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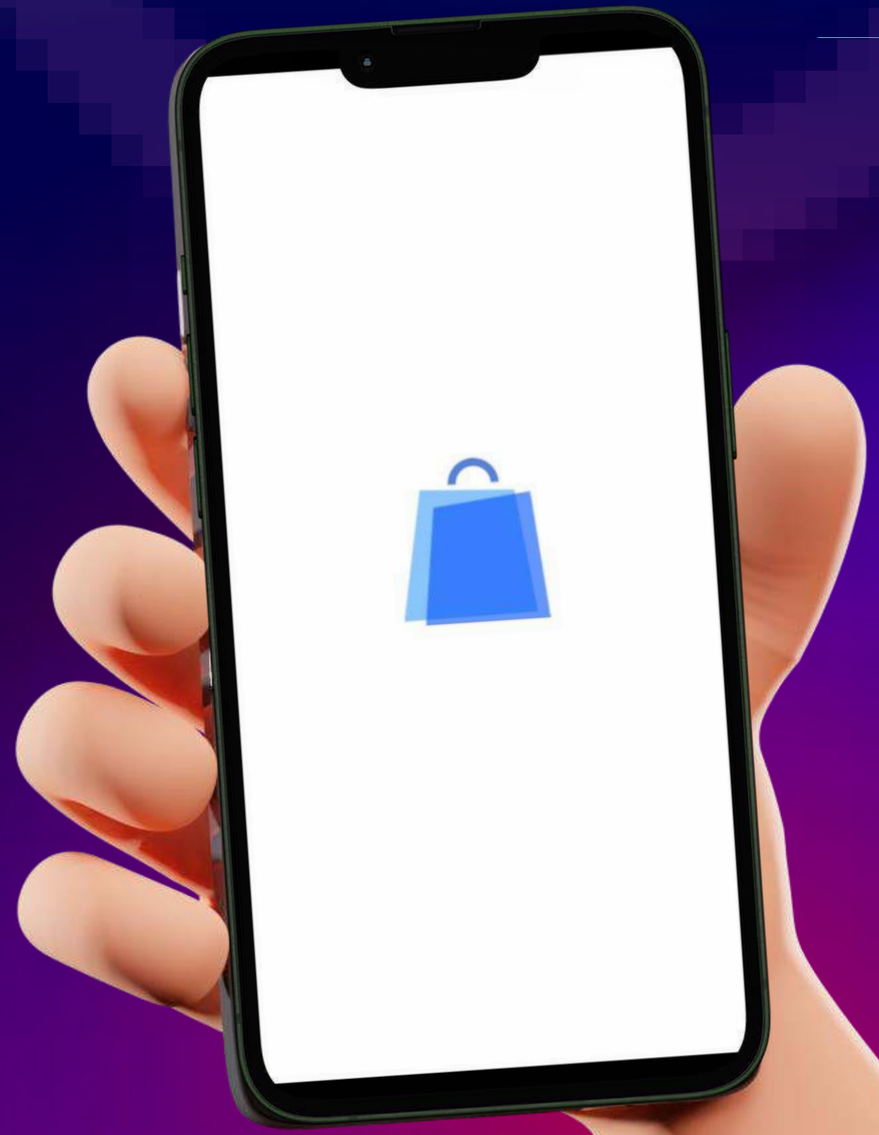
E-COMMERCE APP

Presented by SW3E

DEPI Project presentation



Salford & Co.

PROFESSIONAL TEAM

Team Members

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Mobile App developer

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Software Engineer

Mohamed

Flutter Developer

Malak Amgad

AI Engineer

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AGANDA

- Introduction
- Analysis
- Design
- Implementation
- Conclusion

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INTRODUCTION

Welcome to our presentation on the E-commerce App project. This app is designed to deliver a seamless and enjoyable online shopping experience. With features like personalized home pages, product search, shopping cart, user profiles, and a guided onboarding experience, our e-commerce platform aims to make shopping easy, fast, and secure. Built using Flutter for cross-platform compatibility and integrated with Firebase Authentication and Firestore for user management and data storage, this app combines functionality with a clean, modern design that caters to the needs of today's online shoppers.

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ANALYSIS

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PROBLEM STATMENT

- Users require a platform to browse, search, and purchase products seamlessly.
- E-commerce apps must ensure efficient navigation, personalization, and Validation.

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OBJECTIVES

- Provide a user-friendly app with essential e-commerce functionalities.
- Ensure secure user authentication and seamless data interaction through APIs.

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TRAGET AUDIENCE

Online shoppers who value convenience, speed, and security in mobile commerce.

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FUNCTIONAL REQUIREMENTS

User Management
Core Features

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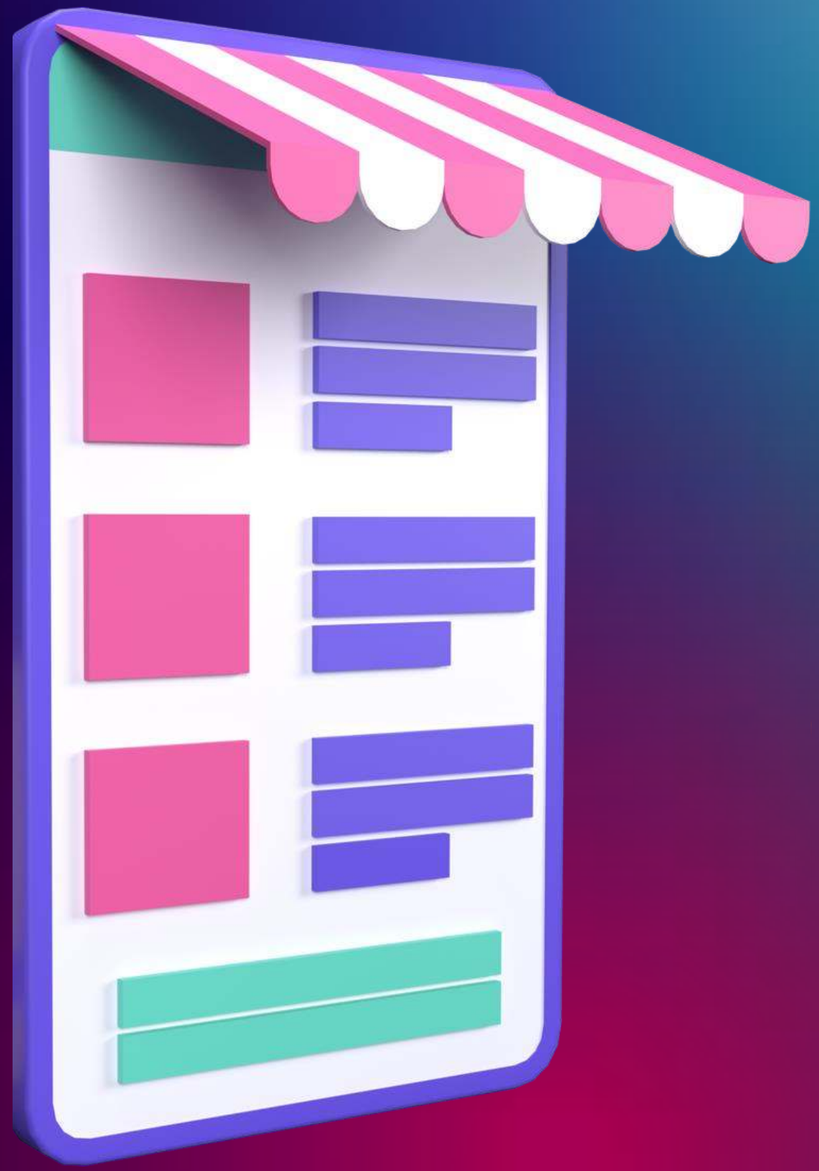
USER MANAGEMENT
CORE FEATURES

- HOME PAGE
- SEARCH
- CART
- PROFILE PAGE

ONBOARDING EXPERIENCE

VALIDATION



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TECHNICAL REQUIREMENTS

- Frontend
  Flutter framework for cross-platform compatibility.
- Backend:
  Firebase Authentication for user management.
  Cloud Firestore for real-time database management.
- APIs:
  Fetching products and categories from the provided REST API .

