**Control Flow Test for LoginActivity()**

A close up of a map

Description automatically generated

**Cyclomatic Complexity**

Taking Cyclomatic complexity:

|decision points| + 1 = 5 + 1 = **6**

**Basic Paths**

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

**Test Cases**

1. email = “ ” ; password: “12345678” ; wi-fi switched on
2. email = “Shearman\_chua@hotmail.com” ; password = “ ” ; wi-fi switched on
3. email = “Shearman\_chua@hotmail.com” ; password = “ 1234” ; wi-fi switched on
4. email = “Shearman\_chua@hotmail.com” ; password = “ 1234678” ; wi-fi switched off
5. email = “Shearman\_chua@hotmail.com” ; password = “ 87654321” (wrong password) ; wi-fi switched on
6. email = “Shearman\_chua@hotmail.com” ; password = “ 1234678” ; wi-fi switched on

**Real Execution Paths**

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

**Control Flow Test for Search**

A close up of a map

Description automatically generated

**Cyclomatic Complexity**

Taking Cyclomatic complexity: |decision points| + 1 = 2 + 1 = **3**

**Basic Paths**

1. Baseline path: 1, 2, 8, 10, 11
2. Basic path 2: 1, 2, 3, 4, 5, 6, 7, 2, 8, 9, 11
3. Basic path 3: 1, 2, 3, 5, 6, 7, 8, 10, 11

**Test Cases**

1. User types nothing and press enter;
2. User types “Dubai” and press enter;
3. User types “Kranji” and press enter;

**Real Execution Paths**

1. 1, 2, 8, 10, 11
2. 1, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2,8, 9, 11
3. 1, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, 2,8, 10, 11