INFORMATION TECHNOLOGY INSTITUTE
Intensive Code Camp
GRADUATION PROJECT

TRIPLE M APP

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Project Code:

Date:

Acknowledgment

We would like to express our sincere gratitude to the Information Technology Institute (ITI) for providing us with the opportunity to work on this graduation project. We extend our appreciation to our instructors for their guidance, support, and valuable insights throughout the development process. Special thanks to our team members who collaborated and contributed to the successful completion of the Triple M App.

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Abstraction

The Triple M App abstracts the complexities of online shopping, offering a user-friendly interface and intuitive navigation. It conceals intricate details of product management and authentication, allowing users to focus on an enjoyable shopping experience. In an era where mobile commerce is thriving, the App emerges as a solution to streamline the online shopping process. It caters to the growing demand for a convenient and feature-rich application that brings together products from various vendors.

Introduction

The Triple M App is a mobile commerce (m-Commerce) application designed to provide users with a seamless shopping experience. It acts as a gateway to a diverse range of products from various vendors, allowing authenticated users to explore, add/remove items from their shopping carts, and complete the entire shopping cycle within the app.

Objectives

The primary objectives of the Triple M App include:

- **Enhanced User Experience:** Create an intuitive and user-friendly mobile application that offers a seamless and enjoyable shopping experience to users.
- **Efficient Product Management:** Implement a robust product management system, leveraging Shopify integration, to efficiently organize, display, and update the extensive product catalog within the app.
- **Secure User Authentication:** Ensure the security of user data by implementing Firebase Authentication, providing a reliable and safe login and registration process for users.
- **Real-time Data Syncing:** Utilize Firestore, a cloud-based NoSQL database, to enable real-time data syncing across devices, ensuring users have up-to-date information on products, orders, and inventory.
- **Scalability and Performance:** Design the app architecture to be scalable, allowing for potential future expansions and ensuring optimal performance even as the user base grows.
- **Cross-Platform Compatibility:** Consider the potential for cross-platform compatibility, making it feasible to expand the app to other platforms in the future.

- Integration with Third-Party Services: Seamlessly integrate with external services, such as payment gateways and delivery services, to enhance the overall functionality of the app.
- Analytics and Insights: Implement analytics tools to gather valuable insights into user behavior, allowing for data-driven decisions to improve app performance and user engagement.
- Clear Documentation: Create comprehensive documentation to facilitate easy understanding, maintenance, and potential future development of the app by the development team or other stakeholders.
- Timely Project Delivery: Adhere to the project timeline and deliver milestones in a timely manner, ensuring that the app is ready for deployment within the specified timeframe.

Features

1. Home Tab:
- Search functionality
- Favorites and shopping cart management
- Display of ads and scrollable brand sections

2. Categories Tab:
- Search and navigation options
- Display of main and sub-categories
- Product filtering based on categories

3. Product Details Screen:
- Sections for images, name, available sizes, price, and rating

4. Product Display:
- Grid layout with product images, prices, and favorite indicators.
- Navigation to detailed product information.

5. Me Tab:
- User-specific toolbar for navigation
- Personalized sections for logged-in users, including orders and wish lists

SDLC

The development of the Triple M App follows a comprehensive Software Development Life Cycle, encompassing stages such as requirements analysis, design, implementation, testing, deployment, and maintenance. This approach ensures a systematic and organized development process, resulting in a robust and user-friendly application.

1. Planning
- Conducted a thorough analysis of project requirements, goals, and constraints.
- Defined the scope, objectives, and deliverables of the e-commerce app.
- Established a project timeline, resource allocation, and risk management plan.

2. Design
- Created detailed design specifications for the app's user interface and functionality.
- Developed wireframes and prototypes to visualize the app's structure and flow.
- Defined the database schema, considering scalability and data integrity.

3. Implementation

- Conducted comprehensive testing, including unit testing, integration testing, and user acceptance testing.
- Addressed and resolved identified bugs and issues promptly.
- Ensured the app's compatibility across various Android devices and screen sizes.

