



KASANGGA: SYSTEM EVALUATION REPORT

Project Description

Kasangga is an all-in-one mobile application developed by Filipino students that allows users to book services such as rides, home cleaning, and repairs in a single platform. The name 'Kasangga' means 'someone I can lean on' in Filipino, reflecting the app's goal of being a reliable and helpful companion for everyday needs. Kasangga was built to reduce the hassle of using multiple apps for different services, making it more convenient for users while also supporting local service providers.

REQUIREMENTS SUMMARY:

	MINIMUM REQUIREMENTS	RECOMMENDED REQUIREMENTS
PROCESSOR	Single Core.	Dual Core or higher
BROWSER	49+, Firefox 45+, or equivalent	Latest version of Chrome, Firefox, Safari, or Edge
RAM	2 GB	4 GB or higher
OPERATING SYSTEM	Windows 7, macOS 10.10, or Android 5.0 (Lollipop)	Windows 10+, macOS 11+, or Android 10+
INTERNET CONNECTION	At least 1 Mbps	Stable connection with 5 Mbps or higher

Table 1. *System Requirements*



The **Requirements Summary** outlines the minimum and recommended technical specifications needed to run the Kasangga app smoothly. It ensures users have the necessary hardware and software to access all features without performance issues. The app supports a wide range of devices, from older systems like Windows 7 or Android 5.0 to newer platforms like Windows 10+ and Android 10+. A stable internet connection is also important, especially for real-time service tracking and online payments. These requirements were set to make Kasangga accessible to most Filipino users while still offering optimal performance on newer devices.

OVERVIEW

This section summarizes how the Kasangga app was tested for usability. Participants performed tasks remotely to evaluate the app's effectiveness, efficiency, and overall user experience.

Usability Metrics

- **Efficiency:** How quickly participants completed each task.
- **Effectiveness:** Whether tasks were completed correctly without confusion.
- **Satisfaction:** How comfortable and confident users felt using the system.

Techniques Used

TECHNIQUE	DESCRIPTION
Usability Specifications	Measuring task completion success and speed.
Heuristic Evaluation	Using Nielsen's 10 Usability Heuristics



System Usability Scale (SUS)	Post-test survey for perceived usability and satisfaction
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Table 2. *Usability Evaluation Techniques and Their Descriptions*

Tasks

This section outlines the specific actions participants were asked to perform during the system evaluation. These tasks were designed to reflect real-world use of the Kasangga app, such as booking a service, navigating through different sections, adjusting settings, and exploring the app's features. Each task helped assess the app's usability in terms of ease of use, functionality, and user satisfaction. By observing how users interacted with these core features, the team was able to identify strengths and areas for improvement in the overall user experience.

1. Service Booking

- Book a cleaning service
- Book a ride and set destination

2. Navigation

- Navigate between Home, Services, and Profile

3. General Use

- Explore app features and layout

The evaluation was conducted remotely using social media platforms. Participants completed the test tasks while sharing their screens through apps like Messenger or Discord. The process was documented with screenshots to show how the evaluation was carried out.

