

CSE6224 SOFTWARE REQUIREMENT

GROUP: GROUP 1

TASK 3

PRODUCT NAME: UNICONNECT

REQUIREMENTS ELICITATION PLAN USING THE KANO MODEL

UNIVERSITY COMMUNICATION AND SERVICES PORTAL WITH CAMPUS MANAGEMENT SYSTEM AND SMS GATEWAY INTEGRATION

STUDENT NAME	STUDENT ID
NG TUAN HOM	1221101892
FOO YAU YUN	1211111966

TAN ZHE ENN	242UC2451F
NG KEAN TIONG	242UC244V5

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1 Kano Model Overview

The Kano Model is a theory for product development and customer satisfaction developed by Professor Noriaki Kano. We have selected this model because this model will help us classify University Communication and Services Portal features based on how they fulfill or exceed user expectations. We will categorize requirements into:

- **Dissatisfiers** (Must-have/Basic Requirements): Features that must be present and cause significant dissatisfaction if absent, but do not increase satisfaction when present (e.g., secure login).
- **Satisfiers** (Performance Requirements): Features where better implementation directly increases satisfaction (e.g., Teaching Evaluation, Billing History).
- **Delighters** (Excitement Requirements): Unexpected features that cause delight when present but no dissatisfaction when absent (e.g., Dashboard Widget, MUET Integration).

2 Elicitation Method 1 - Brainstorming (Brainstorming Session Plan)

2.1 Target Audience

2.1.1 Student

Key contribution: Identify communication pain points, preferred self-service features, and effective notification mechanisms

Selection criteria: Mix of undergraduate and postgraduate students from diverse faculties and years of study

Expected insights: Daily user experience challenges and opportunities for enhancement

2.1.2 Lecturers

Key contribution: Teaching workflow integration points, administrative pain points, student engagement needs

Selection criteria: Faculty members with varying technical proficiency and teaching experience

Expected insights: Academic management requirements and communication challenges

2.2 Process (Who, What, Where, When, Why, How)

Our brainstorming process integrates diverse techniques to capture stakeholder requirements efficiently. Led by NG TUAN HOM with support from FOO YAU YUN (documentation), TAN ZHE ENN (timekeeper), and NG KEAN TIONG (technical advisor), we'll employ brainstorming sessions (3 sessions) to identify

pain points and innovative solutions for the university portal. Sessions will take place at MMU Campus Computer Lab on 3 - 5 May 2025, with Microsoft Teams options for remote participants, using both digital tools and physical materials to facilitate collaborative requirement identification and Kano Model categorization.

Each brainstorming session will follow this structured approach to maximize productive input aligned with the Kano Model categories:

1. Pre-Session Preparation (1-2 days before):

- Create digital and physical materials for idea capture
- Distribute brief Kano Model explanation to participants
- Send reminder with session objectives and expectations

2. Session Execution (90-120 minutes each):

- Introduction (15 mins): Project overview, Kano Model explanation, brainstorming guidelines
- Warm-up Activity (10 mins): Quick exercise to stimulate creative thinking
- Idea Generation (30-40 mins): Guided ideation around specific requirement categories
- Clustering & Prioritization (20 mins): Organize ideas into themes and prioritize using dot voting
- Discussion & Refinement (15 mins): Group discussion of top-voted ideas
- Wrap-up (10 mins): Summary, next steps, and participant feedback

3. Post-Session Activities:

- o Transcribe and organize all captured ideas
- o Preliminary categorization according to Kano Model
- o Share session outcomes with participants for validation
- o Incorporate findings into questionnaire development

2.2.1 Session 1: Basic Requirements (Dissatisfiers)

Focus: Identifying essential features that would cause significant dissatisfaction if absent

Plan to conduct at: 7 May 2025 (MT Meeting Online)

Key Questions:

- What features do you consider absolutely necessary in a university portal?
- Which current communication processes are most frustrating or time-consuming?
- What information should always be readily accessible without requiring physical visits to offices?
- What regulatory compliance features are non-negotiable?
- Which admin functions cannot tolerate system failure?
- What minimum SMS features are expected from the gateway?

