

## **TM910 : Browse Restaurant Menus (Use Case)**

**Actors:** Visitor, Registered User, MenuMap System

**Description:** A user searches for restaurants by location/cuisine/name and views a restaurant's menu with item details (description, price, dietary tags).

**Priority:** High

**Complexity:** Medium

**Stakeholders & Interests:**

- **Users:** Want fast, accurate results and readable menus.
- **Restaurant Owners:** Want accurate, up-to-date menu visibility.

**Trigger:** User opens search and enters a query or uses filters.

**Preconditions:**

- System is available and connected to the menu database.
- At least one restaurant with menu items exists for the queried area.

**Main Success Scenario:**

1. User enters a search term and/or applies filters (location, cuisine, price, dietary).
2. System returns a ranked list of restaurants with basic info (name, rating, distance).
3. User selects a restaurant.
4. System displays the full menu with categories and items.

5. User expands an item to see details (description, price, tags, allergens).
6. User optionally switches categories or opens another restaurant.

**Extensions / Exceptions:**

- 2a. **No results:** System shows “no restaurants found” and suggests nearby areas/alternative filters.
- 4a. **Partial data:** System flags missing/uncertain data and offers “Report issue.”
- 5a. **Slow network:** System shows loading states and cached results when available.

**Postconditions:**

- User has viewed at least one menu; relevant views may be cached for performance.

**Non-Functional Requirements (NFRs):**

- **Performance:** Search results in  $\leq 2s$  P95; menu load in  $\leq 3s$  P95.
- **Usability:** Clear categories; accessible labels (WCAG 2.1 AA).
- **Availability:** 99.9% monthly uptime.
- **Security:** Read-only views do not expose sensitive data; rate limiting on search.