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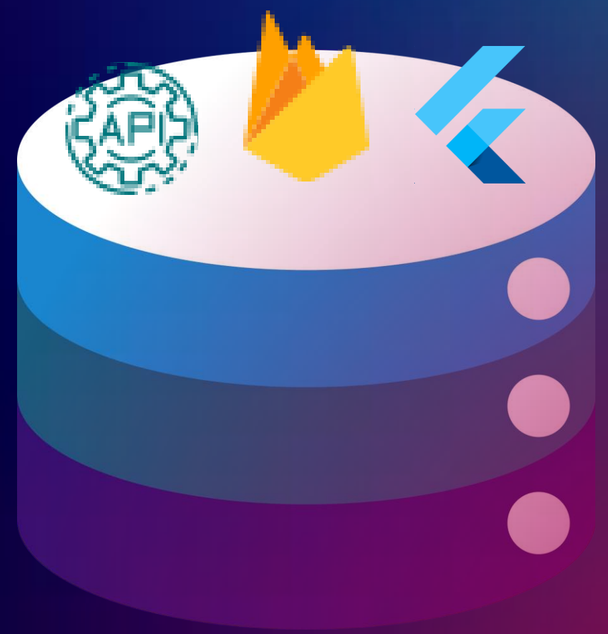

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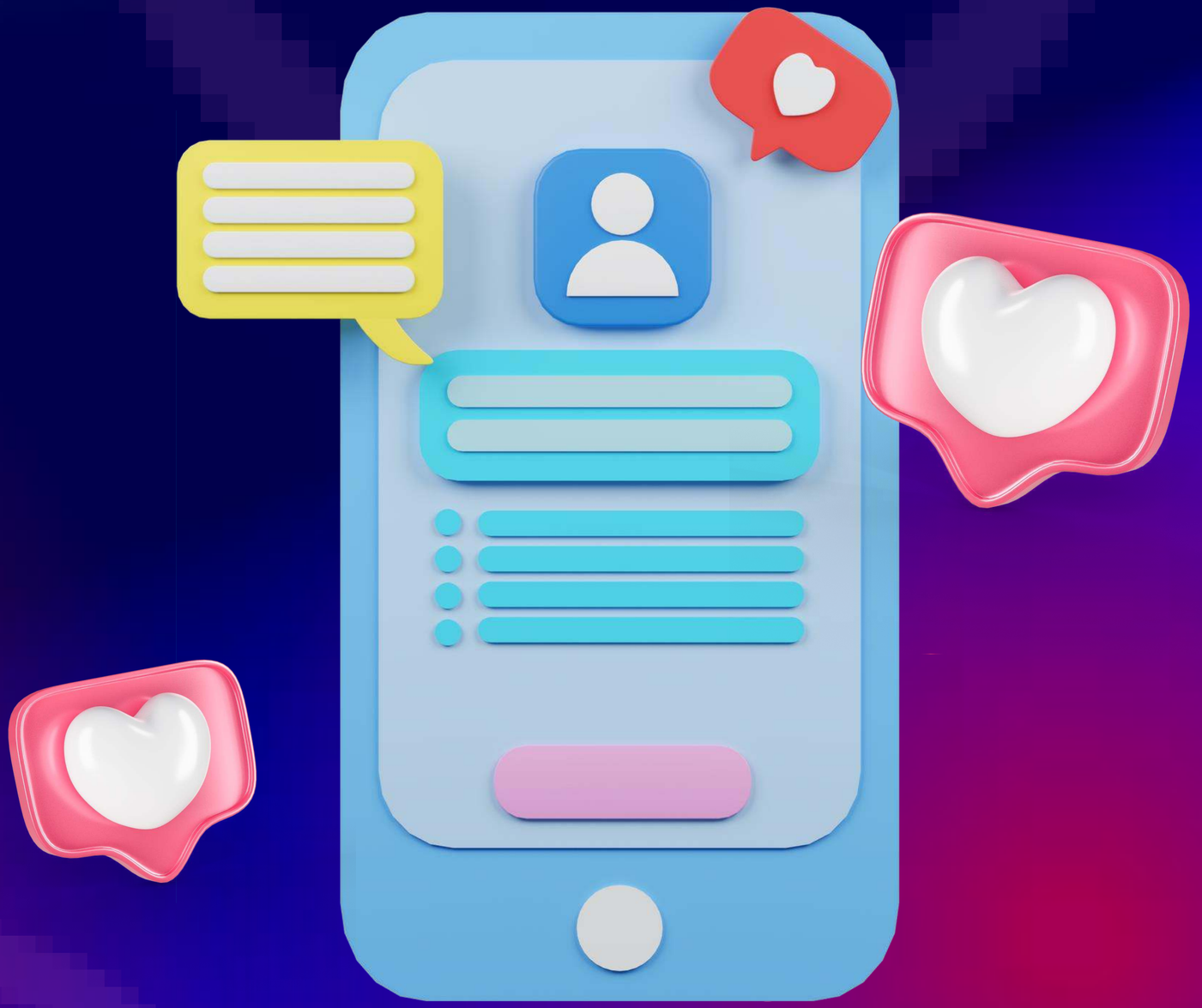
DESIGN



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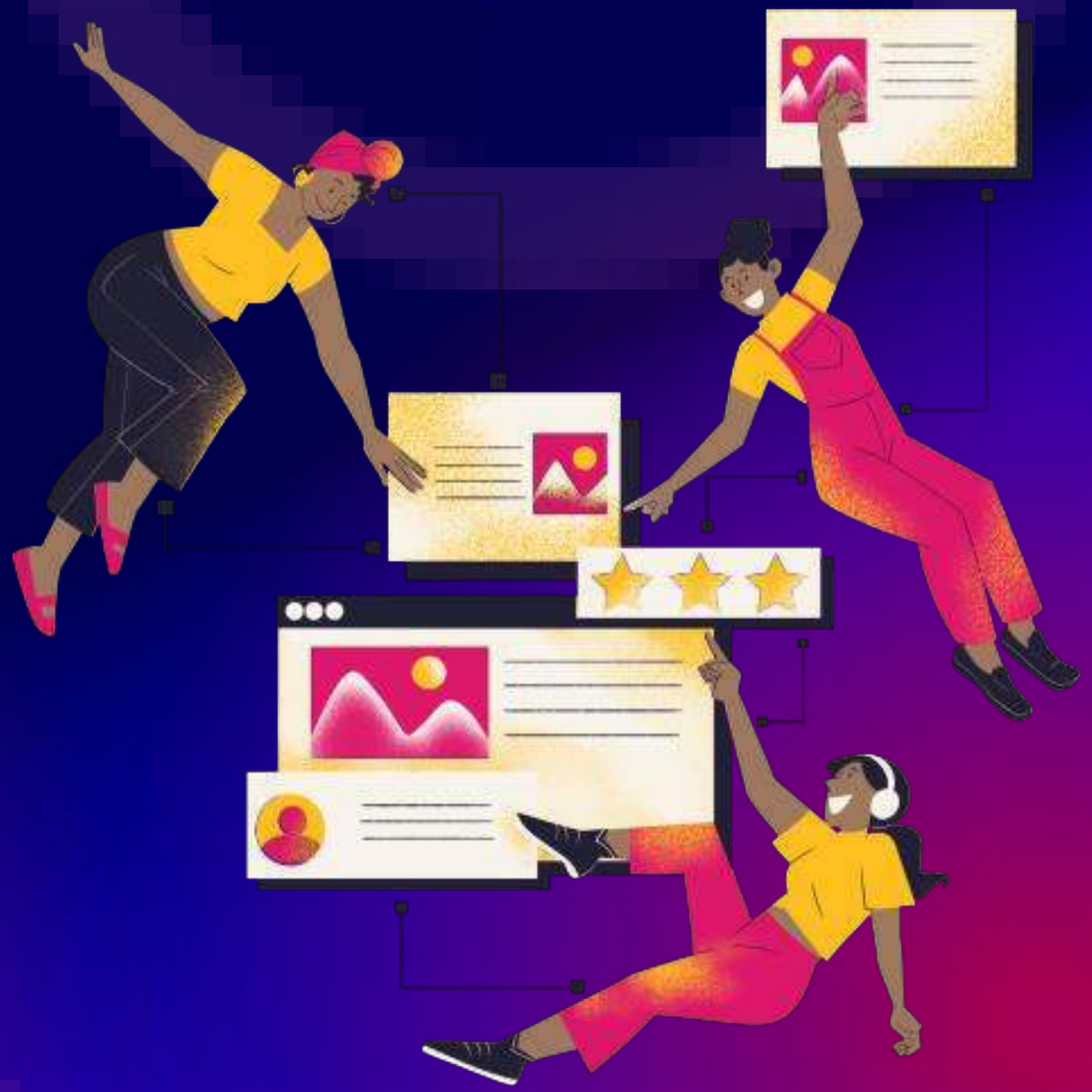
UI/UX GOALS