2.2.2 Session 2: Performance Requirements (Satisfiers)

Focus: Identifying features where better implementation directly correlates with higher satisfaction

Plan to conduct at: 8 May 2025 (MT Meeting Online)

Key Questions:

- What features would make daily interactions with university systems more efficient?
- How could academic processes (registration, consultation, evaluation) be improved digitally?
- How should the system handle notifications and reminders for maximum effectiveness?
- What admin tools would reduce workload?
- How can SMS be optimized for clarity and speed?
- Which policies must be digitally enforced (e.g., PDPA consent flow)?

2.2.3 Session 3: Excitement Requirements (Delighters)

Focus: Identifying unexpected features that would create delight and positive differentiation

Plan to conduct at: 9 May 2025 (MT Meeting Online)

Key Questions:

- What innovative features would make this portal stand out from typical university systems?
- If the portal could anticipate your needs, what would that look like?
- What features would make you actively want to use the system rather than just needing to?
- Would predictive analytics or smart alerts improve admin or compliance workflows?
- Could SMS logs or dashboards help with audit or transparency?
- What features would make admin/staff *want* to use the system daily?

2.3 Expected Outputs from Brainstorming

The brainstorming sessions will produce a comprehensive suite of deliverables essential for effective system development, including a categorized feature inventory organized according to Kano Model classifications, a prioritized implementation roadmap based on stakeholder voting patterns, detailed documentation of current system pain points and their potential solutions, and innovative "delighter" concepts that could differentiate our portal from standard university systems. Inputs from students, lecturers, administration, regulatory bodies, and SMS gateway providers will also contribute innovative ideas that can enhance the portal. These outcomes will guide questionnaire design and ensure development aligns with real user needs and institutional requirements.

3 Elicitation Method 2 - Observation

We planned to use the Observation elicitation method to collect real-world insights about Existing CMS System (CLIC MMU).

3.1 Existing CMS System (CLiC MMU)

3.1.1 Observation Methodology

Our observation process was designed to evaluate the strengths and limitations of MMU's current CLiC system through a hands-on walkthrough. This activity was led by NG TUAN HOM, with support from FOO YAU YUN, TAN ZHE ENN, and NG KEAN TIONG.

From 28–29 April 2025, the team explored various system features using student, lecturer, and admin accounts where available via online Microsoft Team Meeting. Modules reviewed included login, academic result viewing, attendance tracking, billing history, course registration, and announcement delivery.

Each member documented their interactions with the system, focusing on navigation flow, feature accessibility, and responsiveness. Screenshots and detailed notes were recorded for both smooth and problematic interactions. A standardized evaluation template was used to rate each feature based on usability, efficiency, accessibility, and completeness.

All observations were compiled and will be categorized using the Kano Model to distinguish between essential features and value-adding enhancements for the new portal.

3.2 Expected Outputs from Observation

From our observation sessions, we expect to reveal key usability issues, feature gaps, and workflow inefficiencies in the CLiC system. These insights will help identify essential versus value-adding features and serve as a baseline for improvement in the new system. All findings will be organized using the **Kano Model** to guide future development priorities.

4 Elicitation Method 3 - Questionnaire (Design Using Kano Format)

4.1 Target Audience

The questionnaire uses Kano's model to identify and prioritize user needs for the University Communication and Services Portal. By focusing on different stakeholder groups, we can find both shared and unique needs. This helps us design a system that meets essential, performance, and delight features for all users. Stakeholders or target audiences include students, lecturers, administrators, parents and we will analyse the requirements into 3 kano categories.

