**Test Coverage Report – Daily Earn Feature**

**1. Functional Coverage**

The test cases I designed cover the **core functionality** of the Daily Earn feature:

* **Search Functionality**
  + ✅ TC-01 Valid search
  + ✅ TC-02 No results found
  + ✅ TC-03 Invalid characters
  + ✅ TC-04 Long input strings
  + ✅ TC-09 Performance response time
  + ✅ TC-10 Network timeout handling
* **Brand Selection & Action**
  + ✅ TC-05 Selecting a brand from search results
  + ✅ TC-06 Completing the Daily Earn action
* **Reward & Wallet Validation**
  + ✅ TC-07 Verifying reward allocation
  + ✅ TC-11 UI feedback (confirmation, coin updates)
* **Brand Management**
  + ✅ TC-08 Viewing completed brand in *My Brands* (via My DataHub)

**2. User Experience (UX) Coverage**

* Error handling: Covered in TC-02, TC-03, TC-04.
* UI clarity: Covered in TC-11 (notifications & updates).
* Performance: TC-09 ensures user doesn’t wait too long.
* Navigation: TC-08 validates brand visibility after action.

**3. Gaps & Missing Coverage**

Although My test cases cover the **happy path and key negatives**, there are **gaps** you should consider:

1. **Duplicate Reward Handling (Not covered)**
   * What happens if the user tries the Daily Earn action twice in a day?
   * Suggest adding a **TC: Duplicate Action Attempt**.
2. **Cross-Browser/Device Testing (Not covered)**
   * No case for checking on different browsers (Chrome, Edge, Firefox) or mobile.
   * Suggest adding **compatibility test cases**.
3. **Accessibility Checks (Not covered)**
   * No test for accessibility (screen readers, ARIA labels, keyboard-only navigation).
4. **Load/Stress Testing (Not covered)**
   * Performance tested for single user, but not under heavy load.
   * Suggest adding **load scenarios** (e.g., 100+ concurrent searches).
5. **Security Edge Cases (Not covered)**
   * SQL injection / XSS not tested (e.g., entering <script> in search).

**4. Potential Risks**

* **Reward Sync Delay:** Coins may not reflect immediately in wallet.
* **UI Dependency:** If UI fails, users can’t confirm reward despite DB update.
* **Network Handling:** Timeout covered, but partial failures (e.g., action completes but confirmation fails) are not covered.

**5. Suggestions**

✅ Add **Database Validation Strategy**:

* Ensure user\_id, brand\_id, reward\_amount, and timestamp are recorded correctly.
* Check points\_balance increments properly.

✅ Add **Duplicate Action Test Case**: Prevent double rewards.

✅ Add **Negative Security Test Cases**: SQL injection & script tags in search.

✅ Add **Accessibility/Usability Checks**: Font scaling, screen readers, contrast.

✅ Add **Regression Suite**: Cover impact if Daily Earn fails (wallet, My Brands).