- EASE OF USE
- AESTHETIC APPEAL
- CONSISTENCY



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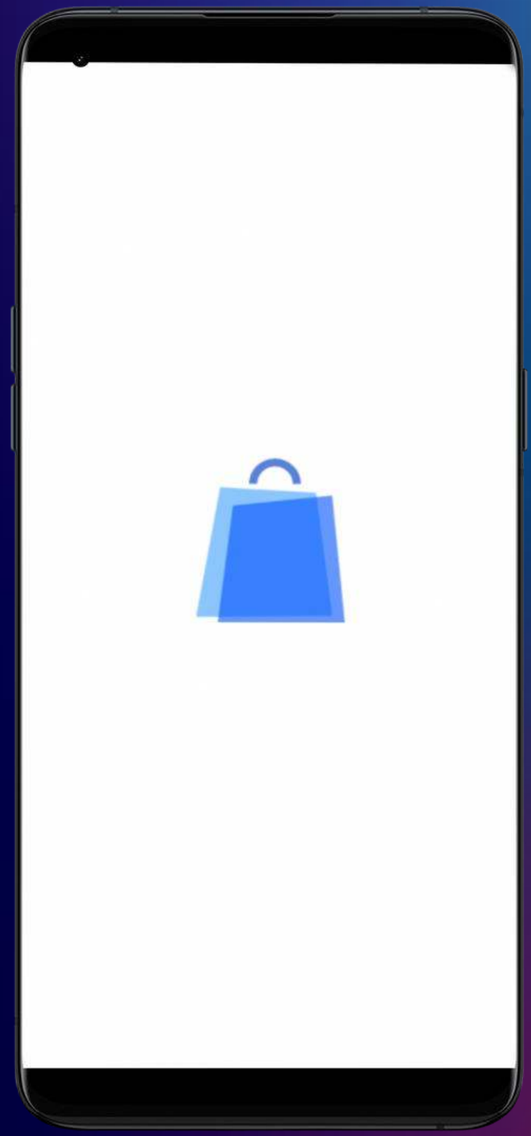
SCREENS

- Splash Screen:
  App logo with a short fade-in animation.



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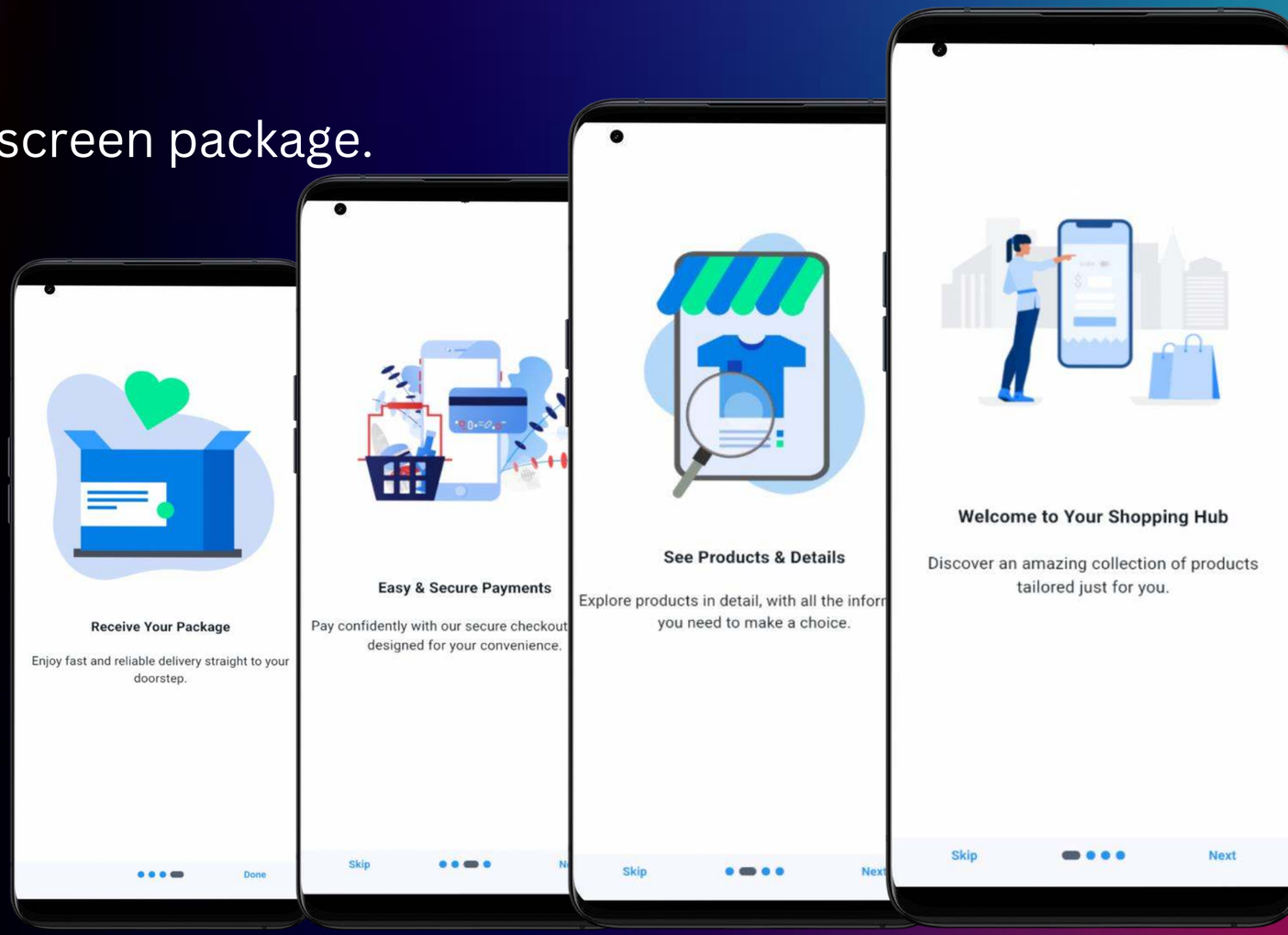
ONBOARDING SCREENS