4.1.1 Students

Dissatisfier (Must-be requirements):

- Secure login and authentication
- Access to academic results and transcripts
- Viewing attendance records
- Billing history and receipts
- Excuse submission and approval process

Satisfier (Performance requirements):

- Attendance QR code functionality
- Automated GPA calculator
- Online payment integration
- Auto reminder scheduler

Delighter (Excitement requirements):

- Personalized dashboard showing progress and reminders
- Document upload and download center
- Club registration portal
- MUET application and result tracking
- Course completion tracker with visual progress indicators

4.1.2 Lecturers

Dissatisfier (Must-be requirements):

- Secure login and authentication
- Grade submission functionality
- Course materials management
- Role-based access control

Satisfier (Performance requirements):

- Efficient uploading of learning materials
- Attendance QR code generation
- Automated reminder system
- Assignment submission tracking

Delighter (Excitement requirements):

- Auto-generated performance reports for students
- Research publication tracker
- Student feedback visualization
- Customizable dashboard with teaching analytics

4.1.3 Administrators

Dissatisfier (Must-be requirements):

- Secure system management
- Accurate student data management
- User access control
- Secure access to sensitive information
- Financial records management

Satisfier (Performance requirements):

- Dashboard to monitor real-time student or service status
- Bulk processing tools for routine tasks
- Report generation tools
- User management interface

Delighter (Excitement requirements):

- Built-in task reminder system
- Predictive analytics for student success
- Automated workflow creation
- Integration with external databases

4.1.4 Parents

Dissatisfier (Must-be requirements):

- Receive attendance alert notifications
- View basic student attendance records

Satisfier (Performance requirements):

- Receive Fee notification
- Online payment access

Delighter (Excitement requirements):

- Document center for accessing exam schedules
- Personalized academic achievement alerts

4.2 Process (Who, What, Where, When, Why, How)

After brainstorming and observation, to ensure the collection of relevant and insightful feedback from all key stakeholders, we planned multiple methods for the distribution and collection of the questionnaire. These methods were customized based on each group's role in the university ecosystem, their availability, and their preferred communication channels. We planned to create the questionnaire by using Google Form on 10 May 2024 via online collaborative session and start the collection from 10 - 16 May 2025. A minimum response target was also set to ensure a diverse and representative dataset: 25 responses from students, 5 from lecturers, 5 from administrative staff, and 5 from parents.

Upon completion, we planned to analyse the collected data, group them according to the Kano Model categories, and translate them into clear requirement statements to guide the development of the university communication and services portal.

4.2.1 Students

- The questionnaire was distributed through private student WhatsApp groups and official university email addresses.
- These channels were selected based on students' daily usage habits to ensure high accessibility and response rates.
- Students were able to complete the survey quickly within these familiar platforms.

4.2.2 Lecturers

- The questionnaire was sent to lecturers via their official university email accounts.
- A formal explanation of the survey's purpose and relevance was included in the email to encourage thoughtful participation.

4.2.3 Administrators

- A member of the project team personally visited administrative departments to distribute the Google Form link.
- This face-to-face method allowed for immediate clarification of any doubts and encouraged higher participation.

4.2.4 Parents

- Parents received the Google Form via email or personal WhatsApp messages, depending on previously established communication preferences.
- This direct and respectful communication style encouraged parents to contribute actively.

4.3 Mapping Requirements to Kano Categories (Plan)

Example (Just a Plan):

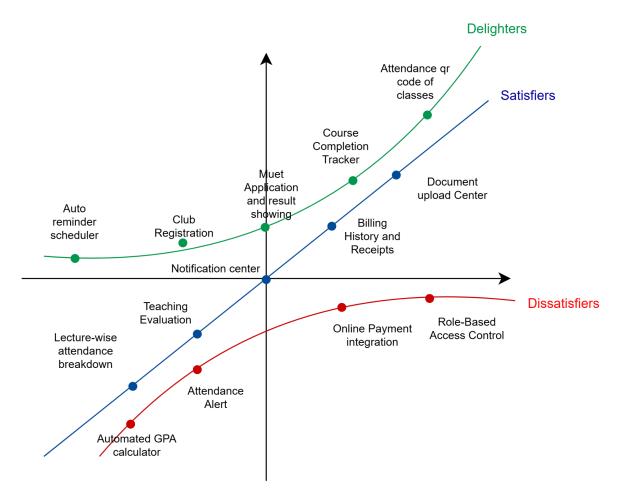


Figure 1: Kano Categories of Requirements (Plan)