4. Maintenance

- Established a post-launch support system to address user feedback and issues.
- Implemented regular updates to introduce new features, enhancements, and address security concerns.
- Monitored app performance, resolved potential issues, and ensured ongoing compatibility with the latest Android versions.

Tools

1. Android Studio:
- Official IDE for Android development.
- Offers a rich set of tools for building Android apps.
- Supports Java, Kotlin, and other languages.

2. Firebase Auth:
- Part of Google's Firebase platform.
- Provides easy-to-use authentication services for apps.
- Supports various authentication methods like email/password, Google, etc.

3. Firestore:
- Cloud-based NoSQL database by Firebase.
- Real-time syncing of data between devices.
- Scalable and flexible for storing and syncing app data.

4. Shopify:
- E-commerce platform for online stores.
- Manages products, inventory, and orders.
- Provides APIs for integration with mobile apps.

5. GitHub:
- Leveraged GitHub for efficient version control, enabling collaborative development and seamless tracking of code changes.
- Facilitated teamwork by providing a centralized repository for code among team members.
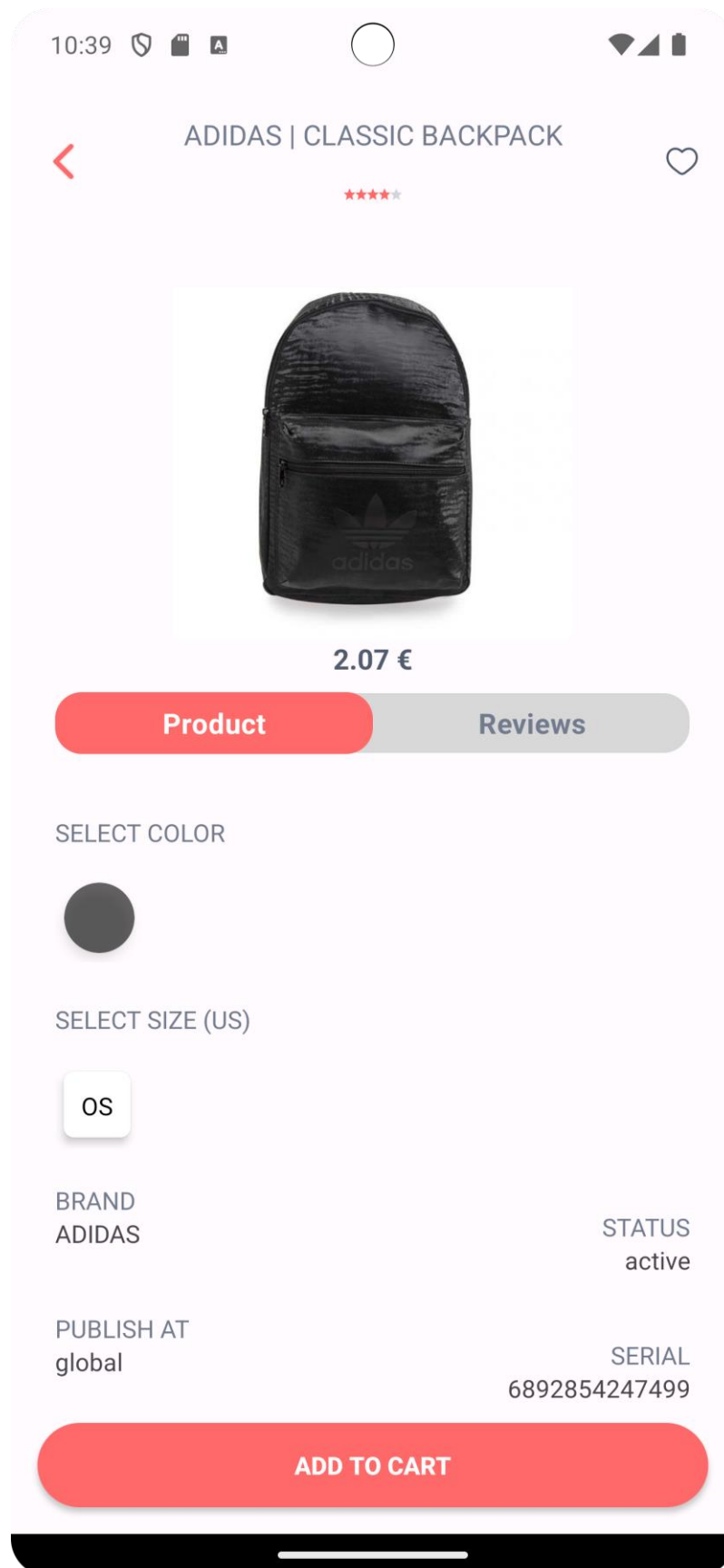
Diagrams