- Carousel views using the introduction_screen package.
- Feature highlights
  - Easy shopping
  - Product details
  - secure Payment
  - receive Package



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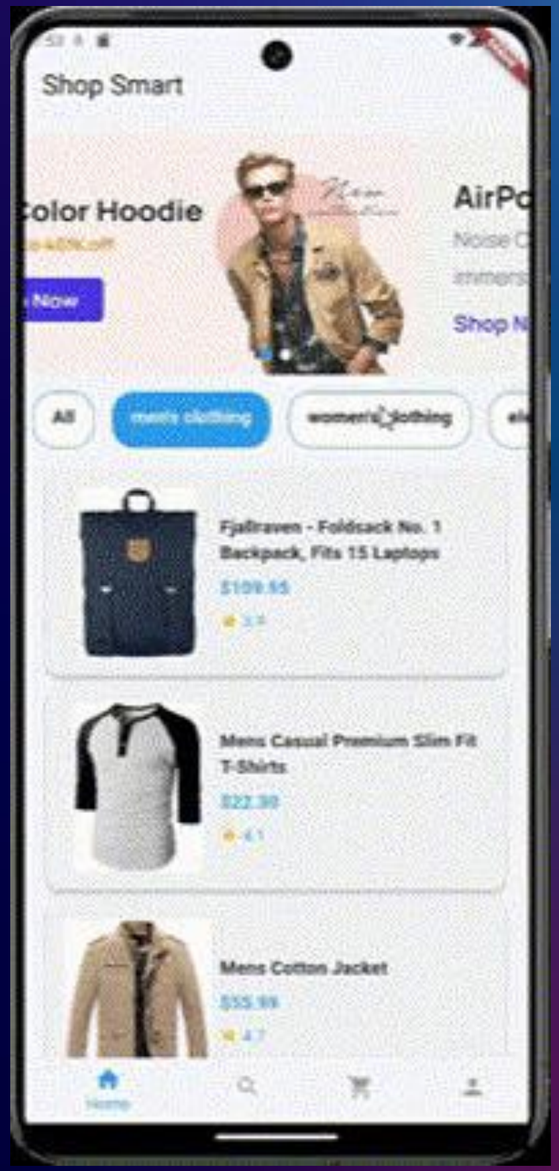
HOME PAGE

- Featured products section with scrollable categories.
- categories at the top for quick access.
- shimmer and card swiper packages



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SEARCH SCREEN

- Input field for keyword-based search.
- List of matching products dynamically populated.

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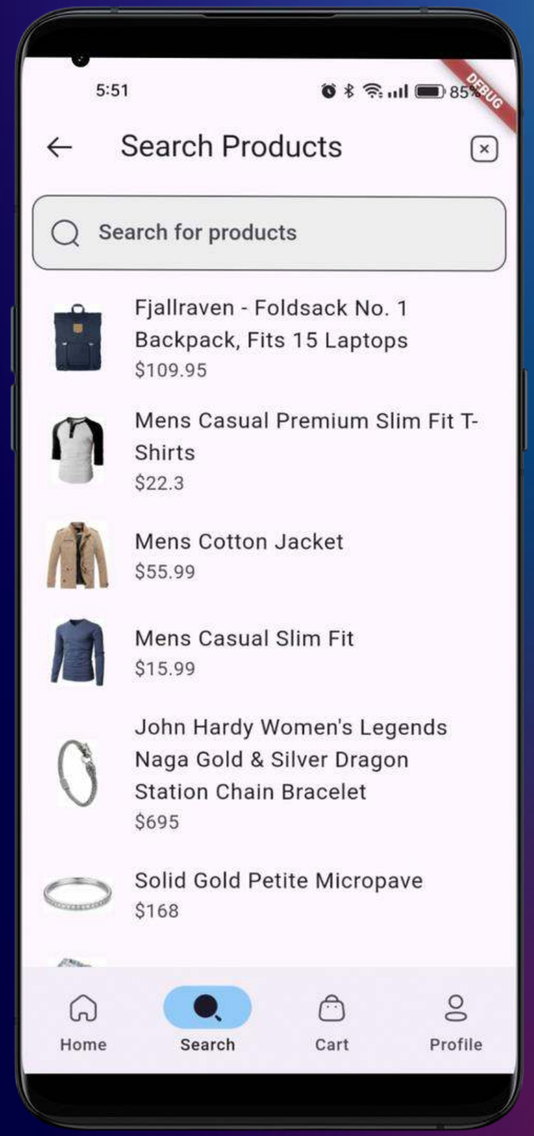

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CART PAGE

- List view of selected items with total cost displayed.
- Option to update quantity or remove items.

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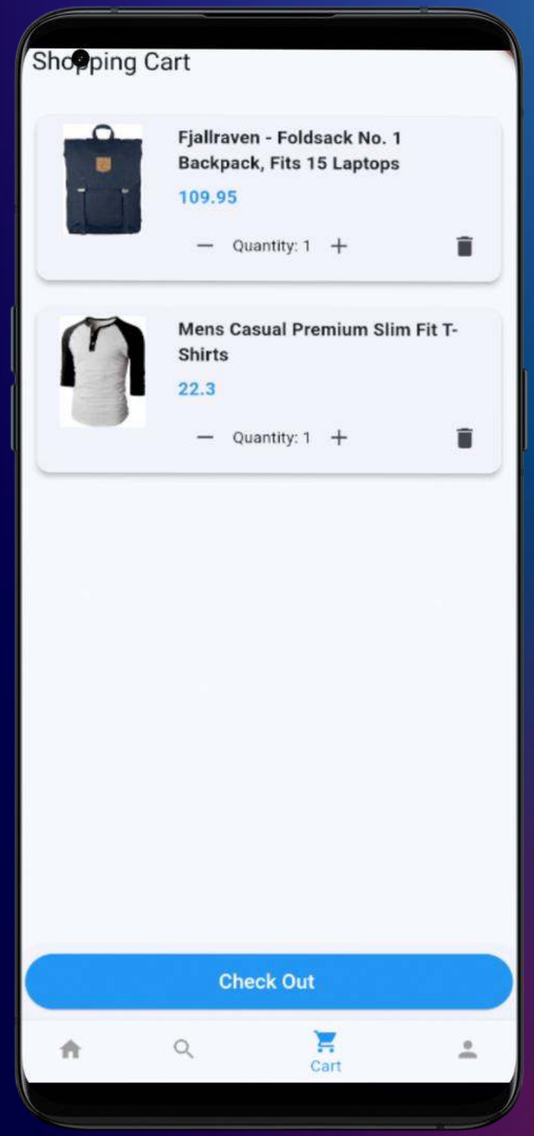

