

## Control Flow Testing (Clinic Search)

### Cyclomatic Complexity

$$V(G)=P+1=2+1=3$$

### Basic Paths

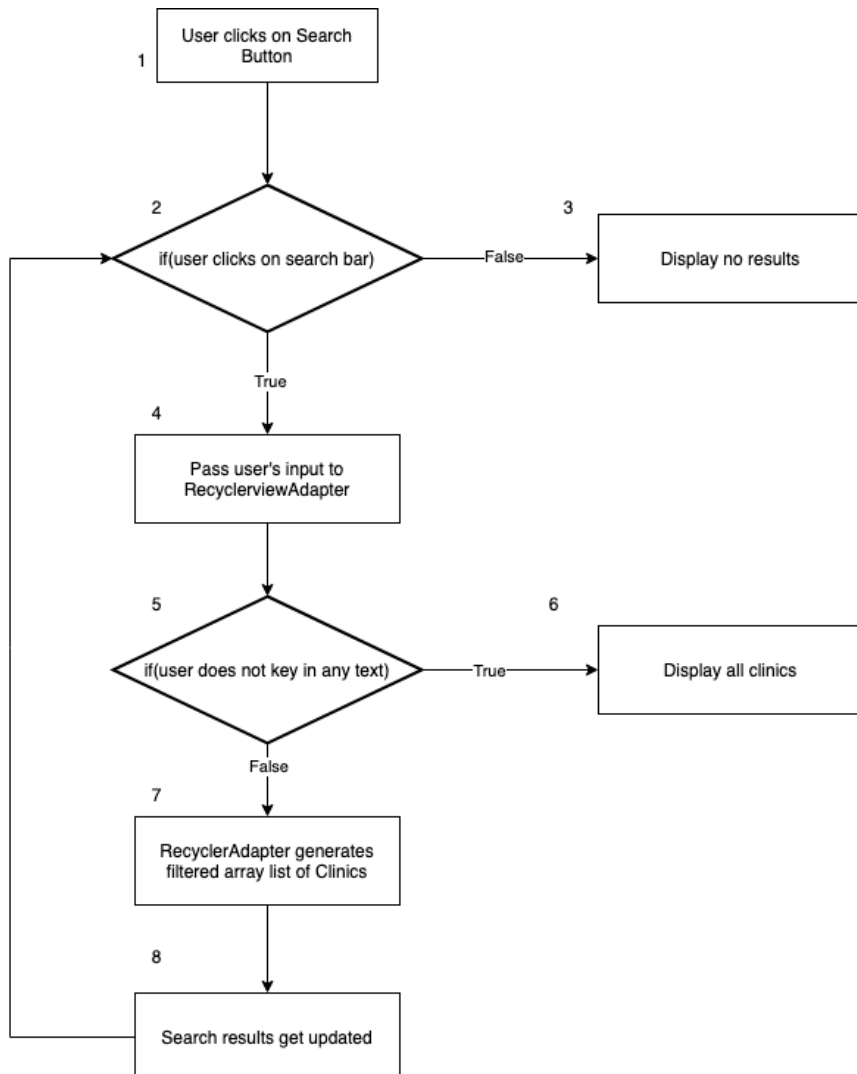
- Baseline path (Basic path 1): 1, 2, 4, 5, 7, 8
- Basic path 2: 1, 2, 3
- Basic path 3: 1, 2, 4, 5, 6

