



Echevarria Designers App



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Introduction

The "Echevarria Designers" app aims to transform the jewelry shopping experience, making it accessible, personalized, and unforgettable. Focusing on engagement rings while offering a broader jewelry selection, the app guides users through an intuitive journey to find their ideal piece. With features like personalized recommendations, virtual try-ons, customization, and expert consultations, users can explore and refine their choices confidently. The app also offers educational resources on gemstones, metals, and jewelry care, ensuring informed decisions for every purchase.

Problem

As we expand our custom jewelry offerings, we face significant challenges in meeting the rising demand for unique, tailor-made designs while maintaining efficiency, managing distribution, and ensuring customer satisfaction. Growing customer expectations, logistical constraints from entering broader markets, and the need to scale personalized services without compromising quality add to the complexity. Balancing these factors is crucial to sustaining the personalized experience and high-quality craftsmanship that customers expect.

Future Work

We plan to incorporate a 3D rendering section that will allow users to fully customize their rings, providing an immersive and interactive design experience.

Acknowledgements

We would like to extend our deepest gratitude to our mentor, Dra. Joanne Brenes Catinchi, for her invaluable guidance and support throughout this project. Special thanks to our client, José Echevarría, for his trust and collaboration, which were crucial to the success of this work.

Implementation

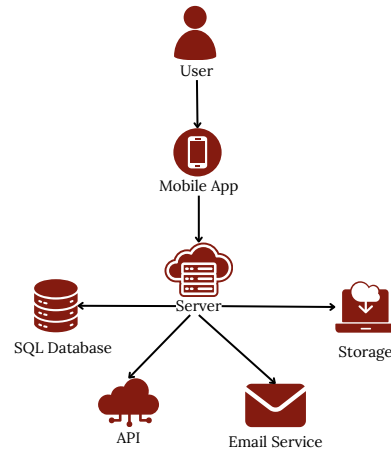


Figure 1. Architecture: This figure focuses on the core components involved in delivering services to the user and maintaining data integrity through cloud services and databases.

USER	CATALOG
USERID	DESIGN_ID
USERNAME	MATERIAL
PASSWORD	STONE_CUT
EMAIL	TONES
GENDER	DIAMONDS
CREATED_ON	STONE_TYPE
	INSTAGRAM_LINK
	IMAGE_PATH
	INSERT_DATE

Figure 2. This figure shows a database schema with two tables: USER and CATALOG, connected by a relationship. The USER table stores user details like ID, username, and email, while the CATALOG table holds design information such as material, stone type, and images.

Software Interfaces

The software interfaces for the app include a React Native frontend, an Express.js backend, and a MySQL database, Google Gmail OAuth 2.0 API, all integrated with a Botpress API for chatbot functionality, supported by detailed documentation to ensure seamless system operation.



Conclusion

The "Echevarría Designers" app offers a modern approach to the jewelry shopping experience, focusing on personalization and customization to meet evolving consumer needs. By leveraging an integrated technology stack and innovative user interfaces, the app enhances customer engagement while providing expert guidance. Future developments, such as 3D rendering for custom ring design, will continue to push the boundaries of what this platform can offer, ensuring it remains an engaging and immersive tool for users.

References

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- [3] M. Neuburg, *Programming iOS 13: Dive Deep into Views, View Controllers, and Frameworks*. O'Reilly Media, 2019.

Graphical User Interface

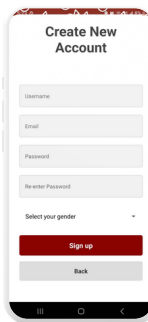


Figure 3. Create Account Page

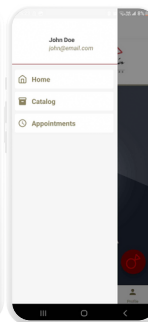


Figure 6. Home Page Menu

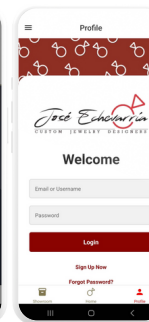


Figure 4. Login Page

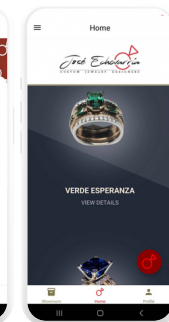


Figure 5. Home Page



Figure 7. Appointments Page

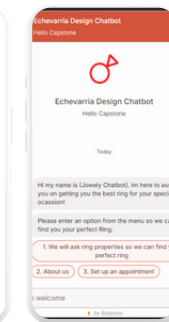


Figure 9. AI Ring Assistant Chatbot