- **Use Cases**

Application Screenshots

✕

All Brands

adidas

adidas

asics-tiger

converse

dr-martens

| | adidas-classic-bac… |
| | 2.07 € |

| | adidas-classic-bac… |
| | 1.48 € |

| | adidas-kids-stan-s… |
| | 2.66 € |

| | adidas-superstar-8… |
| | 5.03 € |
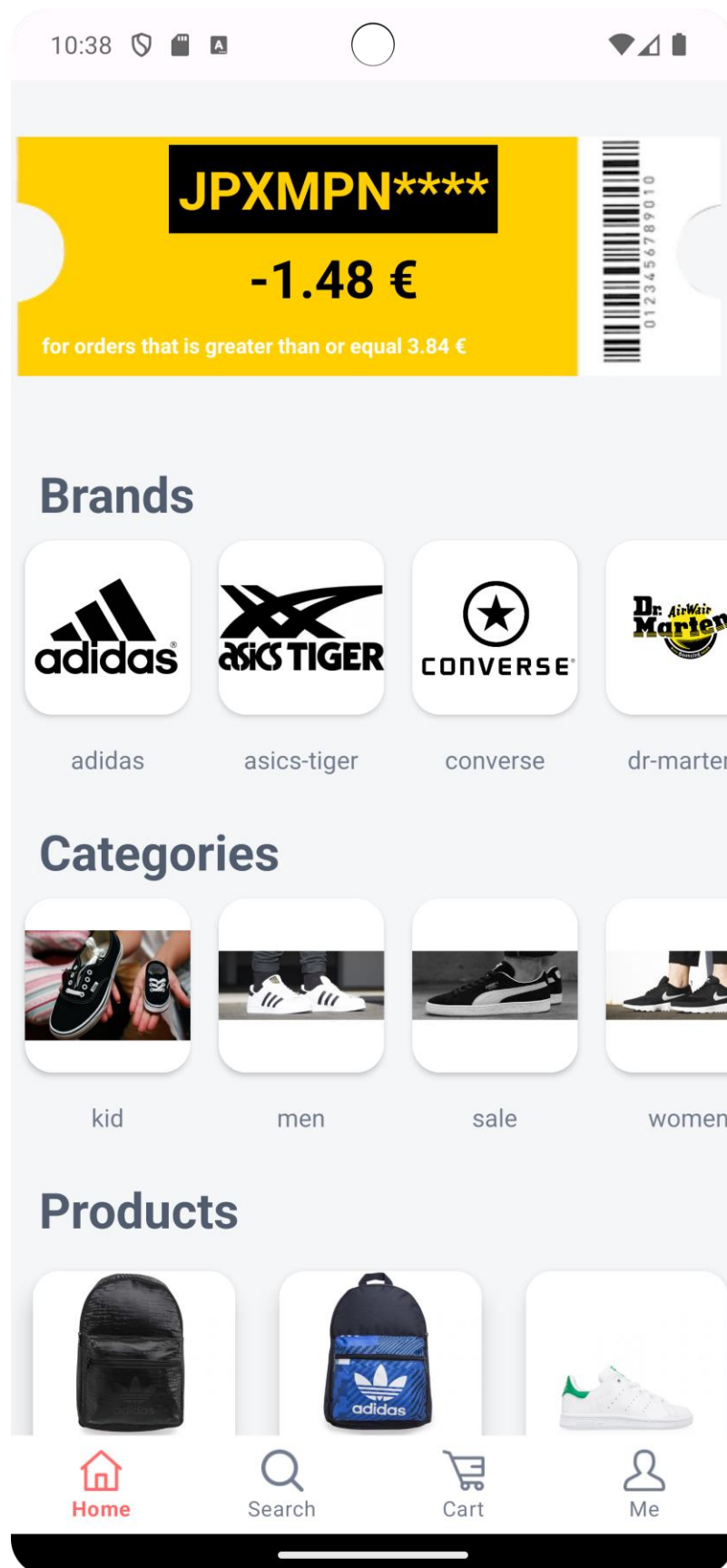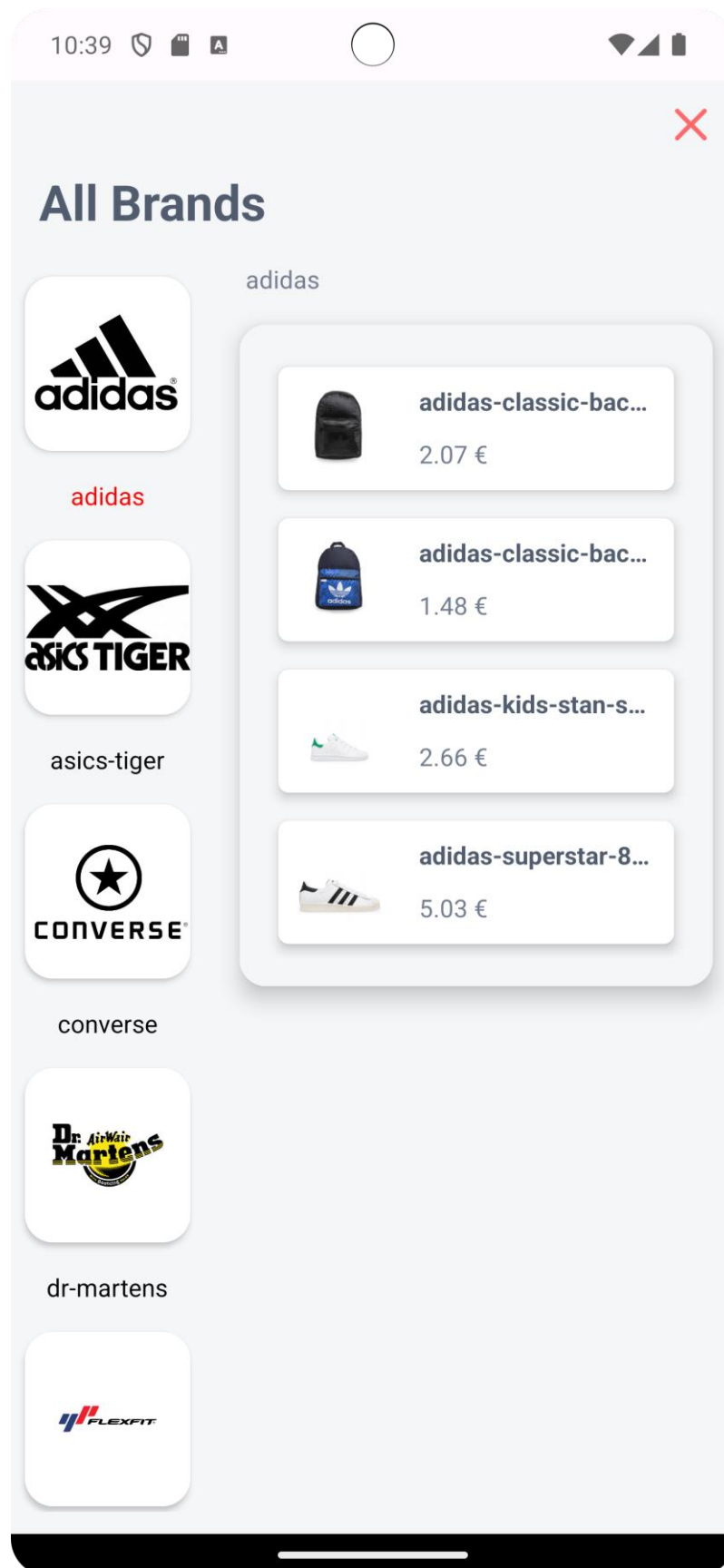
Filter