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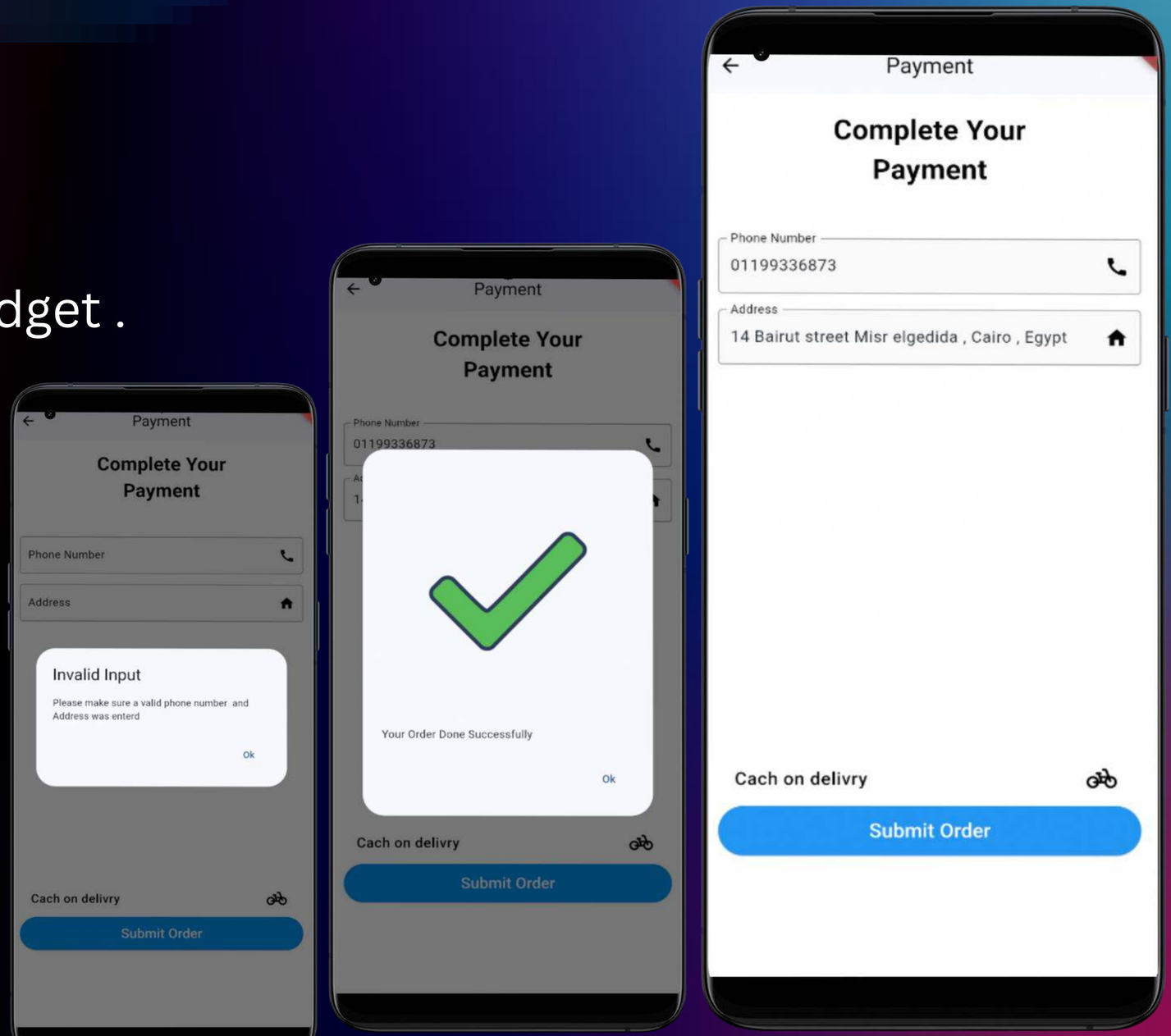
CHECKOUT

- Fast Checkout with successful widget .



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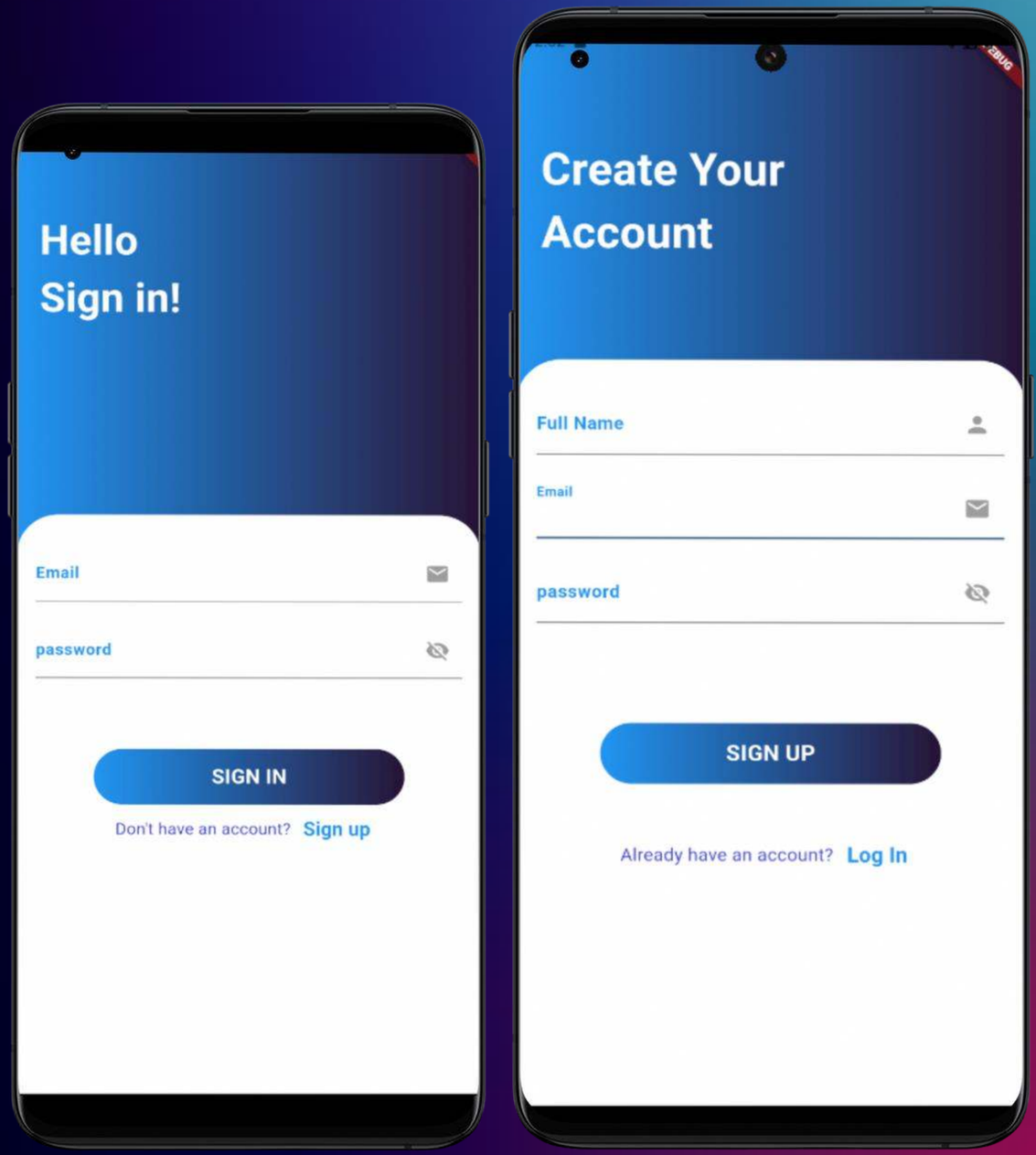
PROFILE PAGE:

- User details (name, email).
- Navigation for settings and logout.

