
14. setTitle("新規会員/会社登録");
15. setSize(400, 300);
16. setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);
17. setLocationRelativeTo(null);
18. setLayout(new GridLayout(6, 1));
19. *// 会員か会社かを選択するラジオボタン*
20. JRadioButton userButton = new JRadioButton("会員", true);
21. JRadioButton companyButton = new JRadioButton("出版社");
22. ButtonGroup group = new ButtonGroup();
23. group.add(userButton);
24. group.add(companyButton);
25. JPanel typePanel = new JPanel(new FlowLayout());
26. typePanel.add(new JLabel("区分:"));
27. typePanel.add(userButton);
28. typePanel.add(companyButton);
29. add(typePanel);
30. userButton.addActionListener(e -> isUserRegistration = true);
31. companyButton.addActionListener(e -> isUserRegistration = true);
32. *// ユーザーIDラベルとフィールド*
33. JPanel userIDPanel = new JPanel(new FlowLayout());
34. userIDPanel.add(new JLabel("User ID:"));
35. userIDField = new JTextField(20);
36. userIDPanel.add(userIDField);
37. add(userIDPanel);
38. *// パスワードラベルとフィールド*
39. JPanel passwordPanel = new JPanel(new FlowLayout());
40. passwordPanel.add(new JLabel("Password:"));
41. passwordField = new JPasswordField(20);
42. passwordPanel.add(passwordField);
43. add(passwordPanel);
44. *// 確認パスワードラベルとフィールド*
45. JPanel confirmPasswordPanel = new JPanel(new FlowLayout());
46. confirmPasswordPanel.add(new JLabel("Confirm Password:"));
47. confirmPasswordField = new JPasswordField(20);
48. confirmPasswordPanel.add(confirmPasswordField);
49. add(confirmPasswordPanel);
50. *// 登録ボタン*
51. JButton registerButton = new JButton("登録");
52. registerButton.addActionListener(new ActionListener() {
53. @Override
54. public void actionPerformed(ActionEvent e) {
55. String userID = userIDField.getText();
56. String password = new String(passwordField.getPassword());
57. String confirmPassword = new String(passwordField.getPassword());
58. if (!password.equals(confirmPassword)) {
59. JOptionPane.showMessageDialog(RegistrationScreen.this, "パスワードが一致しません", "Error", JOptionPane.ERROR\_MESSAGE);
60. return;
61. }
62. if (isUserRegistration) {
63. accountManager.registerUser(userID, password);
64. } else {
65. String companyName = JOptionPane.showInputDialog("会社名を入力してください:");
66. if (companyName != null && !companyName.isEmpty()) {
67. accountManager.registerCompany(userID, password);
68. } else {
69. JOptionPane.showMessageDialog(RegistrationScreen.this, "会社名が無効です。", "Error", JOptionPane.ERROR\_MESSAGE);
70. return;
71. }
72. }
73. JOptionPane.showMessageDialog(RegistrationScreen.this, "登録が完了しました。");
74. new LoginScreen(accountManager).setVisible(true);
75. dispose();
76. }
77. });
78. add(registerButton);
79. }
80. }