Requirements elicitation

1 Stakeholders & Needs

1.1 Stakeholder map

- **Direct:**

    - **Visitor (Unregistered user):** browses and searches vendor listings.
    - **Customer (Registered user):** saves favorite vendors and sends contact requests.
    - **Vendor:** creates and updates listings; manages their own business profile.
    - **Admin/Moderator:** approves listings, manages categories, and handles reports.

- **Indirect:**

    - **Local Community/Associations:** want accurate and up-to-date local offers.
    - **Search Engines:** need clear, structured website content.
    - **City Partners:** want overall statistics and summaries.

- **External:**

    - **Email Services:** sends account verification and contact messages.
    - **Login System:** manages user authentication and passwords.
    - **Analytics Tool:** tracks how many people visit or use the platform.

- **Hidden:**

    - **Users with Disabilities:** need an accessible and easy-to-use interface.
    - **Privacy and Security Staff:** ensure the website follows data protection laws.
    - **Content Moderators:** protect against spam and innappropriate listings.

1.2 Key Needs/Goals

- **Visitor:**

    - Find vendors quickly by category, location, and filters.
    - View clear, trustworthy listing info (hours, photos, contact).
    - Compare options and save or share listings.
    - Contact vendors easily.
    - Browse on mobile smoothly.

- **Customer (Registered):**

    - Create an account and manage profile.
    - Save favorites vendors and view them later.

– Send and track messages sent to vendors.

– Receive notification emails when vendors reply.

- **Vendor:**

  – Register and confirm their business details.

  – Create and edit listings with photos, descriptions, and opening hours.

  – See basic statistics such as number of views or messages.

  – Receive and reply to messages from potential customers.

  – Manage several listings if they own multiple businesses.

- **Admin/Moderator:**

  – Approve or reject new or updated listings.

  – Manage all categories and tags.

  – Handle reports or inappropriate content.

  – View basic statistics about activity on the site.

- **General (applies to all users):**

  – Fast and reliable website.

  – Secure logins and protection of personal data.

  – Accessible to people with disabilities.

  – Works well on all devices (desktop and mobile).

  – Clear and easy navigation for users.

2 User Stories

2.1 Visitor

1. **Browse by category:**

   - **Story:** As a Visitor, I want to browse vendors by category so that I can discover relevant businesses.
   - **Acceptance Criteria:**
     – **Given:** I'm on the home page **when** I click a category **then** I see a list of active vendors in that category.
     – **And** the list shows name, rating, location, and a "View details" option.

2. **Keyword search + filters:**

   - **Story:** As a Visitor, I want to search by keywords and refine with filters (category, location, open now) so that I can narrow results.
   - **Acceptance Criteria:**
     – **Given:** I search "plumber" and set location "Esch" **then** results include vendors whose title/description/tags match and are in "Esch.
     – Clearing filters resets the result set.

3. **View listing details:**

- **Story:** As a Visitor, I want to view a vendor's details so that I can decide to contact them.
- **Acceptance Criteria:**
  - Details include description, services, hours, contact, photos, and category tags.
  - If listing is pending or inactive, it's not publicly visible.

2.2 Customer (Registered)

1. **Create account & sign in:**

   - **Story:** As a Customer, I want to register and sign in so that I can save vendors and send inquiries.
   - **Acceptance Criteria:**
     - Email verification is required.
     - Password reset is available via email.

2. **Favorite vendors:**

   - **Story:** As a Customer, I want to add/remove vendors to favorites so that I can revisit them quickly.
   - **Acceptance Criteria:**
     - **Given:** I'm signed in **when** I click "Favorite" **then** the vendor appears in my Favorites list; clicking again removes it.

3. **Send inquiry & track:**

   - **Story:** As a Customer, I want to send an inquiry to a vendor and see my inquiry history so that I can follow up.
   - **Acceptance Criteria:**
     - Inquiry form validates required fields and rate-limits spam.
     - Confirmation email is sent; inquiry appears in "My inquiries" with timestamp.

2.3 Vendor

1. **Vendor registration & verification:**

   - **Story:** As a Vendor, I want to register my business and verify ownership so that I can publish listings.
   - **Acceptance Criteria:**
     - Vendor profile requires business name, email, and category; email verification required.
     - Unverified vendors cannot publish.

2. **Create listing (draft → submitted):**

   - **Story:** As a Vendor, I want to create a listing with photos, services, and hours so that customers can find me.
   - **Acceptance Criteria:**
     - Required fields validated (title, category, city, description, contact).
     - Status flows: **Draft → Submitted → Approved/Rejected**.
     - On submit, Admin gets a moderation queue item.