Requirement	Kano	Source	Description
	Category		
Notification center	Delighter	Brainstorming/	A centralized place in the
		Questionnaire	portal where all SMS
			alerts are logged for
			reference
Document upload	Delighter	Brainstorming/	For distributing academic
		Observation	calendar, grade reports
			and fee structures

Club Registration	Delighter	Questionnaire/	Club registration is for
		Brainstorming	student to register the club
			which student interested
NATIONAL 11	D 11 1 .	D /	on from the system portal
MUET Application	Delighter	Brainstorming/	MUET application is for
and result showing		Questionnaire	student to register through
			our system portal and have
			a look result of MUET
			when release
Course Completion	Delighter	Questionnaire/	Display how much of the
Tracker		Prototype	Degree program a student
TIACKCI			had completed and what
			courses are pending
Lecture-wise	Delighter	Observation/	Display attendance per
attendance		Questionnaire	course with a breakdown
breakdown			of present, absent, late
			and excused sessions of
			every student.
Attandance On eads	Satisfier	Questionnaire/	During the course,
Attendance Qr code		Brainstorming	lecturer will show the
of classes			attendance qr code for
			student to take the
			attendance of the class
Automated GPA	Satisfier	Brainstorming/	Include a GPA calculator
calculator		Observation/	that updates automatically
		Questionnaire/	based on recent grades
		Prototype	
Online Payment	Satisfier	Brainstorming/	Allow student to pay fees
integration		Questionnaire	directly through the portal
			using payment gateway
Auto reminder	Satisfier	Questionnaire/	This allows the admin to
scheduler		Prototype	schedule automated SMS
			reminders based on due
			dates.
Attendance Alert	Dissatisfier	Brainstorming/	Send low attendance
		Observation/	record to parents if
		Prototype	

			attendance drop under	
			80%	
Teaching	Dissatisfier	Questionnaire/	This function allows	
Evaluation		Observation	student to input qualitative	
			feedback for lecturer	
Billing History and	Dissatisfier	Observation/	Provide a full history of	
Receipts		Prototype	past payment and	
			downloadable of PDF	
			receipts for	
			record-keeping.	
Role-Based Access	Dissatisfier	Brainstorming/	Ensure each actor sees	
Control		Questionnaire	only what's relevant to	
			their role	

4.4 Sample Questions

- 1. How would you feel if the portal HAD an "Attendance QR code for classes" section which calls students to scan the QR code for attendance of class? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 2. How would you feel if the portal HAD an "Excuse Submission and Approval" section which allows students to submit absence excuses and receive responses from lectures?

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)

3. How would you feel if the portal HAD a "Lecture-wise attendance breakdown" feature where lecturers can view all the attendance of students in every course ?

Options:

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 4. How would you feel if the portal HAD an "Attendance Alerts" feature which will send low attendance records to parents if attendance drops under 80%? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 5. How would you feel if the portal HAD an "Automated GPA Calculator" feature where students can check their GPA and CGPA in their academic performance page ?

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 6. How would you feel if the portal *HAD* a "Course Completion Tracker" feature which displays your completed degree programs and pending courses? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)

- I dislike it (1)
- 7. How would you feel if the portal HAD a "Teaching Evaluation" feature which students can add some feedback to their lecturer of the current semester? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 8. How would you feel if the portal *HAD* a "MUET Application and result showing" section where students can register for the MUET exam and view their result of MUET through our school portal?

 Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 9. How would you feel if the portal *HAD* a "Club registration" section where students can easily register clubs from our portal?

Options:

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 10. How would you feel if the portal *HAD* an "Online Payment Integration" section where students can pay fees directly through the portal using a payment gateway?

