

The Woolala Mobile Application

Delaram Khakzad, Eric Lloyd Robles, Ehsan Jalilifar, Farnaz Nazari,
Jacob Strickland, Jialin Li

Department of Computer Science and Engineering
Texas A&M University

INTRODUCTION

The Woolala app is a mobile application developed for both Android and iOS users. The app provides an infrastructure for business owners and customers in the Fashion design/produce field to conveniently sell/buy their desired products. The app functions similarly to the social media apps, with a big difference in restricted functionality for patrons and business users. Therefore, each tier experiences an environment that matches with its criteria.

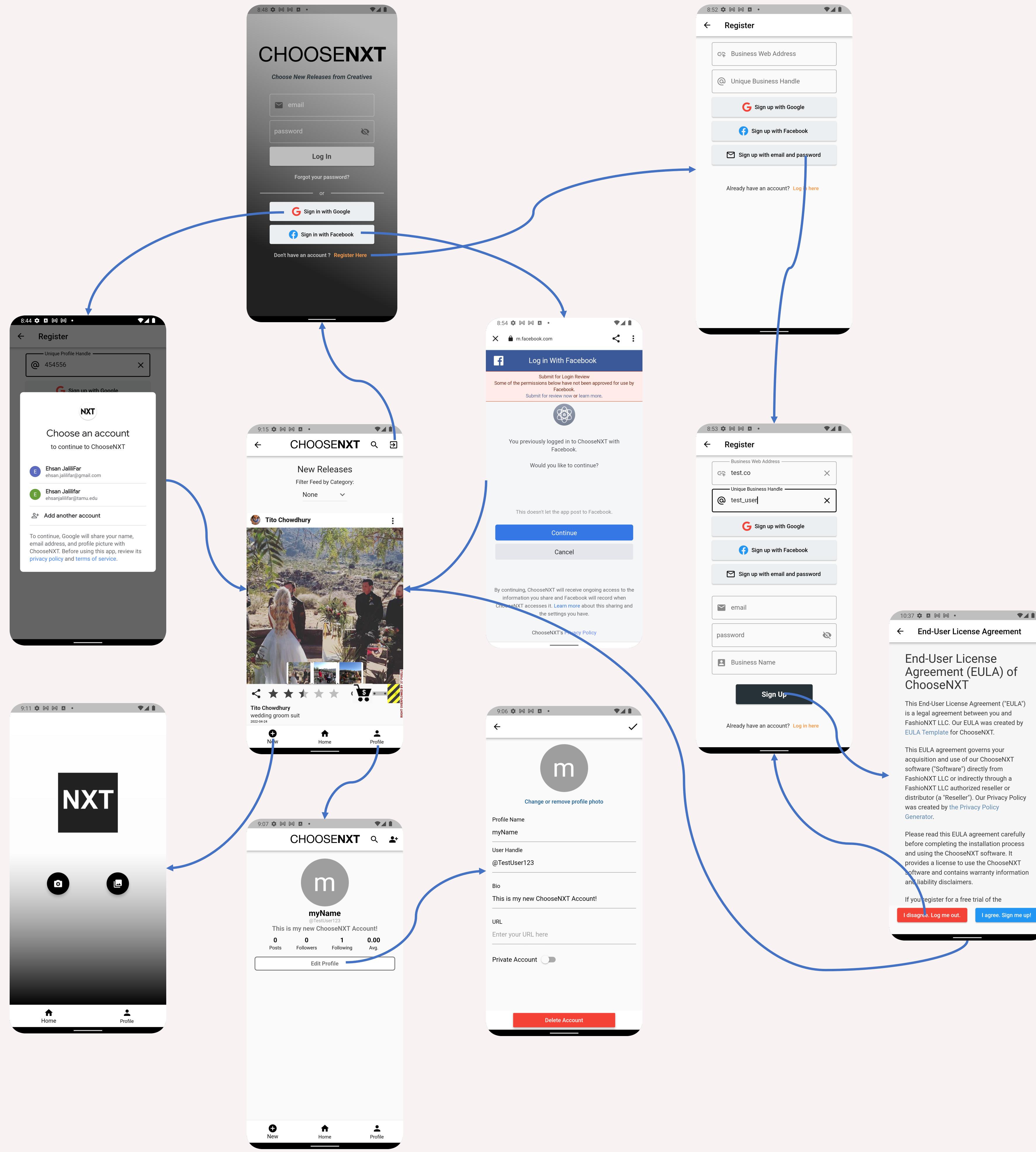
DEVELOPMENT ENVIRONMENT

- Framework: Flutter
- Programming language: Dart
- Database: MongoDB
- Authentication: Firebase
- Deployment: App store and Google Play
- IDE: Android Studio, XCode, Visual Studio

CUSTOMER EXPECTATIONS

- Only business accounts should be able to post their products and get feedback on the product quality and price.
- Patrons should be able to see the posts in their feed.
- Feed page must be populated based on the user's following list and the feed algorithm.
- Feed algorithm needs to be developed to capture user interests (e.g., how much time a user spends on a post).
- A direct message tool needs to be added to the app for communication between patrons and business owners.
- Post feature's need improvement to get feedback on the product (e.g., what is a reasonable price for this product? How much would you pay?)
- The updated versions should be regularly deployed in the Google Play and App Store.
- Users can invite their friends through other social media apps (e.g., Instagram, Twitter, and Facebook).

DESIGN DIAGRAM



CHALLENGES

- Most of the code was written with deprecated libraries (Flutter Engage Edition 2.0 was released on March 2021).
- The codebase was not written with MVC architectural pattern.
- There is not any advance and practical testing package for Flutter.

KEY FEATURES

- **Feed Algorithm Design**
- **Categorizing Feed**
- **Price Slider**
- **Multi Image Display**
- **User Login and sign-up Methods**
 - **Email and password**
 - **Google Sign In**
 - **Facebook Sign In**
- **Two tier accounts**
- **Invite Friends Through Social Media**
- **Price Range Slider on Posts**
- **Post Categorization**
- **UI Improvement**

FUTURE WORKS

Analytics with CRM: Business owners want to the app analytics including but not limited to number of users, views per day, and trending products.

Notification for patrons and business accounts

Followers list separation into business and patron

ROLES

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| <p>Developers:</p> <ul style="list-style-type: none"> • Delaram Khakzad • Eric Lloyd Robles • Ehsan Jalilifar • Farnaz Nazari • Jialin Li | <p>Product Owner:</p> <ul style="list-style-type: none"> • Jacob Strickland |
| <p>Scrum Master:</p> <ul style="list-style-type: none"> • Jacob Strickland | |