/user



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STYLE GUIDE

- COLOR PALETE

- TYPOGRAPHY

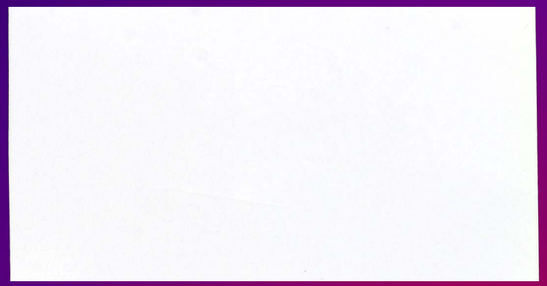
ROBOTO REGULAR WEIGHT MEDIUM SIZE

- ICONS

Underlined text

- LAYOUTS

Grid Structure
space around
card:floating appearance



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IMPLEMENTATION

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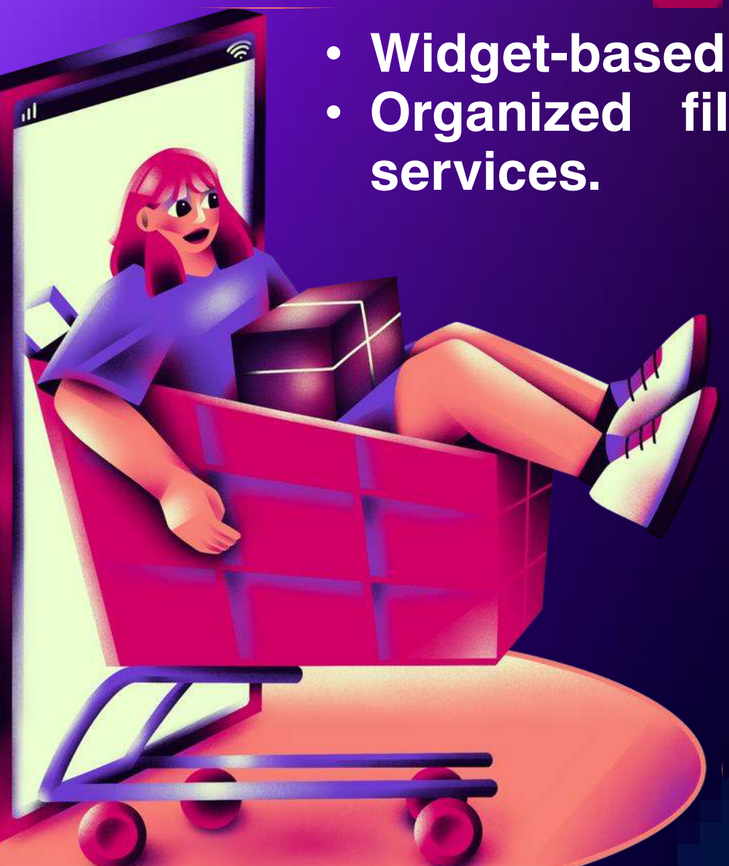
ARCHITECTURE

FRONTEND

- Widget-based structure for reusability.
- Organized files: screens, widgets, models, services.



BACKEND

- Firebase for authentication and data storage.
- REST API integration for product management.

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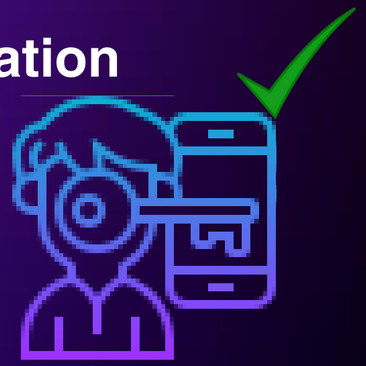
KEY FEATURES

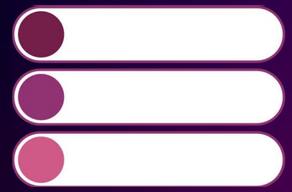
USER AUTHENTICATION

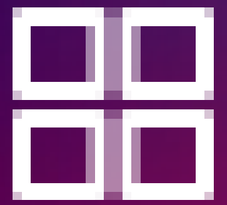
- user authentication
- validation



PRODUCT DISPLAY

- dinamic loading via API
- ListView and GridView for layouts.





CART MANAGEMENT

- Stateful widget to manage cart items.
- Real-time updates based on changes.

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KEY FEATURES

ERROR HANDLING

- Graceful error messages for API failures.
- Retry mechanisms for failed API requests.

PACKAGES

- different flutter package where used

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TECHNOLOGIES & DEPENDENCIES

FLUTTER

- Framework for cross-platform development.

FIREBASE

- firebase_auth
- cloud_firestore

PACKAGES

- introduction_screen
- flutter_launcher_icons
- firebase_auth
- cloud_firestore
- card_swiper
- cupertino_icons
- iconly
- card_swiper
- cupertino_icons
- fancy_shimmer_image

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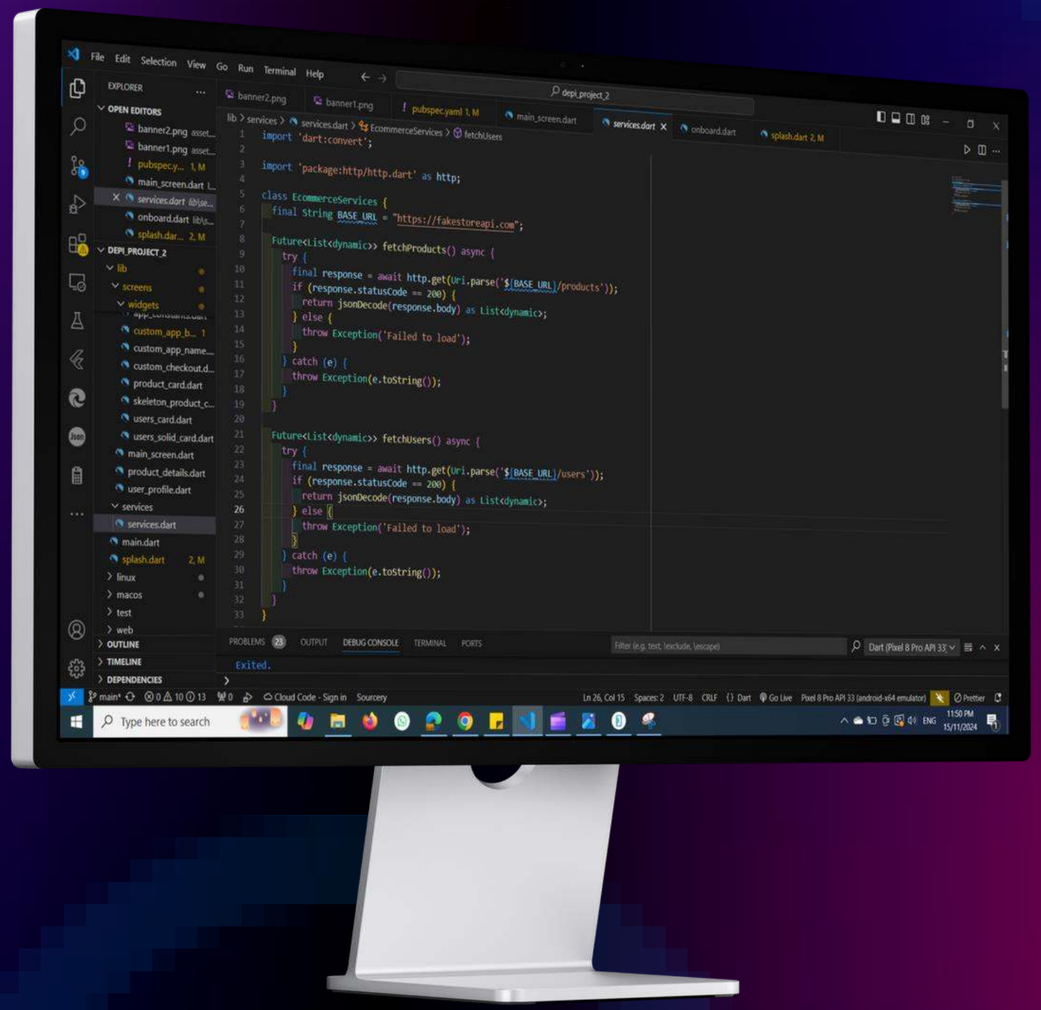
CODE SNIPPETS



