**TT2L\_GX Requirements Elicitation Plan Using the Kano Model**

**1. Introduction to the Kano Model Approach**

For our Campus Ride-Sharing Platform with Parking System Integration project, we have chosen to implement the Kano Model for requirements elicitation and categorization. This model will help us prioritize features by understanding their impact on user satisfaction.

**Justification for Using the Kano Model**

The Kano Model is particularly suitable for our ride-sharing platform for the following reasons:

1. **Multiple Stakeholder Groups**: Our project serves diverse user groups (students, faculty, staff) with potentially different needs and expectations. The Kano Model helps identify which features are universally needed versus those valued by specific user segments.
2. **Resource Optimization**: With limited development resources, we need to prioritize features that will provide maximum value. The Kano Model helps identify which features are essential (dissatisfiers) versus those that are value-added (satisfiers) or innovative (delighters).
3. **Novelty of the Application**: As a new platform, understanding which innovative features will truly delight users versus those that may go unnoticed is critical for adoption.
4. **Integration Complexity**: The integration with parking systems adds complexity, and the Kano Model will help determine which integration points are essential versus nice-to-have.

**2. Kano Requirement Categories**

We will classify all requirements into the following Kano Model categories:

**Dissatisfiers (Must-have/Basic Features)**

These are requirements that users expect to be present. Their absence will cause dissatisfaction, but their presence doesn't significantly increase satisfaction.

**Satisfiers (Performance Features)**

These requirements provide linear satisfaction — the better they are implemented, the more satisfaction they bring to users.

**Delighters (Excitement Features)**

These are unexpected features that users don't anticipate but create high satisfaction when present. Their absence doesn't cause dissatisfaction.

**Indifferent Features**

Features that users don't care much about either way.

**Reverse Features**

Features that users actually prefer not to have.

**3. Elicitation Techniques by Requirement Category**

**For Dissatisfiers (Must-have/Basic Features)**

**Techniques:**

1. **Document Review**
   * Review existing transportation policies and parking system documentation
   * Analyze user complaints about current transportation systems
2. **Contextual Inquiry**
   * Shadow users during their commute process
   * Observe parking lot usage patterns during peak hours
3. **Structured Interviews**
   * Interview campus transportation managers
   * Interview campus security personnel
   * Interview parking enforcement staff

**Example Questions:**

* "What are the minimum features you would expect from a campus ride-sharing app?"
* "What would make you immediately reject using the ride-sharing platform?"
* "What essential information do you need before agreeing to share a ride?"

**For Satisfiers (Performance Features)**

**Techniques:**

1. **Surveys**
   * Campus-wide survey on transportation preferences
   * Targeted surveys for frequent commuters
2. **Focus Groups**
   * Session with student commuters from different residential areas
   * Session with faculty/staff with varying schedules

**Example Questions:**

* "How important is seeing real-time parking availability on a scale of 1-5?"
* "Would you be more likely to use the platform if it showed you how much CO2 you've saved?"
* "What factors would make you choose one ride over another?"

**For Delighters (Excitement Features)**

**Techniques:**

1. **Brainstorming Sessions**
   * Creative ideation workshop with diverse user representatives
   * "Blue sky" feature brainstorming with technical team
2. **Analogous Application Analysis**
   * Review highly-rated features from commercial ride-sharing apps
   * Analyze innovative features from other university transportation systems

**Example Questions:**

* "What feature would make you enthusiastically recommend this app to friends?"
* "What would make this platform different from existing ride-sharing apps?"
* "If this platform could solve one unexpected problem for you, what would it be?"

**4. Kano Questionnaire Design**

For each potential feature, we will ask paired functional/dysfunctional questions:

**Functional Question:** "How would you feel if the ride-sharing platform had [feature X]?"  
**Dysfunctional Question:** "How would you feel if the ride-sharing platform did not have [feature X]?"

Response options for both questions:

1. I like it that way
2. I expect it to be that way
3. I am neutral
4. I can live with it that way
5. I dislike it that way

Based on the combination of answers, each feature will be classified according to the Kano evaluation table.

**5. Implementation Plan**

**Phase 1: Preparatory Work (Week 1-2)**

* Develop stakeholder list and recruitment strategy
* Create survey instruments and interview protocols
* Schedule interviews and focus groups
* Prepare Kano questionnaires

**Phase 2: Execution of Elicitation Activities (Week 3-5)**

* Week 3: Conduct interviews and document reviews (focus on dissatisfiers)
* Week 4: Run surveys and focus groups (focus on satisfiers)
* Week 5: Facilitate brainstorming and scenario workshops (focus on delighters)

**Phase 3: Analysis and Categorization (Week 6-7)**

* Week 6: Analyze all data collected
* Week 7: Categorize requirements using Kano model
* Prepare prioritization matrix

**Participant Sampling Strategy**

We will ensure representation from:

* Different user categories (students, faculty, staff)
* Various commute distances and locations
* Different schedules (morning/afternoon/evening classes)
* Users with and without cars
* Users with different levels of technology adoption
* Accessibility needs representation

**6. Tools and Resources Required**

* **Survey Platform**: Qualtrics for online surveys
* **Collaborative Tools**: Miro for virtual workshops and brainstorming
* **Documentation**: Microsoft Word and GitHub for documentation
* **Analysis**: Excel for Kano analysis calculations
* **Meeting Spaces**: Physical rooms for in-person sessions and virtual meeting links for remote participants

**7. Validation Strategy**

To ensure the accuracy of our categorization, we will:

1. Cross-validate findings between different elicitation methods
2. Conduct follow-up sessions with select participants to verify interpretations
3. Use statistical analysis to identify consistency in Kano categorizations
4. Check for correlation between similar requirements

**8. Ethical Considerations**

* All participants will sign informed consent forms
* Data will be anonymized for reporting
* Participants can withdraw at any time
* Incentives (e.g., coffee vouchers) will be provided equally to all participants

**9. Output Format**

The final output will include:

* Complete categorized requirements list (dissatisfiers, satisfiers, delighters)
* Prioritization matrix based on Kano analysis
* Supporting evidence for each categorization
* Recommendations for implementation phasing