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.

Prototype Description:

The Prototype was created with the use of Figma. This is because Figma is an interactive Prototyping Software/Website that can easily be distributed to testers with the use of links sent by the developers.

Jewelry Express Figma Link:

https://www.figma.com/proto/XC5LRpFOcG3FL5UFyfzI0Z/Jewelry-Express?
node-id=470-408&p=f&t=2X31ifU2ccZcc8Yd-0&scaling=scale-down&content
-scaling=fixed&page-id=0%3A1&starting-point-node-id=3%3A2

User Scenario:

Mia, a working professional, often finds it difficult to schedule jewelry consultations due to her busy weekday schedule and the store's limited phone availability. She has missed a few appointments in the past because she forgot the time or couldn't get through on the phone to reschedule.

One weekend, while scrolling through social media, Mia sees a post from Jewelry Express Goldsmith and Tools Supply announcing their new online booking system. Curious, she clicks the link and finds a clean, easy-to-use interface where she can view available time slots, book an appointment, and receive automatic reminders via email. Impressed, she shares the system with her friend Clara, who also prefers online booking for convenience and flexibility.

SASHA Mock-up/Prototype:

LANDING PAGE - Our system prototype features a user-friendly landing page that serves as the home page when users access the website. Here, users can view details about the jewelry offered by Jewelry Express Goldsmith and Tools Supply, including descriptions, prices, and images. The page also highlights the services provided by the business, such as custom designs or repairs, and displays a showcase of top jewelry items to attract customers. This landing page aims to give visitors a quick and engaging overview of what the shop offers before they proceed to book an appointment.
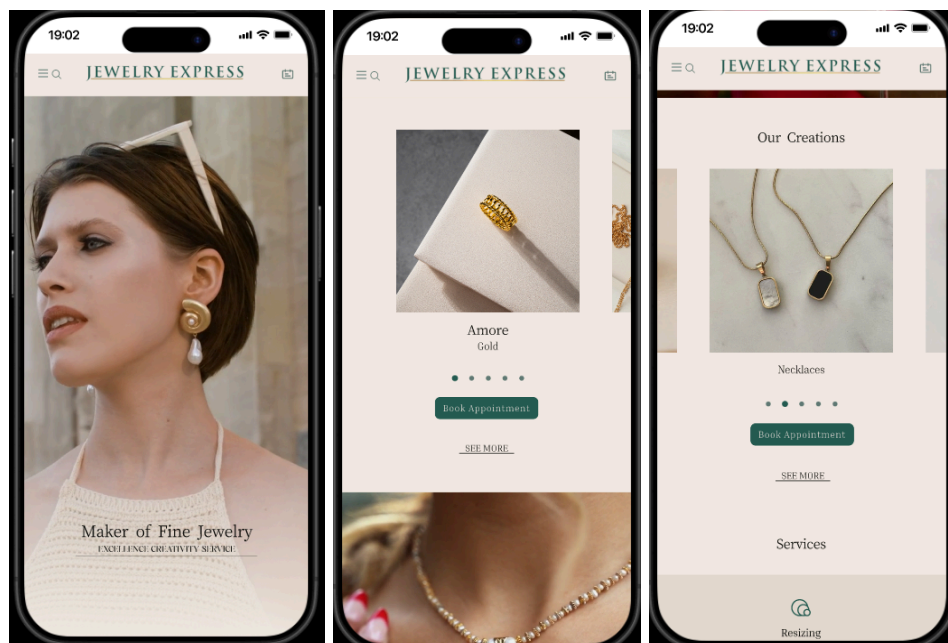

Booking Page - The booking system in our prototype allows users to easily set an appointment by filling out a simple form. It includes input fields for the user's name, the type of services they are interested in, and a calendar with available time slots to choose their preferred date and time. After clicking the confirm button, the system shows a summary of the appointment details for the user to review. Once everything is correct and the user submits the form, a "Thank You" message pops up in a modal to confirm that the booking was successfully made.