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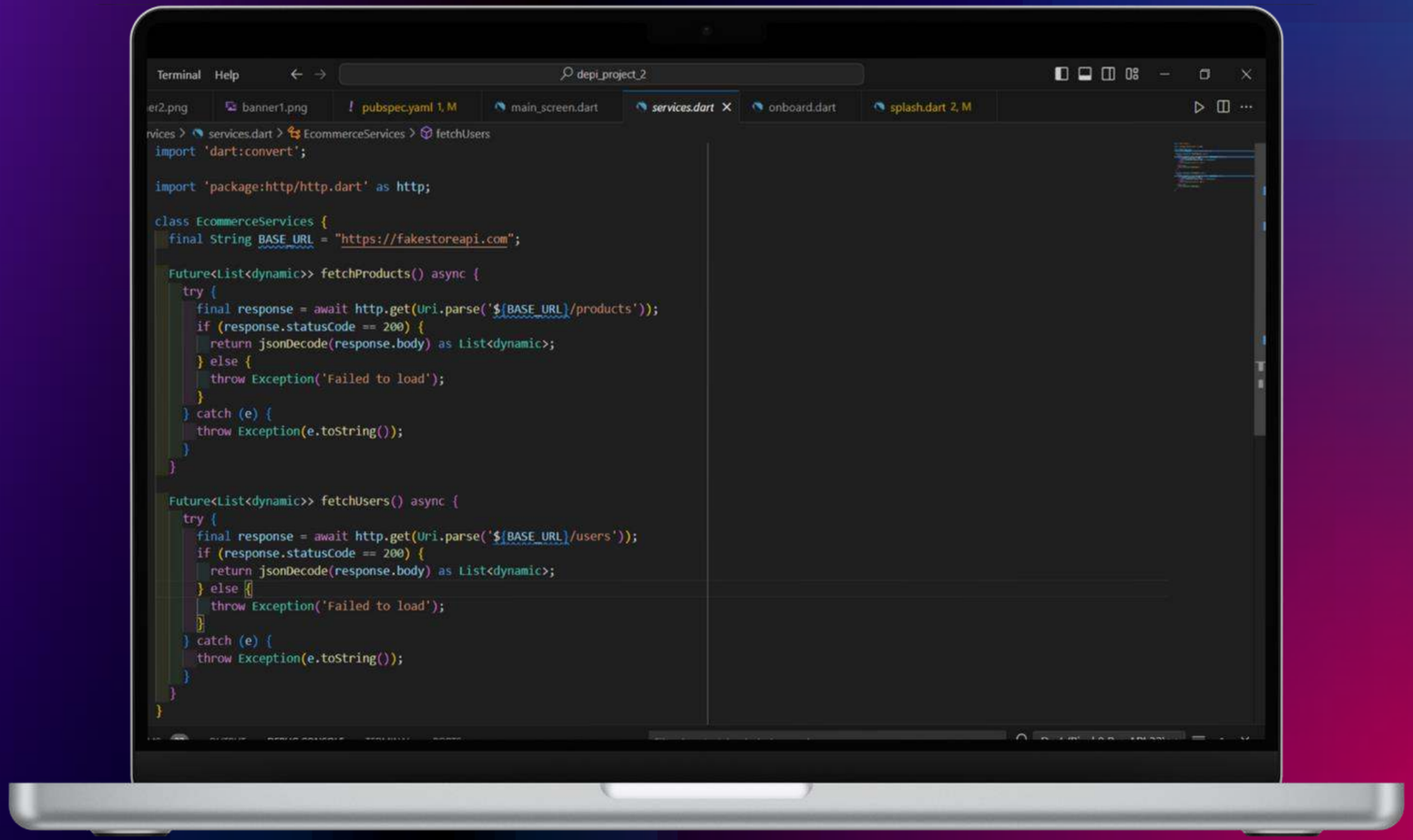
API INTEGRATION



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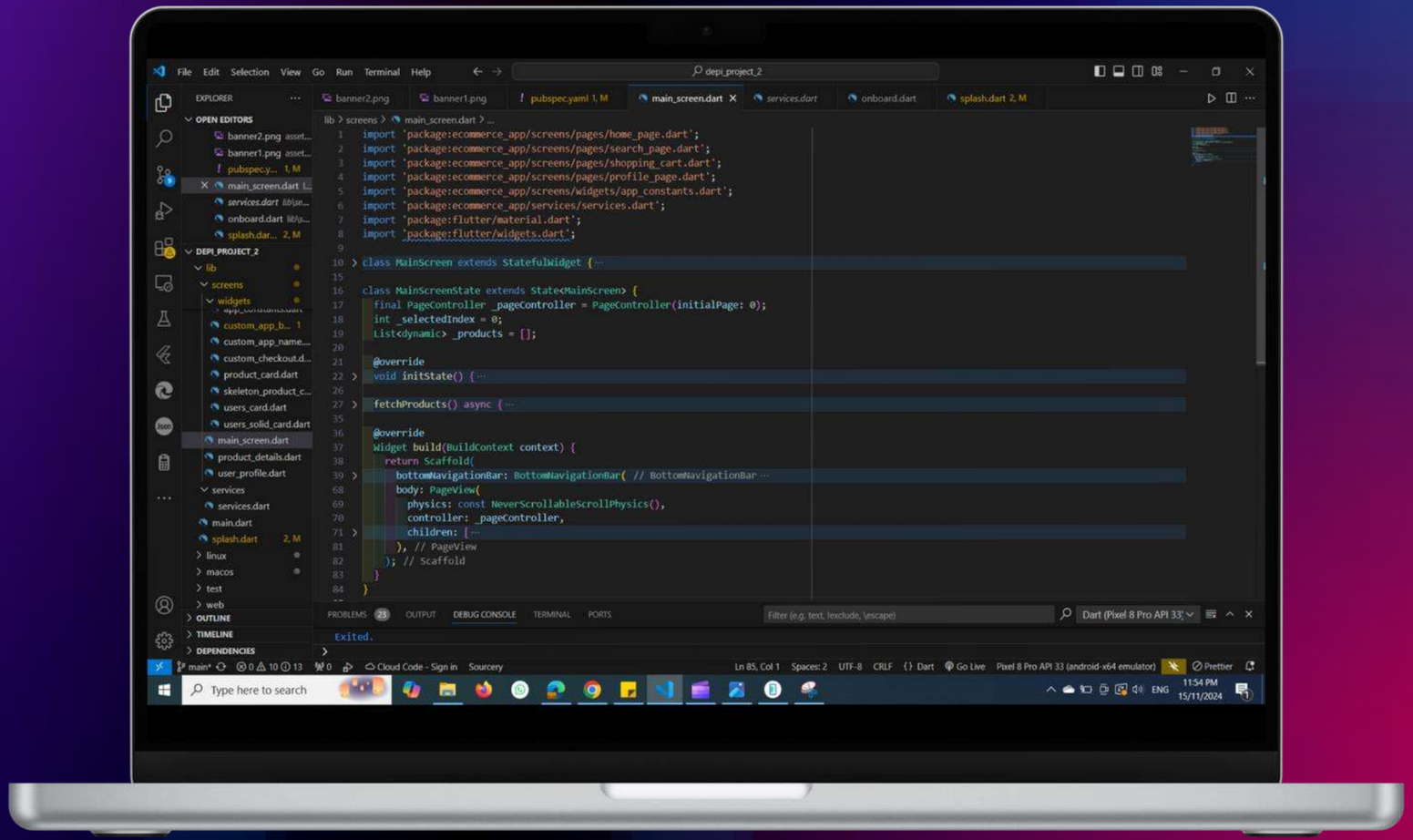
HOME PAGE



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CHALLENGES

MANAGING API ERRORS.

- Solution: Implemented error handling and retry mechanisms.

MANAGING API ERRORS.

- Solution: Used Flutter’s MediaQuery for adaptive layouts.

