Project Description:

The project is a web-based appointment booking system designed for Jewelry Express Goldsmith and Tools Supply. It allows customers to schedule appointments online in real time, while providing the business with tools for managing bookings, sending automated reminders, and tracking appointment history. The system aims to eliminate the inefficiencies of manual scheduling methods, reduce missed appointments, and enhance overall customer experience and operational productivity.

Requirements Summary:

MINIMUM REQUIREMENTS	Processor Cores	Single Core
	OS	Windows 7 / macOS 10.10
	RAM	2 GB
	Browser / Platform	Chrome v80+, Firefox v75+
	Connectivity	Stable Network Connection
RECOMMENDED REQUIREMENTS	Processor Cores	Quad Core or higher
	OS	Windows 10 / macOS 11+
	RAM	4 GB
	Browser / Platform	Latest Chrome, Firefox, Safari
	Connectivity	5 Mbps internet or Higher
OTHER REQUIREMENTS	Permissions	Notifications, JavaScript enabled, Cookies allowed

Table 1. System Requirements

To ensure accessibility across a wide range of devices, the web application is designed to run on systems with as low as a dual-core processor, 2 GB of RAM, and older operating systems like Windows 7 or macOS 10.10. Since the system is lightweight and browser-based, it does not require high-end hardware, allowing users with limited resources to access it smoothly.

Overview

To ensure that the prototype achieved its intended usability goals, an evaluation was conducted focusing on the core features and overall user experience of the Jewelry Appointment Booking Web Application. The evaluation was performed online to allow flexibility and accessibility for participants.

The assessment was guided by three key usability metrics:
1. **Efficiency** - Measuring how quickly and smoothly users could perform tasks such as browsing jewelry, booking appointments, and navigating the interface.
2. **Effectiveness** - Determining whether users were able to successfully complete tasks without confusion or the need for assistance.
3. **Satisfaction** - Evaluating how confident and comfortable users felt while interacting with the system, including their overall impression of the design and functionality.

Technique	Description
Usability Specifications	This technique focuses on measuring how efficient, effective, and user-friendly the prototype is. It includes evaluating how easily users can book an appointment, browse jewelry, and navigate the system without confusion. Key metrics include task completion time, learnability, and user satisfaction.
Heuristics Evaluation	The prototype will be assessed based on Nielsen's 10 Usability Heuristics to identify any usability issues. This includes checking if the interface is consistent, easy to understand, provides feedback, and helps users avoid or recover from errors. It ensures that the design aligns with common usability principles.
Participant Survey and Feedback	After interacting with the prototype, users will complete a short survey using a 5-point Likert scale (1 - Strongly Disagree to 5 - Strongly Agree). The survey statements focus on ease of use, clarity of features, design appeal, and overall satisfaction. This method helps the team collect direct feedback about how intuitive and enjoyable the system was to use, and highlights any areas needing improvement.

Table 2. Usability Evaluation Techniques and Their Descriptions

The tasks designed for this prototype are grouped into three main sections: Landing & Navigation Tasks, Jewelry Interaction Tasks, and Booking Tasks. These tasks will be performed by participants to demonstrate the core functionality and usability of the system:

Access and Exit the Website (Landing & Navigation Task)
Evaluates how easily users can enter the site, understand the layout, and navigate between main pages such as Home, Jewelry, and Booking.

Browse Jewelry Listings and View Details (Jewelry Interaction Tasks)
Participants will be asked to explore the jewelry catalog, click on individual items, and view detailed descriptions and related products.

Book an Appointment (Booking Task)

Users will complete a full appointment booking process, including selecting a jewelry service, choosing a date and time, entering their name, reviewing details, and submitting the request.

Modify or Cancel a Booking (Booking Task)
Users will be asked to simulate editing or canceling a scheduled appointment to test flexibility and system feedback.

These tasks were selected because they align with the core features of the prototype and reflect common user actions. They help evaluate how well the system supports easy navigation, as well as the ability to perform CRUD operations (Create, Read, Update, Delete) within the context of browsing and booking jewelry service.

Method of Survey and Feedback:
The survey was conducted face-to-face at Mapúa Malayan Colleges Mindanao, involving students and young professionals. This allowed the team to gather direct feedback, observe user interactions, and ask follow-up questions for clearer insights.