- I like it (5)
- I expect it (4)
- I am neutral (3)

- I can tolerate it (2)
- I dislike it (1)
- 11. How would you feel if the portal *HAD* a "Billing History and Receipts" section which provides a full history of past payments and downloadable PDF receipts for record-keeping?

Options:

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 12. How would you feel if the portal *HAD* an "Auto reminder scheduler" section which students will not forget about time of courses and examination date?

Options:

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 13. How would you feel if the portal *HAD* a "Dashboard Widget" section where it shows student academic highlights, attendance status, billing alerts? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 14. How would you feel if the portal *HAD* a "Notification Center" section where SMS alerts are logged for reference ?

- I like it (5)
- I expect it (4)

- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 15. How would you feel if the portal *HAD* a "Role-Based Access Control" function which ensures each actor (student, parent, lecturer, admin) sees only what's relevant to their role?

Options:

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 16. How would you feel if the portal *HAD* a "Document Upload and Download center" feature for distributing academic calendar, grade reports and fee structures?

- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)
- 17. How would you feel if the portal *HAD* an "University Announcement" function where students can see the announcement posted by the university? Options:
- I like it (5)
- I expect it (4)
- I am neutral (3)
- I can tolerate it (2)
- I dislike it (1)

4.5 Expected Outputs from Questionnaire

4.5.1. Categorized User Requirements

- All feedback will be analyzed and mapped into the three Kano categories:
 - **Must-be (Basic)**: Features expected as standard and whose absence causes dissatisfaction.
 - One-dimensional (Performance): Features that directly impact satisfaction when improved.
 - Attractive (Delighter): Features that provide unexpected satisfaction and competitive advantage.
- These categories will guide the design and development phases by highlighting which requirements must be fulfilled, which should be optimized, and which could be added to exceed user expectations.

4.5.2. Stakeholder-specific Needs

- Consolidated lists of requirements specific to each group (students, lecturers, administrators, parents), ensuring that the portal caters to diverse user perspectives.
- Identification of shared pain points and overlapping expectations across different stakeholder groups.

5 Elicitation Method 4 - Prototyping

5.1 Target Audience

Prototyping serves as a visual and interactive elicitation method that allows stakeholders to experience the proposed system before full development. By creating a low-fidelity prototype using Figma, we can gather concrete feedback on user interface design, functionality flow, and feature prioritization from different user groups.

5.1.1 Students

Key contribution: User experience validation, interface usability feedback, feature accessibility assessment

Expected insights: Navigation preferences, feature discoverability, mobile responsiveness expectations, and overall user satisfaction with the proposed interface

5.1.2 Lecturers

Key contribution: Teaching workflow validation, administrative process efficiency evaluation, feature relevance assessment

Expected insights: Academic management interface requirements, grading workflow preferences, and integration needs with existing teaching processes

5.1.3 Administrators

Key contribution: System management interface validation, operational workflow assessment, data management requirements

Expected insights: Dashboard layout preferences, reporting functionality needs, and bulk operation requirements

5.1.4 Parents

Key contribution: Information accessibility validation, notification preference assessment, transparency requirements

Expected insights: Preferred information presentation format, communication clarity needs, and mobile accessibility requirements

5.2 Process (Who, What, Where, When, Why, How)

Our prototyping process leverages Figma to create interactive mockups that stakeholders can explore and evaluate. Led by FOO YAU YUN (expert in using Figma) with support from NG TUAN HOM, NG KEAN TIONG and TAN ZHE ENN, we'll develop a comprehensive prototype showcasing key system features and user flows.

The prototype development starts from 14 - 16 May 2025 and feedback collection will occur from 16 May - 22 May 2025, using both in-person demonstrations and remote sharing via Figma links. We will distribute a Google Form to collect feedback from stakeholders based on their feelings. This approach ensures all stakeholders can interact with the proposed system design and provide valuable input for requirement refinement.