| Men | Kid | Women |

SELECT COLOR

Brands

| Adidas | Ascis Tiger | Converse | Dr Marten |

Price:

| Min | | Max |

Apply
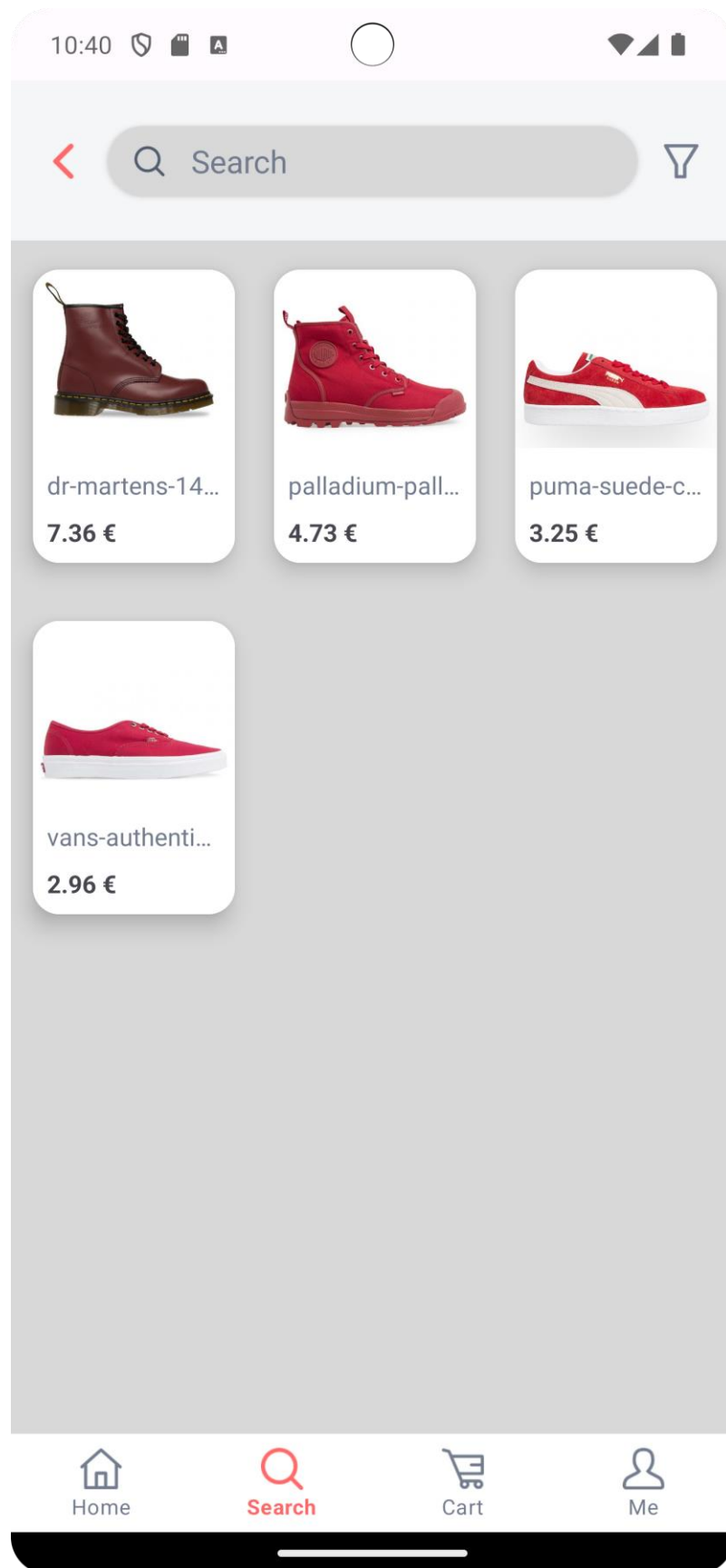
Cart

clear all

**ADIDAS | CLASSIC BACKPACK | LE(
MULTICOLOUR**

OS / blue

1.48 €

— 1 +

Total

1.48 €

CHECKOUT

Free Domestic Shipping

Home   Search   Cart   Me

10:41

Checkout

SHIPPING ADDRESS

PAYMENT METHOD

CASH ON DELIVERY   CREDIT CARD
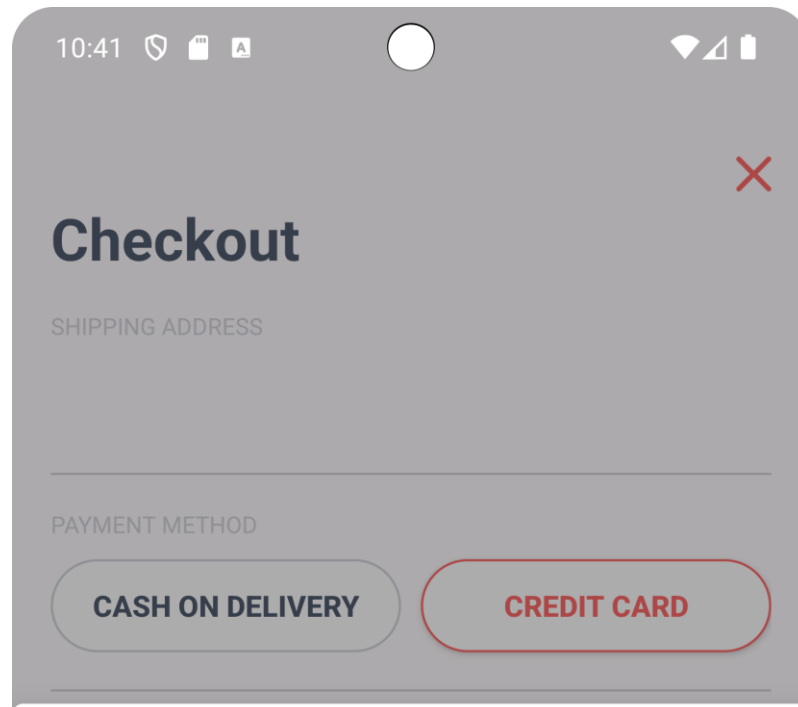
✕   `TEST MODE`

Add your payment information

Card information

Card number   VISA ●● AMEX DISCOVER

MM / YY   CVC   ▭135

Billing address

Country or region
United States   ⌄

ZIP Code

☐ Save for future Tripe M payments

Pay $1,550.00   🔒

10:42

spong
spong@gmail.com

☰	All My Orders
🪂	Pending Shipments
💳	Pending Payments
🛍	Finished Orders

⚲	Shipment Addresses	
♡	Favourites	
💼	Currency	🇪🇺
🔤	Languages	English

LOG OUT

🏠 Home	🔍 Search	🛒 Cart	👤 Me

10:42

Choose your preferred language

English ✓

العربية

Choose your preferred address

home
94043, Amphitheatre Parkway,
Santa Clara County, California,
United States

jr
94043, Amphitheatre Parkway,
Santa Clara County, California,
United States

My Tag
7730230, Belqas, Dakahlia
Governorate, Egypt

10:43

line Lake Events

Kite Lot

Shoreline Amphitheatre

N Shoreline Blvd

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Stierlin Ct

Googleplex

Charleston

Shashi Hotel Mountain
View, an Urban Resort

Shore

Zareen's

Space P.