Jewelries Page - The Jewelries Page displays a list of available jewelry items that are offered for sale. Each item includes a photo, name, and a short description to help users learn more about the product. This page allows customers to browse the selection easily and get more details about the jewelry before making a decision or booking an appointment.
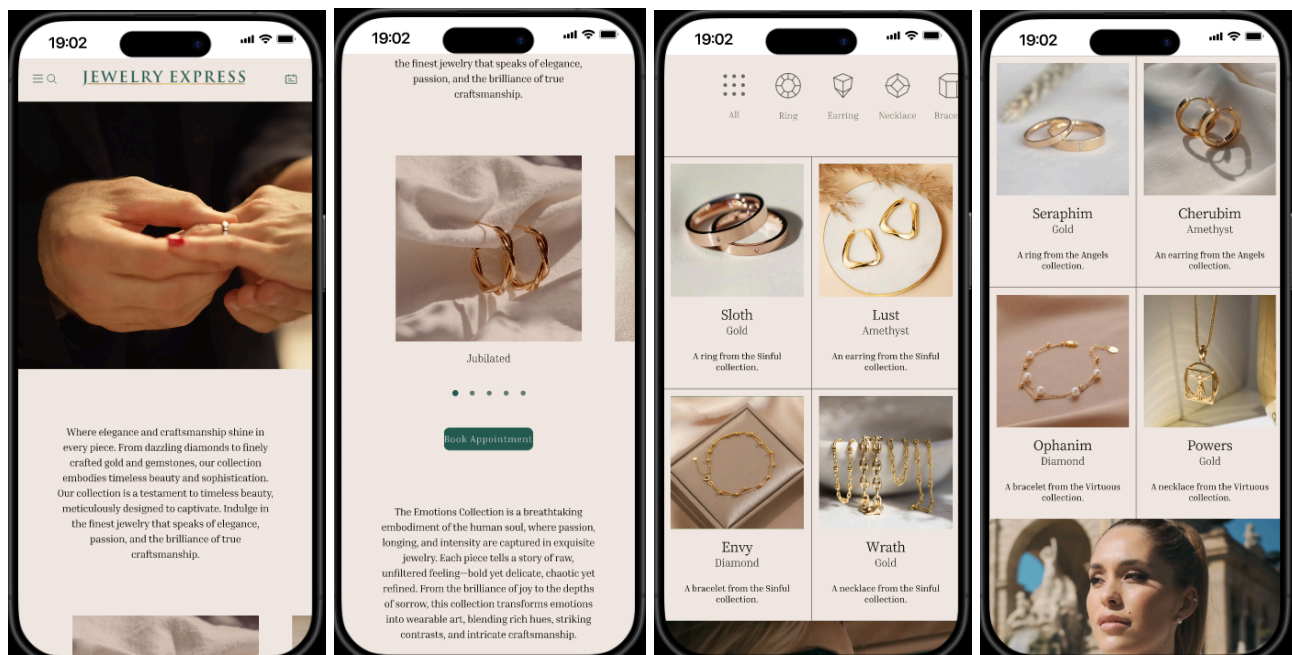
Jewelry Detail Page - The Jewelry Detail Page shows more information about a specific jewelry item selected by the user. It includes a detailed description and additional photos so users can view the product from different angles. There is also a section that displays related jewelry items, helping users explore similar options they might be interested in.
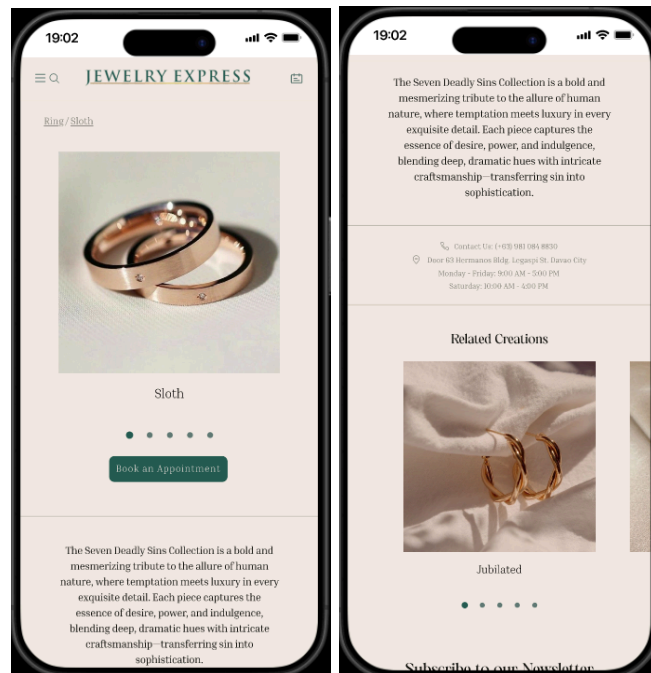
Rationale:

The team decided to develop a web-based appointment booking system using Figma for the prototype to ensure a clean and intuitive user interface that reflects the real-world functionality of the system. The design includes a landing page showcasing available jewelry, services offered, and top products, making it easy for customers to explore before booking. The booking feature includes input fields for name, jewelry type, and appointment time, with a review step and a confirmation modal to enhance user experience. Additional pages such as the Jewelries Page and Jewelry Detail Page provide item descriptions, photos, and related products to help users browse and make informed choices. Using Figma allowed the team to easily collaborate, share updates, and make real-time adjustments based on feedback. However, as a browser-based tool, it relies on an internet connection and may pose limitations in performance when working with larger screens or offline environments. Despite this, the prototype effectively demonstrates the flow and core features of the system, ensuring both customer convenience and business efficiency.