### Test Cases

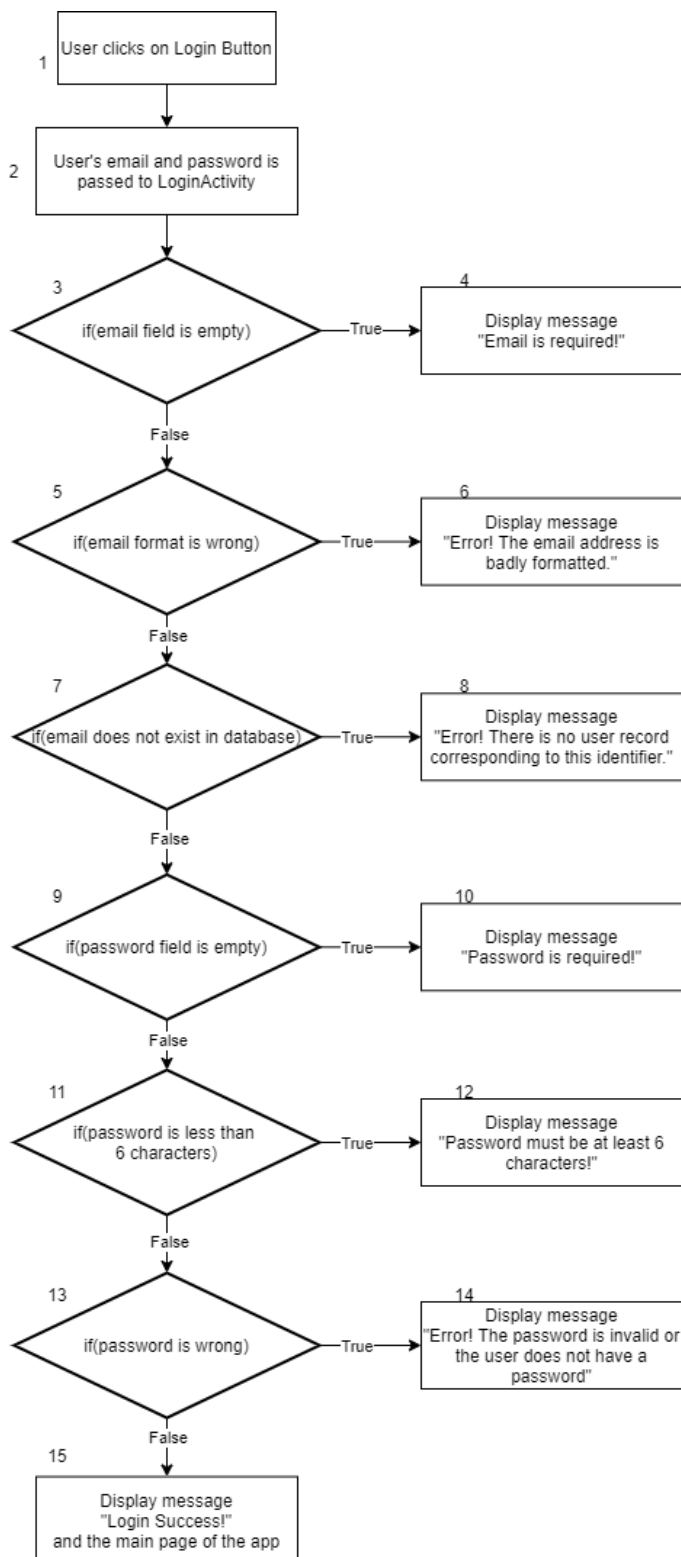
1. User does not click on search bar
2. User does not key in any text
3. User enters 'Fullerton' in search bar

### Real Execution Paths

1. 1, 2, 3
2. 1, 2, 4, 5, 6
3. 1, 2, 4, 5, 7, 8



## Control Flow Testing (User Login)



### Cyclomatic Complexity

$$V(G)=P+1=6+1=7$$

### Basic Paths

- Baseline path (Basic path 1): 1, 2, 3, 5, 7, 9, 11, 13, 15
- Basic path 2: 1, 2, 3, 4
- Basic path 3: 1, 2, 3, 5, 6
- Basic path 4: 1, 2, 3, 5, 7, 8
- Basic path 5: 1, 2, 3, 5, 7, 9, 10
- Basic path 6: 1, 2, 3, 5, 7, 9, 11, 12
- Basic path 7: 1, 2, 3, 5, 7, 9, 11, 13, 14

### Test Cases

1. User leaves the email field empty
2. User types in an email that does not follow the email format
3. User types in an email that is not in the database
4. User types in a correct email but leaves the password field empty
5. User types in a correct email and a password that is less than 6 characters
6. User types in a correct email but a wrong password
7. User types in a correct email and password

### Real Execution Paths

1. 1, 2, 3, 4
2. 1, 2, 3, 5, 6
3. 1, 2, 4, 5, 7, 8
4. 1, 2, 3, 5, 7, 9, 10
5. 1, 2, 3, 5, 7, 9, 11, 12
6. 1, 2, 3, 5, 7, 9, 11, 13, 14
7. 1, 2, 3, 5, 7, 9, 11, 13, 15