Google Pear

Enter address tag

Apartment number   Building number

Phone number
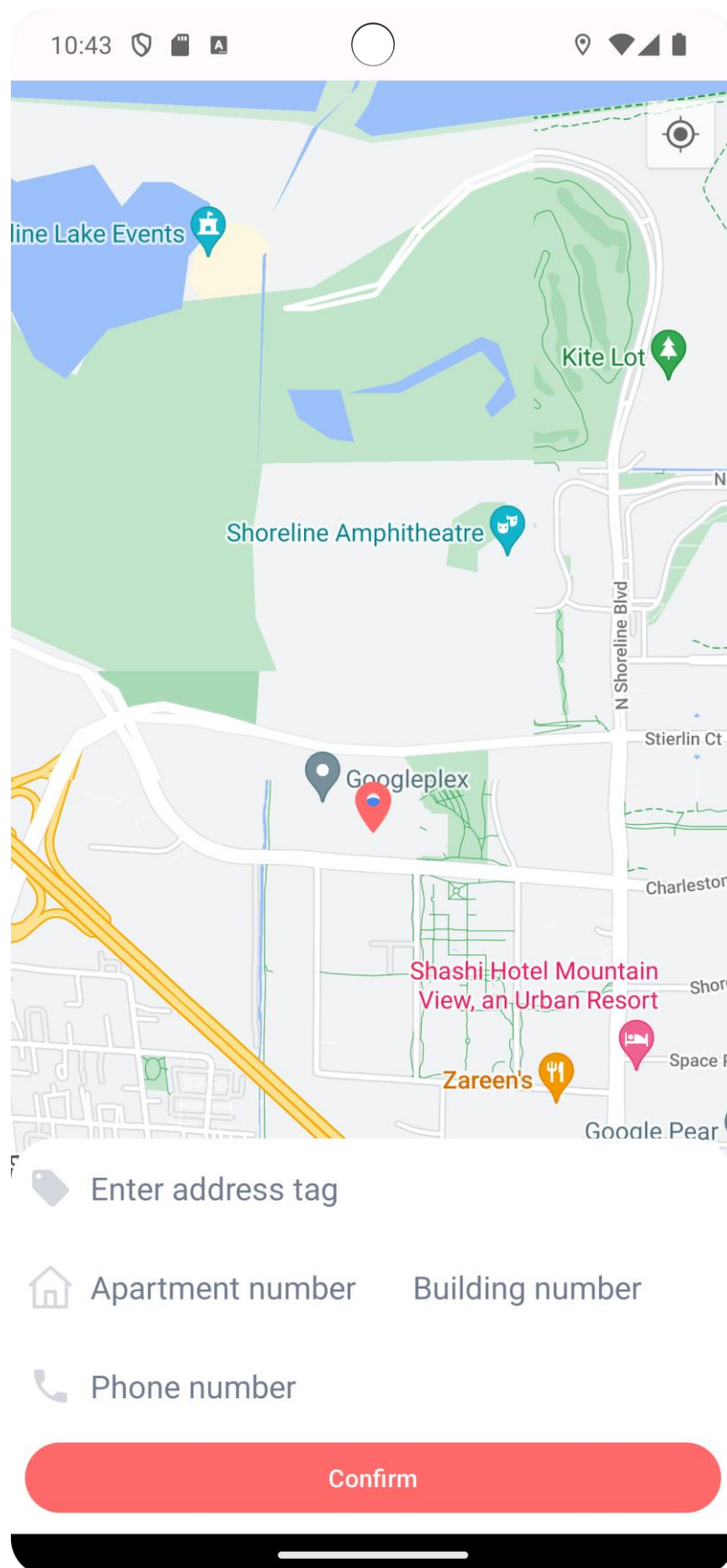
Confirm

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Log In

✉ Enter your e-mail

🔒 Enter your password 👁

LOG IN

SIGN UP

FORGET PASSWORD

User Info

Enter your username

Enter you mobile number

Enter your address (optional)

CONFIRM

BACK

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