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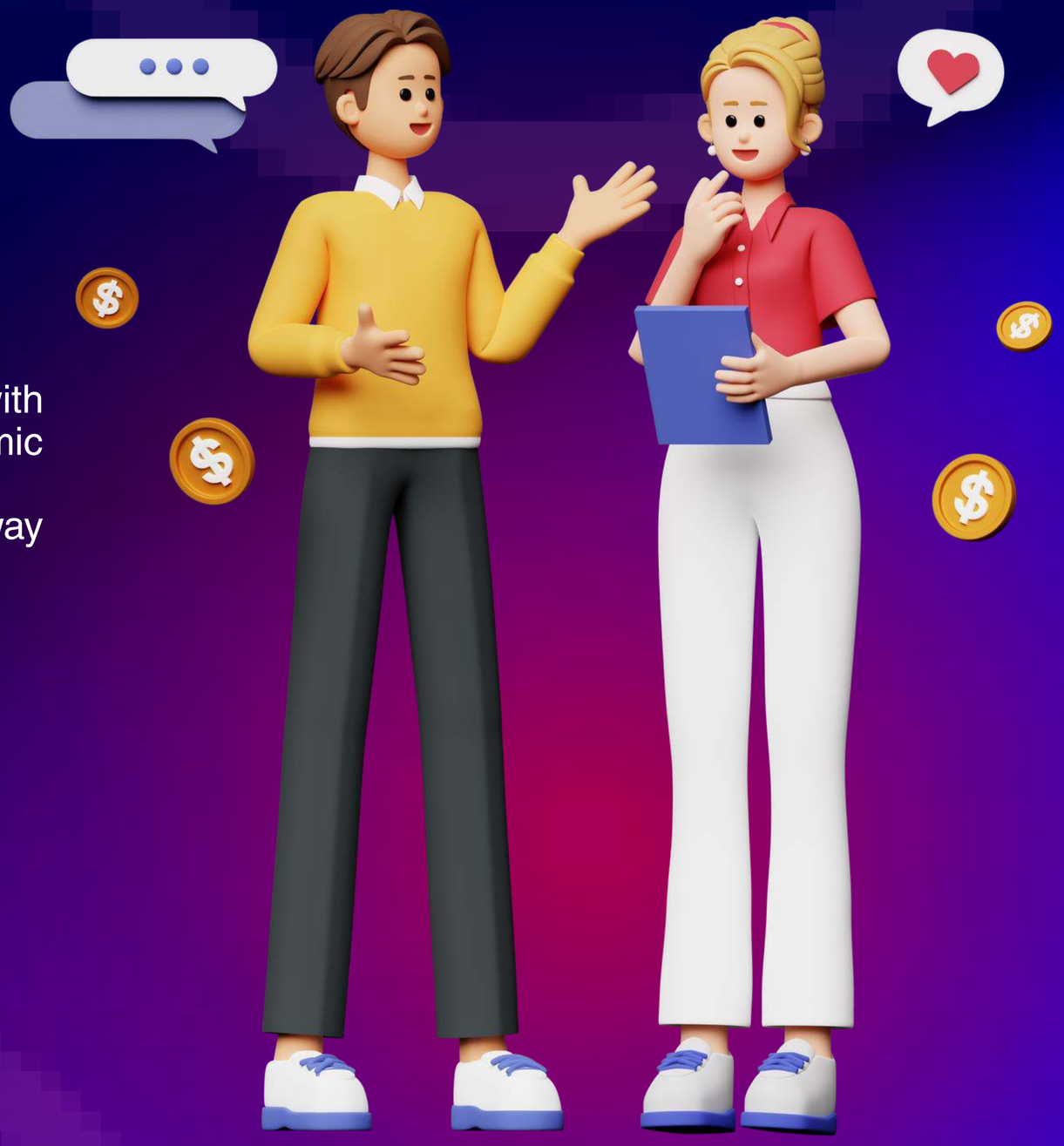
CONCLUSION

- The app provides a robust e-commerce solution with essential features like user authentication, dynamic product listing, and cart management.
- Future enhancements can include payment gateway integration, order tracking, and notifications.



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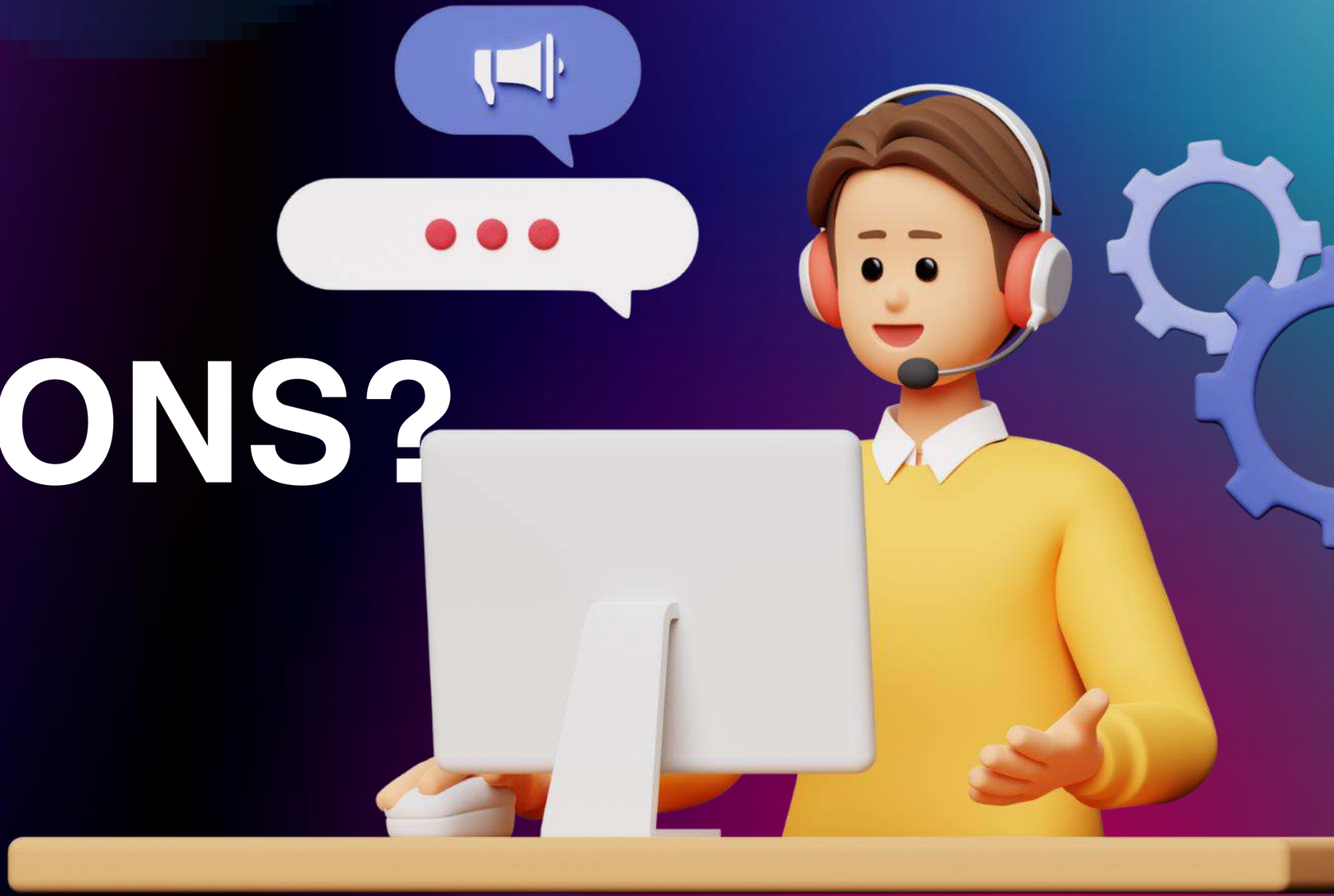
QUESTIONS?



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Thank you