Prototype Development Process:

1. Design Phase (14 - 16 May 2025):

- Create wireframes for key user interfaces (login, dashboard, attendance, grades, finance)
- Develop interactive flows for primary user journeys
- Implement responsive design considerations for mobile and desktop views
- Include role-based interface variations for different user types

2. Stakeholder Demonstration (16 - 22 May 2025):

- Scheduled demo sessions with different user groups
- Interactive prototype sharing via Figma links
- Structured feedback collection using evaluation forms
- Real-time discussion and requirement clarification

5.2.1 Students

Who: Undergraduate and postgraduate students from various faculties.

What: Explore prototype features (e.g., QR code attendance, GPA calculator, club registration).

Where: Accessed via university e-learning portal, official WhatsApp groups, and email.

When: Between 16 - 22 May 2025.

Why: To gather user-centered insights on frequently used academic and student life services.

How:

- Prototype shared via link.
- Students interact with core features.
- Complete Google Form based on their experience.

• Target: **25 responses**.

5.2.2 Lecturers

Who: Full-time and part-time academic staff.

What: Test features like attendance recording, teaching evaluation, document sharing.

Where: Introduced via staff meetings and shared via email.

When: During the data collection period (16 - 22 May 2025).

Why: To evaluate system utility from a teaching and academic delivery perspective.

How:

- Short prototype walkthrough presented in meetings.
- Lecturers explore the system functionalities.
- Feedback collected through the Google Form.
- Target: 5 responses.

5.2.3 Administrators

Who: Admin officers handling user management, course enrollment, and finance.

What: Review admin dashboard, finance tracking, and automation tools.

Where: Through scheduled in-person demo or shared prototype link.

When: During the data collection period.

Why: To validate the portal's effectiveness in administrative operations.

How:

• Live demo session or individual prototype exploration.

• Google Form distributed post-demo.

• Focus on operational feedback and automation.

• Target: 5 responses.

5.2.4 Parents

Who: Parents of currently enrolled students.

What: View features like attendance alerts, billing records, and announcements.

Where: Accessed via email invitations and parent WhatsApp groups.

When: Within the 16 - 22 May 2025 timeline.

Why: To gather feedback from indirect stakeholders concerned with student progress.

How:

- Short prototype demo video shared for understanding.
- Feedback form linked afterward.
- Focus on clarity of information and transparency.
- Target: 5 responses.

5.3 Expected Outputs from Prototyping

5.3.1 User Interface Validation

- **Design Feedback Report:** Consolidated feedback on layout, navigation, color schemes, and visual hierarchy from all stakeholder groups
- **Usability Assessment:** Identification of interface elements that cause confusion, navigation bottlenecks, and accessibility concerns
- Mobile Responsiveness Evaluation: Specific feedback on mobile interface design and touch interaction requirements

5.3.2 Feature Priority Refinement

- **Feature Importance Ranking:** Updated priority list based on stakeholder interaction with prototype features
- Workflow Validation: Confirmation of proposed user workflows and identification of missing steps or unnecessary complexity
- **Integration Requirements:** Detailed understanding of how features should work together and integrate with existing systems
- **Performance Expectations:** User feedback on expected response times, loading behaviors, and system performance

5.3.3 Requirement Clarification and Enhancement

- Functional Requirement Updates: Refined functional requirements based on prototype feedback and stakeholder suggestions
- Non-functional Requirement Identification: Performance, security, and usability requirements identified through prototype interaction

- **Technical Constraint Documentation:** Implementation challenges and technical considerations identified during prototype evaluation
- User Story Enhancement: Detailed user stories and acceptance criteria based on stakeholder feedback

6 Kano Model Application & Analysis Methodology

6.1 Kano Model Categories

Kano Category	Identification	Example
	Criteria	Features
Dissatisfier	 Basic features that 	Login, Logout,
(Must-be	users expect by	Attendance
requirement)	default.	alert
	 If missing, users 	
	become frustrated,	
	but their presence	
	does not significantly	
	increase satisfaction.	
Satisfier (Features that users	Teaching
One-dimensional	explicitly want. The	Evaluation,
customer	better they are	Billing History
requirement)	implemented, the	and Receipts
	more satisfied users	
	become.	
	 If missing or poorly 	
	implemented, users	
	will be disappointed.	
Delighter	Unexpected features	Dashboard
(Attractive	that pleasantly	Widget, MUET
requirement)	surprise users.	Integration,

They are not	Club
demanded, but their	Application
presence increases	
user satisfaction.	
 If missing, users 	
won't complain.	