(IMAGES on survey)

Data Presentation
After conducting a face-to-face survey with selected students and young professionals, the responses were gathered to assess the usability and overall effectiveness of the jewelry web application. Participants were asked to perform specific tasks such as browsing jewelry items, making a booking, and navigating through different pages. Their feedback was recorded using a System Usability Scale (SUS) and short interviews.

The collected data was analyzed to identify patterns in user behavior, task completion time, and common difficulties. Most users were able to complete tasks smoothly, indicating good usability and a user-friendly design. Minor suggestions for improving clarity and accessibility were noted and will be considered for further development.

Task Category	Average Completion Time	Interpretation	Classification
Landing Page & Navigation	0.8 minutes	Acceptable	Successful
Book Appointment & Jewelry Details	3.2 minutes	Highly Acceptable	Very Successful
Analysis & Recommendation	1.1 minutes	Acceptable	Successful

Table 3. Task Completion Time

Table 3 outlines how the team will evaluate the time each participant takes to complete specific tasks. It serves as a benchmark to determine whether the design of each task is effective and meets the intended usability goals.

Heuristic Evaluation

The evaluation of the jewelry appointment booking prototype will also utilize Nielsen's 10 Usability Heuristics to assess the interface design and overall user experience:

Visibility of System Status

The system keeps users informed about their actions and system processes (e.g., booking confirmation, form submission) through timely feedback such as loaders, pop-ups, and status messages.

Match Between System and Real World

The interface uses simple and familiar terms like "Book Appointment," "View Details," or "Top Picks" instead of technical jargon. Information is displayed in a logical and intuitive order, reflecting real-world browsing and service selection behaviors.

User control and Freedom

Users can easily go back, cancel, or modify bookings without being locked into a specific process. Clear exit options and undo/redo actions are included for flexibility.

Consistency and Standards

The system maintains uniformity in layout, button labels, icons, and actions across all pages ensuring users don't have to guess meanings or functions.

Error Prevention

Forms include validations and constraints (e.g., disabling unavailable time slots) to minimize errors before submission. The system is designed to help users avoid mistakes rather than just handling them after they occur.

Recognition rather than recall

Navigation is intuitive and consistent, with actions and options clearly visible on each screen. Users do not need to memorize steps; key information is kept accessible at all times.

Flexibility and Efficiency of Use

Both new and returning users can benefit from the system. Novices can follow simple steps, while experienced users can quickly repeat bookings or access favorites with fewer clicks.

Aesthetic and Minimalist Design

The interface focuses only on essential information. Jewelry listings, booking forms, and user prompts are clean and concise, avoiding clutter and distractions

Help Users Recognize, Diagnose, and Recover from Errors

If a user enters invalid data or leaves a required field empty, the system shows clear error messages that describe the issue and suggest what to fix.

Help and Documentation

The system includes a Help section or tooltips for key actions, guiding users through the booking process or providing assistance if they get stuck. The documentation is easy to find and written in simple language.

Participant Survey and Feedback

Results

SECTION 1			
Question	**Mean**	**Interpretation**	**Classification**
The system responded quickly and efficiently.	4.2	Highly Acceptable	Very Successful
I found the system easy to navigate.	4.0	Highly Acceptable	Very Successful
The steps for booking were clear and straightforward.	4.2	Highly Acceptable	Very Successful
SECTION 2			
I was able to book an appointment without confusion.	3.6	Acceptable	Successful
I was able to complete my tasks without assistance.	3.9	Acceptable	Successful
I encountered minimal to no errors while using the system.	3.9	Acceptable	Successful
The jewelry listings were clear and informative.	3.8	Acceptable	Successful
SECTION 2			
The interface design was visually appealing.	4.5	Highly Acceptable	Very Successful
I feel confident using this system again in the future.	4.0	Highly Acceptable	Very Successful
Overall, I am satisfied with the usability of the system.	3.9	Acceptable	Successful

Table 4.1 Survey Data Interpretation

Category	Mean	Interpretation	Classification
Effectiveness	4.1	Highly Acceptable	Very Successful
Efficiency	3.8	Acceptable	Successful
Overall Satisfaction	4.1	Highly Acceptable	Very Successful
Average	**4.0**	**Highly Acceptable**	**Very Successful**

Table 4.2 Average Score Summary

The evaluation results show that the system prototype is well-received by users. The effectiveness score of 4.1 means users were able to complete tasks correctly and with ease. The efficiency score of 3.8 indicates that the system is generally easy and quick to use, though there may still be room for small improvements. For overall satisfaction, the score of 4.1 shows that users had a positive experience and felt confident using the system. With an overall average of 4.0, the prototype is considered highly acceptable and successful in meeting its usability goals.

