

American Construction Supply

Overview

The goal of this project is to develop a mobile application that will allow users to browse and purchase construction supplies. The app will be similar to HomeDepot, but will be specific to our company's offerings. The app will be available for both iOS and Android operating systems.

- <u>User</u>
- Addresses
- **Y** Product
- Marketplace
- <u>Cart</u>
- Orders
- Payments
- <u>Notifications</u>

- Share
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- ** Ratings & Reviews
- Customer Support
- ****** Admin Panel
- Admin Verification
- **Languages**
- Delivery App
- **Admin Panel Delivery Update**

The mobile app will have the following features:

- User login and registration: Users will be required to create an account in order to
 access the app's features. The registration process will require users to provide
 basic personal information such as name, email, and password. Users will be able
 to log in to their accounts using their email and password.
- Browse and search for construction supplies: Users will be able to browse
 through a wide range of construction supplies offered by the company. The app will
 feature a search function that will allow users to search for specific products by
 name, category, or keyword.
- View product details and specifications: Users will be able to view detailed product information and specifications. This will include product images, descriptions, prices, and technical specifications such as dimensions, weight, and materials used.
- Add items to the cart: Users will be able to add items to their cart with a single tap. The app will display the running total of the items in the cart and the total cost.
- Checkout and payment processing: Users will be able to complete their purchases directly within the app. The checkout process will include the input of

- shipping and billing information as well as the selection of a payment method. The app will support popular payment methods such as credit cards and PayPal.
- Order history: Users will be able to view their order history within the app. This will include details such as order date, order number, and total cost.
- **Push notifications for promotions and order updates**: The app will send push notifications to users to inform them of special promotions and updates on their orders. Users will be able to customize their notification preferences within the app.
- Invoice generation through Biztrack POS for Admins: In addition to the features mentioned earlier, admins of the app will be able to generate invoices for orders through the Biztrack POS system. This feature will be incredibly useful as it will help the company keep track of its sales and revenue. The integration with the Biztrack POS system will allow for easy and accurate tracking of orders and payments, as well as streamlined accounting processes. The app will use the Biztrack API to connect with the POS system and send order details to generate invoices. The app will send a notification to the admin when an order is placed, and the admin will be able to generate an invoice with just a few clicks. This will save time and effort, especially for large orders, and will ensure that invoices are generated quickly and accurately. The invoices will include all relevant information such as customer details, item details, prices, and taxes. The admin will also be able to easily search for and retrieve past invoices for reference or accounting purposes. This feature will provide the company with a convenient and efficient way to manage its sales and invoicing processes, and will help ensure accurate and timely payments.

The user interface design will be optimized for ease of use and intuitive navigation. The app will be designed to provide a seamless user experience across multiple devices and screen sizes. The security of user data will be ensured through the use of SSL encryption and password hashing.

The app will undergo rigorous testing to ensure it is stable and performs as expected. Functional testing will ensure that all features are working as intended, while performance testing will ensure that the app is fast and responsive. Compatibility testing will ensure that the app works on a wide range of devices and operating systems.

The development of the mobile app is expected to take approximately 6 months, broken down into three phases: requirements gathering and design, development of the API, and development of the mobile app. The result will be a secure, user-friendly, and

convenient mobile app that will allow customers to easily browse and purchase construction supplies from the company.

Architecture

The mobile app will be developed using Flutter for both iOS and Android platforms. The app will communicate with a RESTful API for product data and order processing. The API will be developed using Python with a MongoDB database for product information and user data.

User Interface Design

The user interface will be designed to be intuitive and easy to navigate. The app will feature a clean and modern design with easy access to key features such as product browsing, search, and checkout. The user interface will also be optimized for mobile devices with varying screen sizes.

Security

The mobile app will use SSL encryption for all communication with the API to ensure user data is secure. User passwords will be hashed and salted for added security.

Testing

The app will undergo rigorous testing to ensure it is stable and performs as expected. Testing will include functional testing, performance testing, and compatibility testing on multiple devices and operating systems.

Additional Features

In addition to the features listed in the original scope of work, the mobile app will also include the following:

- Wishlist and favorites list: Users will be able to add items to a wishlist or favorites list for future purchases.
- **Filtering options**: Users will be able to filter search results by price, brand, or other criteria.

- Order status tracking: Users will be able to track the status of their orders, including order processing, shipping, and delivery.
- Product reviews and ratings: Users will be able to leave product reviews or ratings.
- **Persistent shopping cart**: Users will be able to view their shopping cart even when they exit the app and return later.
- **Multiple shipping addresses**: Users will be able to create and manage multiple shipping addresses for their orders.
- In-store product availability: Users will be able to check the availability of a product in their local store.
- **Related products**: Users will be presented with suggestions for related products based on their browsing and purchase history.
- Order modification and cancellation: Users will be able to cancel or modify their orders within a specified time frame.
- **In-app customer support**: Users will be able to contact customer support directly within the app.
- **Shipping Information**: Users will be provided with detailed information about the shipping options available to them, such as delivery timeframes and costs.
- **Social media and email sharing**: Users will be able to share products or their cart with others via email or social media.

The addition of these features will enhance the user experience and provide users with more options and flexibility when using the app.

Conclusion

The development of a mobile app for our construction supply company will provide our customers with an easy and convenient way to browse and purchase our products. The app will be developed using the latest technologies and will be designed to be secure and user-friendly.