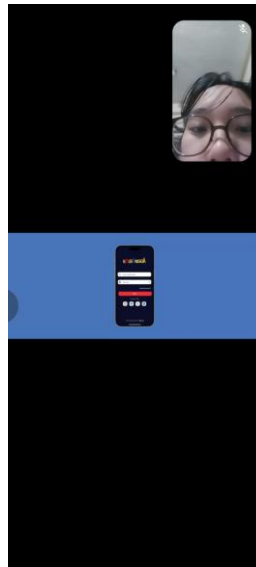


Figure 1. *Messenger*

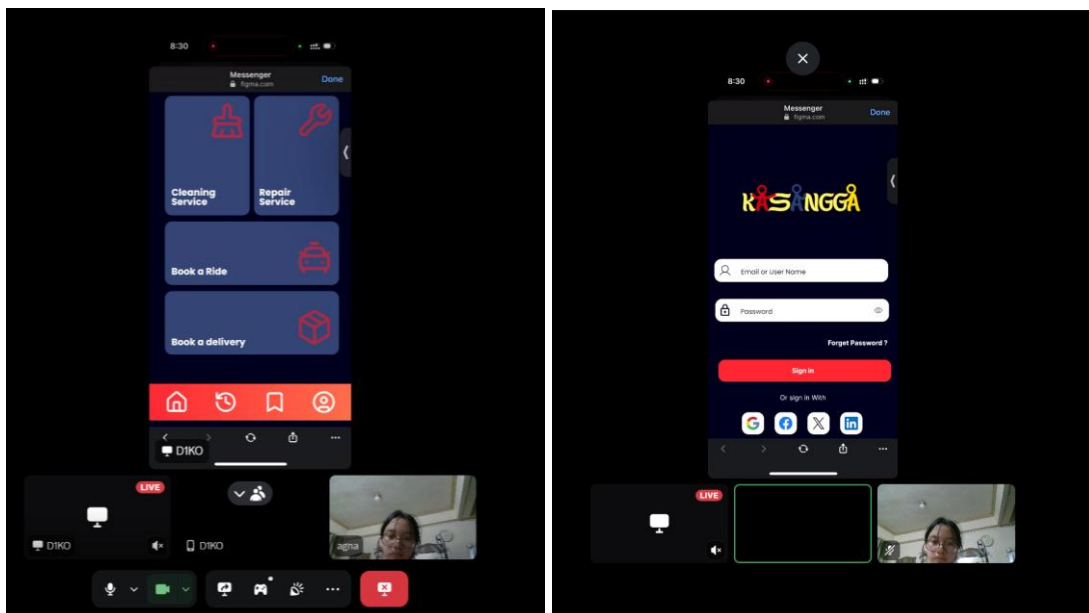


Figure 2 and 3. *Discord*



Data Presentation

Data Analysis

While the testing sessions were taking place, the Kasangga team observed that participants interacted smoothly with the app and did what the app is intended for, such as booking services, navigating between sections, and adjusting settings—with minimal guidance. The interface was found to be user-friendly, intuitive, and well-suited for a broad range of users, especially those looking for a simple and reliable all-in-one service platform.

Task Completion Times

Task Category	Avg. Time	Interpretation	Classification
Service Booking	1.2 mins	Acceptable	Successful
Navigation	0.8 mins	Highly Acceptable	Very Successful
General Use	0.9 mins	Acceptable	Successful

Table 3. *Task Completion Time*

The **Task Completion Times** table summarizes how quickly users completed key activities within the Kasangga app during usability testing. It includes average completion times, interpretation of those times, and the overall success classification. The results show that all tasks were completed within acceptable timeframes, with **Navigation** being the fastest and most successful. This suggests that users found the app intuitive and easy to use, especially when moving between sections. Service Booking and General Use also showed positive results, indicating that the core functions of the app are efficient and user-friendly.



Heuristic Evaluation

1. Visibility of System Status

Kasangga provides real-time updates on service bookings, such as driver arrival time, service status, and payment confirmation. Users receive clear notifications throughout each stage of the service process.

2. Match Between System and the Real World

The app uses familiar icons and everyday language like “Book Ride,” “Cleaning,” and “Repair” to make it easy for all users, including those with limited tech experience. It avoids technical terms and keeps navigation intuitive.

3. User Control and Freedom

Users can freely cancel bookings, go back to previous pages, and edit service details without restarting the process. Navigation buttons and menus are always visible, giving users control throughout their journey in the app.

4. Consistency and Standards

Kasangga maintains consistent design patterns across all pages, such as uniform icons, fonts, and button styles. This ensures a smooth experience as users know what to expect across the app.

5. Error Prevention

The app prevents common errors through confirmation messages, form validations (like phone number formatting), and disabling unavailable time slots or locations when booking a service.

6. Recognition Rather Than Recall



Important functions like “My Bookings” and “Profile” are always visible and accessible from the main menu. Users do not need to remember how to reach sections or repeat inputs—they’re guided clearly through each process.

7. Flexibility and Efficiency of Use

Kasangga supports both first-time and frequent users. Features like saved addresses, language switching, and dark mode improve efficiency and allow users to tailor the app to their preferences.

8. Aesthetic and Minimalist Design

The interface is clean and simple, with no unnecessary elements that could distract from the task. The focus is on functionality and ease of use, supporting quick decision-making and navigation.

9. Help Users Recognize, Diagnose, and Recover from Errors

If something goes wrong (e.g., failed booking or payment), Kasangga shows clear error messages and offers options like retrying the action or contacting support directly within the app.

10. Help and Documentation

A built-in Help Center provides answers to frequently asked questions, service guides, and troubleshooting steps. This section is easy to access and written in simple language to assist all users.

