Team Assignment - Use Cases

ICT 4305: Object Oriented Methods and Programming

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Faculty: Nirav Shah, M.S , MBA Director: Cathie Wilson, M.S. Dean: Michael J. McGuire, MLS **Use Case: Vendor Interaction and Management Software**

Use Case Overview

The shopkeeper uses the system to manage vendor information, track communications,

and assess vendor responsiveness for better decision-making.

Subject Area

Vendor Interaction and Management.

Actor(s)

• Primary Actor: Shopkeeper

• Secondary Actor: Vendor

Trigger

The shopkeeper needs to create, update, or access vendor information, record

interactions, search vendor records, or generate reports.

Goal

The goal of this software is to allow the shopkeeper to quickly and efficiently manage vendor information, track communications, and then further assess vendor responsiveness for overall better decision making.

Preconditions

- The shopkeeper is authenticated in the system.
- The vendor information is either in the database or can be added within the database.

Basic Flow (Main Success Scenario)

- 1. The shopkeeper creates or updates a vendor profile.
 - Fields: Name of vendor, company name, address, phone number, name of representative, category.
 - b. The system validates required fields before saving.
 - c. Version history option for updating existing records.
 - d. This interaction ensures that vendor data is accurate and complete for the shopkeeper's knowledge.

- 2. The shopkeeper records vendor interactions.
 - a. Input: Date, Interaction type (i.e. meeting, call, email, etc.), notes, and responsiveness rating (1-5).
 - b. The system links interactions to vendor profiles.
 - c. Mandatory fields (i.e. date) must be present.
 - d. The system timestamps entry and saves it to the vendor's history.
 - e. This interaction supports performance tracking and historical analysis.
- 3. The shopkeeper accesses a vendor profile.
 - a. The shopkeeper logs in and selects a vendor from the list.
 - b. The system displays the vendor's name, address, phone number, and representative details.
 - c. This interaction allows the shopkeeper to reexamine vendor profiles.
- 4. The shopkeeper searches and retrieves vendor records.
 - a. The shopkeeper can search for vendors based on their name, category,
 response rate, or date range.
 - b. The system displays a list view with filters and sorting options.
 - c. Vendor profile and interaction history available on record selection.
 - d. This interaction provides fast access to vendor history for seamless decision making.

- 5. The shopkeeper generates a vendor performance report.
 - The system produces a summary by vendor: total interactions, average responsiveness, and last interaction date.
 - There are multiple export options. This includes PDF format, as well as Excel.
 - c. This interaction allows reports to be viewed, downloaded, or exported as the shopkeeper sees fit.

Alternative Flows

- Missing Contact Info: The system prompts the user to fill out the required fields before saving.
- Duplicate Records: The system notifies the shopkeeper and offers to merge duplicate entries/records or cancel one of them to avoid redundancy.
- Invalid Data: The system displays an error message when invalid data is input into entry fields.

Postconditions

- The database stores vendor records and interactions securely.
- The reports reflect the most recent and accurate vendor data available.

 The shopkeeper has a clearer picture of vendor reliability and responsiveness, as well as an improved ability to plan future interactions and prioritize reliable vendors.

Business Rules

- Vendor profiles must have all required fields completed.
- Interactions are always linked to a vendor profile.
- Reports can only be generated from existing stored data.