3. **Respond to inquiries:**

   - **Story:** As a Vendor, I want to receive inquiries by email and reply from my dashboard so that I don't miss leads.
   - **Acceptance Criteria:**
     - Email notification on new inquiry; dashboard shows inquiry thread; replying sends an email to the inquirer.

4. **Basic analytics:**

   - **Story:** As a Vendor, I want to view listing views and inquiry counts so that I can measure interest.
   - **Acceptance Criteria:**
     - Dashboard shows last 30 days views and total inquiries per listing.

2.4 Admin/Moderator

1. **Moderate listings:**

   - **Story:** As an Admin, I want a moderation queue to approve/reject submitted listings so that public content stays clean.
   - **Acceptance Criteria:**
     - Approve sets status to Active; Reject requires reason (email sent to vendor).
     - Audit log records moderator, action, timestamp.

2. **Manage categories & tags:**

   - **Story:** As an Admin, I want to create/edit/retire categories and tags so that taxonomy stays consistent.
   - **Acceptance Criteria:**
     - Only Admin can create/retire categories; retired categories cannot be assigned to new listings.

3. **Handle reports:**

   - **Story:** As an Admin, I want to review abuse reports and disable listings/users if necessary so that the platform remains safe.
   - **Acceptance Criteria:**
     - A "Report" button on listing details creates a ticket; Admin can mark resolved or block listing/user.

3 Initial Requirements List

3.1 Functional Requirements (derived from stories)

- **FR1:** Search across title/description/tags with filters (category, city, "open now").

- **FR2:** Public listing page with essential details (title, description, hours, contact, photos).

- **FR3:** User registration, email verification, sign-in, password reset.

- **FR4:** Favorites (add/remove/list) for signed-in users.

- **FR5:** Users can send and receive contact messages between customers and vendors.

- **FR6:** Vendors can create and edit listings, view statistics, and manage messages.

- **FR7:** Admins can approve or reject listings and see the history of actions.

- **FR8:** Admins can add, view, edit, or remove categories and tags.

- **FR9:** Users can report problems or inappropriate content, and admins can review and solve them.

3.2 Non-Functional Requirements

- **NFR1 Performance:** The website should load search results in under 1 second for most users.

- **NFR2 Security:** Passwords must be safely stored, and only authorized users can access certain areas.

- **NFR3 Privacy:** The system must follow privacy laws. Users can request deletion or export of their data.

- **NFR4 Availability:** The website should be available most of the time and handle errors without crashing.

- **NFR5 Accessibility:** The interface must be usable by people with disabilities.

- **NFR6 Usability:** The layout should adapt to all devices and remain clear and simple.

- **NFR7 Visibility:** The website should be easy to find through search engines with clean page titles and URLs.

3.3 Assumptions

- There will be no online payments.

- City name is used instead of full addresses.

- Customer reviews or ratings may be added in a later version.

4 Backlog Planning

4.1 Epics

- **E1 Auth & Accounts** (FR3)

- **E2 Listings & Vendor Dashboard** (FR2, FR6)

- **E3 Search & Filters** (FR1)

- **E4 Messages & Notifications** (FR5)

- **E5 Admin & Moderation** (FR7, FR8, FR9)

- **E6 Foundation (DevOps/Quality)** - repository, project setup

4.2 Product Backlog

ID	User Story	Epic	MoSCoW	Acceptance Test
S1	Register, verify email, sign in	E1	Must	Can create account, receive verification email, login, reset password
S2	Create vendor listing (draft→submit)	E2	Must	Required fields validated, status changes recorded
S3	Public listing view	E2	Must	Listing page shows required fields; hidden if not Active
S4	Keyword search + filters	E3	Must	Search returns relevant results; filters combine; clear resets
S5	Send message + email	E4	Must	Messages delivered, confirmation email, recorded in history
S6	Favorites (add/remove/list)	E1	Should	Favorite toggles, list shows saved vendors
S7	Admin moderation queue	E5	Must	Submitted listings appear; approve/reject with reason; audit log
S8	Manage categories/tags	E5	Should	Admin can CRUD; retired not assignable
S9	Abuse report	E5	Could	Report button logs ticket; admin can resolve
S10	Basic analytics (views/inquiries)	E2	Could	Vendor dashboard shows counts last 30 days
FND1	Repo + Project setup	E6	Must	GitHub repo with actions