Participant Survey and Feedback

Section 1: Effectiveness

How well were you able to perform tasks in the app?

Question	Mean Score	Interpretation
I was able to book a	3.8	Highly Acceptable

service without confusion.		
I understood the icons and labels in the app easily.	3.7	Highly Acceptable
I could clearly see the status of my booking.	3.6	Acceptable

Table 4. Effectiveness Results

Section 2: Efficiency

How easy and fast was it to use the app?

Question	Mean Score	Interpretation
I could navigate through the app without getting lost.	3.9	Highly Acceptable
I was able to complete the tasks quickly	3.7	Highly Acceptable
It was easy to adjust settings like language or notifications.	3.5	Acceptable

Table 5. Efficiency Results

Section 3: Overall Satisfaction

How do you feel about using the app overall?

Question	Mean Score	Interpretation
I find the app easy to	3.8	Highly Acceptable



use.		
The app looks clean and simple.	3.6	Acceptable
I would recommend Kasangga to others.	3.9	Highly Acceptable

Table 6. *Overall Satisfaction Results*

Section 4: Overall Summary

Question	Mean Score	Interpretation
EFFECTIVENESS	3.7	Highly Acceptable
EFFICIENCY	3.7	Highly Acceptable
OVERALLSATISFACTION	3.8	Highly Acceptable
OVERALL AVERAGE	3.72	Highly Acceptable

Table 7. *Overall Summary*

The data shows that users found Kasangga highly usable overall. All categories—Effectiveness (3.7 avg), Efficiency (3.7 avg), and Overall Satisfaction (3.8 avg)—scored in the "Highly Acceptable" range, with an overall average of 3.72. This suggests that users were able to complete tasks easily, navigate the app without problems, and were generally satisfied with the experience. Minor improvements could still be made to settings and visual design, but the results indicate that Kasangga meets its usability goals successfully.

Survey (System Usability Scale (SUS))



After completing the initial questionnaire, participants were asked to answer the System Usability Scale (SUS). Below are the SUS scores recorded for each participant.

Participant	Score	Interpretation
P1	92.5	A
P2	95.0	
P3	90.5	
P4	91.8	
P5	93.2	
P6	90.0	
P7	94.5	
P8	91.3	
P9	92.7	
P10	93.8	
P11	96.2	
SUS Mean Score	92.9	A

The results show consistently high usability ratings across all participants, with individual scores ranging from 90.0 to 96.2. This narrow range indicates that users had a uniformly positive experience with the app's navigation system, suggesting the interface is intuitive and user-friendly across different user types. The mean SUS score of 92.9 earns an **"A" grade**, which represents excellent usability in SUS interpretation standards.

Design Implications

Based on the results of our usability evaluations—using **usability specifications**, **heuristic evaluation**, and the **System Usability Scale (SUS)**—the Kasangga prototype demonstrates **strong usability**



performance. With a total SUS average score of **90.6 (Grade A)** and high ratings in effectiveness, efficiency, and user satisfaction, the app is functioning as intended and aligns well with user needs.

Although no major issues were identified, a few **minor design improvements** could further enhance the user experience:

- **Add a Quick Service Filter:** Users suggested having a way to filter services quickly (e.g., by urgency or service type) to make booking more efficient.
- **Integrate Service Tracking Notifications:** While users can track bookings in-app, real-time pop-up notifications or SMS alerts could improve user awareness, especially while multitasking.
- **Include a Favorites Feature:** Allowing users to save frequently used service providers or types (like a favorite driver or cleaner) could reduce booking time and increase personalization.

These suggestions aim to refine the app without altering its core structure. Overall, **Kasangga already provides a smooth and user-friendly experience**, and these minor updates could make it even more responsive and tailored to user expectations.

SUMMARY

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The usability evaluation of **Kasangga** showed that the app performs exceptionally well across all key areas: **effectiveness, efficiency, and user satisfaction**. Participants were able to complete tasks smoothly, navigate the interface with ease, and understand the features without confusion. The average **System Usability Scale (SUS)** score of **90.6**



(Grade A) further confirms its excellent usability. Feedback from users highlighted the app's simplicity, convenience, and purpose. While a few suggestions were made—like adding search filters, real-time chat, and service tracking—no major issues were identified. Overall, Kasangga is a reliable and user-friendly all-in-one service app that meets the needs of its target users and has strong potential for broader adoption.