Task 4 – Requirements Elicitation Plan Using the Kano Model



**Project**

CSE6224 Software Requirement Engineering   
Term 2510

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| **Tutorial Section** | TT2L |
| **Group** | Group E |
| **Project Title** | Campus Ride-Sharing Platform with  Parking System Integration |

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## **1.0 Elicitation Plan Using the Kano Model**

To guide the development of MMU Rides, we implemented an elicitation plan that blends user insight with feature prioritization using the **Kano Model**. This approach combined three techniques, **observation**, **questionnaires**, and **prototyping**, to uncover user needs and determine how each feature contributes to user satisfaction.

The process began with **observation** and **prototyping** to generate a broad set of potential system features. Then, a **questionnaire** was deployed to campus users to gather their input and categorize features based on how they influence user satisfaction.

## **1.1 Technique Overview**

* **Questionnaire**  
  Designed to collect user feedback on desired features and expectations.  
  Responses were analyzed using the **Kano Model**, classifying features as:
  + ***Dissatisfiers*** – Essential features that users take for granted.
  + ***Satisfiers*** – Features that directly increase user satisfaction.
  + ***Delighters*** – Unexpected features that positively surprise users.
* **Observation**  
  Involved studying established ride-sharing platforms like **Kummute** and **BlaBlaCar**.  
  Insights were drawn from their design choices, functionality, and user interactions to inspire our feature set.
* **Prototyping**  
  Created early mock-ups of the system to visualize how key features would work.  
  This allowed stakeholders to interact with the design and validate or refine the proposed requirements.

## **2.0 Justification on Selected Techniques**

**Observation**

* Studied popular ride-sharing apps: **Kummute** and **BlaBlaCar**.
* Aimed to identify common features, UI designs, and user flows.
* Chosen to gain practical insights from real-world applications.
* Helped establish a baseline for essential and user-friendly features.

**Prototyping**

* Created low-fidelity prototypes to simulate key system features.
* Allowed stakeholders to interact with early versions of the system.
* Chosen to clarify system requirements and gather early feedback.
* Enabled visual validation of features before development.

**Questionnaire**

* Distributed to campus users with structured question pairs.
* Incorporated functional and dysfunctional questions for each feature.
* Chosen for its ability to capture user expectations and emotional responses.
* Used the **Kano Model** to classify features into:
  + **Dissatisfiers**
  + **Satisfiers**
  + **Delighters**

## **3.0 Questionnaire Design Plan Using Kano Model**

**3.1 Question Structure**

For each of the 10 proposed features, we asked respondents a pair of questions:

* **Functional question**: “If this feature is available, how do you feel?”
* **Dysfunctional question**: “If this feature is not available, how do you feel?”

This format follows the Kano Model and helps us capture emotional responses to both the presence and absence of each feature.

**3.2 Response Options**

Each question used the following standardized responses:

* **I expect it** – This feature is essential.
* **I like it** – I would be happy or excited if this feature exists.
* **I am neutral** – I feel indifferent.
* **I can tolerate it** – I can accept its absence.
* **I dislike it** – I would be disappointed or frustrated.

**3.3 Response Interpretation**

Responses were analyzed using Kano’s classification rules:

A screenshot of a diagram

AI-generated content may be incorrect.

**4.0 Feature Analysis Summary**

| **Feature** | **Functional Response** | **Dysfunctional Response** | **Kano Category** |
| --- | --- | --- | --- |
| **MMU Login & Digital ID** | I like it | I dislike it | Satisfier |
| **Ride Offer & Request** | I expect it | I dislike it | Dissatisfier |
| **Manual Ride Matching** | I like it | I dislike it | Satisfier |
| **Real-Time Parking Availability** | I like it | I expect it | Delighter |
| **Reward Points & Leaderboard** | I like it | I expect it | Delighter |
| **Push Notifications & Messaging** | I like it | I dislike it | Satisfier |
| **Ride History Tracking** | I like it | I dislike it | Satisfier |
| **Safety & Emergency Tools** | I expect it | I dislike it | Dissatisfier |
| **User Rating & Feedback** | I like it | I dislike it | Satisfier |
| **Transparent User Profiles** | I expect it | I dislike it | Dissatisfier |

**4.1 Open Feedback**

An additional open-ended question invited users to suggest improvements or features. These qualitative insights supported further refinement of the system.