Table 1 : Kano Model Categories

6.2 Analysis Methodology

For this project, we used two main methods to gather and understand or elicit what users really need: **brainstorming, observation**, **questionnaire** and **prototyping** based on the Kano Model. These approaches were chosen because they help us figure out not only what users want, but also how much those features matter to them.

We started with **brainstorming** and **observation** to get the team's ideas flowing about what the system should offer. This helped us explore possible features, spot common issues with current systems, and think of ways to improve the overall user experience. The brainstorming stage acted as an initial filter for feature discovery, laying the groundwork for a more structured analysis using the Kano Model.

After that, we used a Kano-based **questionnaire** to validate and classify those features with real users — including students, parents, and lecturers. The questionnaire asked users to evaluate how they would feel if a particular feature were present. It allowed us to sort the features into three categories, which are **Dissatisfiers** (basic features that users expect to be there), **Satisfiers** (features that improve satisfaction if done well), and **Delighters** (features that users don't expect but love when they see them).

To further support this analysis and gain deeper user insights, we also developed a system prototype (**prototyping**). This prototype served as a tangible representation of the proposed features and user interface, enabling stakeholders to interact with the system concept early in the design process. Presenting the prototype to stakeholders allowed us to gather direct feedback, clarify

requirements, and identify usability concerns, making it an essential part of our elicitation strategy.

The final output of this analysis will be a comprehensive requirements classification document that clearly delineates which features are Dissatisfiers (must-haves), Satisfiers (performance features), and Delighters (excitement features), providing a solid foundation for the development of the University Communication and Services Portal.

7 Timeline and Milestones

Milestone	Activities	Date	Location	Deliverable	Involve Members
Planning Completion	Finalize plan and responsibilities	26 April 2025	Online - Microsoft Teams	Requirements Elicitation Plan document	All team members
CLiC System Observation	Analyze CLiC MMU features and document user interactions	28 April - 29 April 2025	Online - Microsoft Teams	Feature inventory and user workflow documentation	All team members
Brainstormin g Completion	Complete all brainstormi ng sessions	9 May 2025	Online - Microsoft Teams	Initial feature list and classifications	All team members
Questionnair e Development	Create and review questionnair e	10 May May 2025	Online - Microsoft Teams (online collaborativ e session)	Final Kano questionnaire	All team members
Questionnair e Data Collection	Distribute and collect questionnair e responses	10 May - 16 May 2025	Online - Google Forms	Raw response data	All team members
Prototype Design Phase	Design wireframes, flows, and role-based layouts using Figma	14 May - 16 May 2025	Computer Lab + Online	Refined prototype version	Foo Yau Yun (lead), others

Stakeholder Demonstratio n	Present prototype and collect stakeholder feedback	16 May - 22 May 2025	Computer Lab, MMU Campus	Classified requirements list	All team members
Analysis Completion	Analyze data and classify requirement s	23 May 2025	Computer Lab, MMU Campus	Classified requirements list	All team members
Final Documentati on	Compile all documentati on	23 May - 24 May 2025	Computer Lab, MMU Campus	Complete deliverable package	All team members

Table 2: Timeline and Milestones

8 Expected Outputs Summary

From the requirement elicitation activities, we expect to gather a clear and organized list of features based on actual user needs. These features will be categorized using the Kano Model to show which ones are essential, which improve user satisfaction, and which add extra value. We will also prioritize these features based on stakeholder input to guide what should be developed first. In addition, the findings will give us a better understanding of what users expect from the system and why certain features are important. All of this will support the creation of a solid Software Requirements Specification (SRS) and help ensure that the final system truly meets user expectations.