Design Implication

Based on the evaluation results and user feedback gathered through usability specifications, heuristic evaluation, and survey responses, the system prototype was overall successful and met its intended usability goals. Users rated the system as highly acceptable in both effectiveness and overall satisfaction, and acceptable in terms of efficiency. This shows that the design is functional and user-friendly, but there are areas that can be improved to further enhance the user experience.

- **Font Size Adjustment** - Some users found the font size slightly small, especially on certain screens. Increasing the font size or offering adjustable text sizing would help improve readability, especially for users with visual strain or those using smaller devices.

- **Highlighting of Booking Steps** - Although the booking process was rated positively, a few users mentioned that the steps could be more visually guided. Adding progress indicators or clearer step-by-step prompts would improve user control and freedom, ensuring users don't feel lost in the process.

- **More Intuitive Icons** - While the interface was praised for being visually appealing, some icons (such as for confirming or editing a booking) were not immediately understood. Replacing or labeling these icons with clearer visuals or tooltips would reduce recognition rather than recall issues.

- **Error Handling and Feedback** - Minor improvements can be made in how the system notifies users of errors. For example, more helpful error messages when appointment fields are left blank or when an action fails will help users recover from mistakes more easily.

- **Increased Tap Area for Buttons** - On larger screens or mobile views, some interactive buttons (e.g., booking confirmation or navigation) had small tap areas. Enlarging these areas or spacing them better would help improve efficiency and make the system more touch-friendly.

There were no major flaws that would suggest a complete redesign. However, these minor improvements would further strengthen the overall usability, flexibility, and clarity of the system, especially for new users. The team plans to implement these enhancements in future iterations of the prototype.

Critique and Summary

What were the advantages and disadvantages of your evaluation?

The evaluation process for Jewelry Express combined usability specifications, heuristic evaluation, and a System Usability Scale (SUS) survey. This helped the team gather both detailed user feedback and measurable data. Conducting the evaluation online was convenient and allowed the team to reach college students and young professionals, the target users of the system. It also made collecting feedback faster and easier through digital platforms. However, there were some limitations. Since the evaluation was done remotely, the team couldn't directly observe users' facial expressions or body language, which might have revealed subtle usability issues. Some participants also experienced slow internet connections, which affected how they interacted with the system. Lastly, the sample size was small, and certain features like mobile responsiveness and real-time error feedback couldn't be fully tested due to limited time and resources.

What would you have done differently knowing what you know now (both designwise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).

If given more time, the team would conduct two rounds of evaluation which are one for the initial Jewelry Express prototype and another after making improvements. This would help measure what changes worked best. Clearer instructions and visual cues would also be added for tasks like editing product listings and renaming items, which some users found confusing. The team would expand testing to include a wider variety of users, such as jewelry sellers and potential buyers from different age groups. We would also consider adding backend features to simulate real-time transactions and inventory management for a more realistic experience. Lastly, tools to track user behavior and task success would be used to better understand how users navigate the system and where improvements are needed.

Project Summary

The Jewelry Express prototype was evaluated to assess how well it supports essential features such as browsing jewelry items, booking appointments with sellers, and managing product listings. The system successfully met its main goals, offering a smooth user experience with clear navigation and efficient CRUD (Create, Read, Update, Delete) functions.

Participants were generally satisfied with the system, but suggested improvements in a few areas. These included increasing font size for better readability, enlarging tap targets for mobile users, and making action icons (like edit and delete) more recognizable. Tasks such as renaming items or editing listings could also benefit from clearer visual cues.

In conclusion, the evaluation showed that Jewelry Express is effective, user-friendly, and well-received. While a full redesign is not necessary, applying minor updates based on user feedback will help enhance overall usability and make the system even more ready for real-world use.