Changes to the Requirements:

No major changes were made to the core system requirements; however, adjustments were made to improve the usability aspects of the prototype. These updates were driven by the need to ensure that the system would be intuitive and user-friendly for both new and returning customers. Some usability considerations were based on principles from the 10 Usability Heuristics, such as visibility of system status, user control and freedom, consistency, and minimalist design. Additionally, due to time constraints, some planned features, such as user

authentication or live backend integrations, were excluded from the prototype. As a result, evaluation criteria for those features were removed, and the focus shifted toward making the interface as simple and easy to navigate as possible to ensure a smooth user experience in the final product.

Initial Evaluation Plan:

The team will conduct the evaluation online to ensure greater flexibility and accommodate the varied schedules and availability of participants. This approach allows users to test the prototype remotely, using their own devices in familiar environments, which may yield more natural feedback. Online evaluation also enables efficient data collection through screen sharing, recorded sessions, and digital forms.

The evaluation will be divided into three main parts:
1. **Usability Specifications** - Specific goals such as ease of navigation, task completion time, and clarity of interface will be measured using timed tasks and user feedback collected via online tools.
2. **Heuristic Evaluation** - The prototype will be assessed remotely by evaluators using Nielsen's 10 Usability Heuristics to identify usability issues and interface improvements.
3. **Participant Survey and Feedback** - Online surveys and optional video interviews will be used to gather user opinions, pain points, and suggestions. Tools like Google Forms, Discord, or Microsoft Teams will help streamline this process.

Population

The prototype will be tested by a small group of approximately 10 participants, consisting of college students and young professionals who represent typical users of online appointment and shopping platforms. These participants will be guided through a series of tasks such as exploring jewelry products, viewing item details, and successfully booking an appointment. This diverse but focused group was chosen to simulate real user behavior and provide insights into the system's usability, clarity, and overall experience. Their feedback will help identify potential improvements before further development.

Developer / UI Designer	Roles
Angela Nareen Bernales	Guide participants through the tasks when needed and facilitate the survey and feedback collection to ensure all necessary input is gathered for analysis.
Laurence Kharl Devera	Observe participant behavior, documenting their feedback, and noting usability issues encountered during testing
Mc Curvin Royeras	Responsible for overseeing the functionality and responsiveness of the UI/UX elements within the prototype.

Table 1. Member Role

Usability Specification

The prototype is designed with key usability goals in mind to ensure that it delivers a smooth and satisfying user experience. These measures serve as the basis for evaluating how effectively the system meets user expectations:

- **Effectiveness**: Assesses how accurately and successfully users can complete core tasks, such as browsing jewelry or booking appointments, without encountering issues or errors.

- **Efficiency**: Measures how quickly and effortlessly users can navigate the system, focusing on ease of use and streamlined task flow.

- **Utility**: Evaluates whether the system provides all the necessary features and options users need to accomplish their goals, including browsing, viewing details, and scheduling.

- **Learnability**: Determines how easily first-time users can understand and begin using the system with little to no instruction.

- **Memorability**: Looks at how well users can recall how to use the system after a break, ensuring they don't need to re-learn tasks when returning.

Prototype Tasks

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.

Landing Page & Navigation	Within 1 minute or Below	Highly Acceptable	Successful
	Above 1 minute	Not Acceptable	Unsuccessful
Book Appointment & Jewelry Details	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 minutes	Not Acceptable	Unsuccessful
Analysis & Recommendation	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 minutes	Not Acceptable	Unsuccessful

Table 2. Time Interpretation

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.

Survey
To measure the overall usability and user satisfaction with the jewelry appointment booking prototype, a 5-point Likert scale survey will be administered to participants. This survey is designed to gather feedback based on the users' experience while interacting with the system's main features such as viewing jewelry, booking appointments, and navigating the interface.

Scale:
Participants will rate their agreement with each statement using the following scale:
- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Statements
1. I found the system easy to navigate.
2. I was able to book an appointment without confusion.
3. The jewelry listings were clear and informative.
4. The interface design was visually appealing.
5. I feel confident using this system again in the future.
6. The system responded quickly and efficiently.
7. I was able to complete my tasks without assistance.
8. The steps for booking were clear and straightforward.
9. I encountered minimal to no errors while using the system.
10. Overall, I am satisfied with the usability of the system.

Interpretation:

Results from each participant will be averaged to determine the overall usability rating for each question. Scores closer to 5 indicate **high satisfaction and usability**, while scores closer to 1 indicate **areas that require improvement**.

This Likert scale approach allows the team to capture more nuanced user feedback and identify specific areas for refinement in the system prototype.