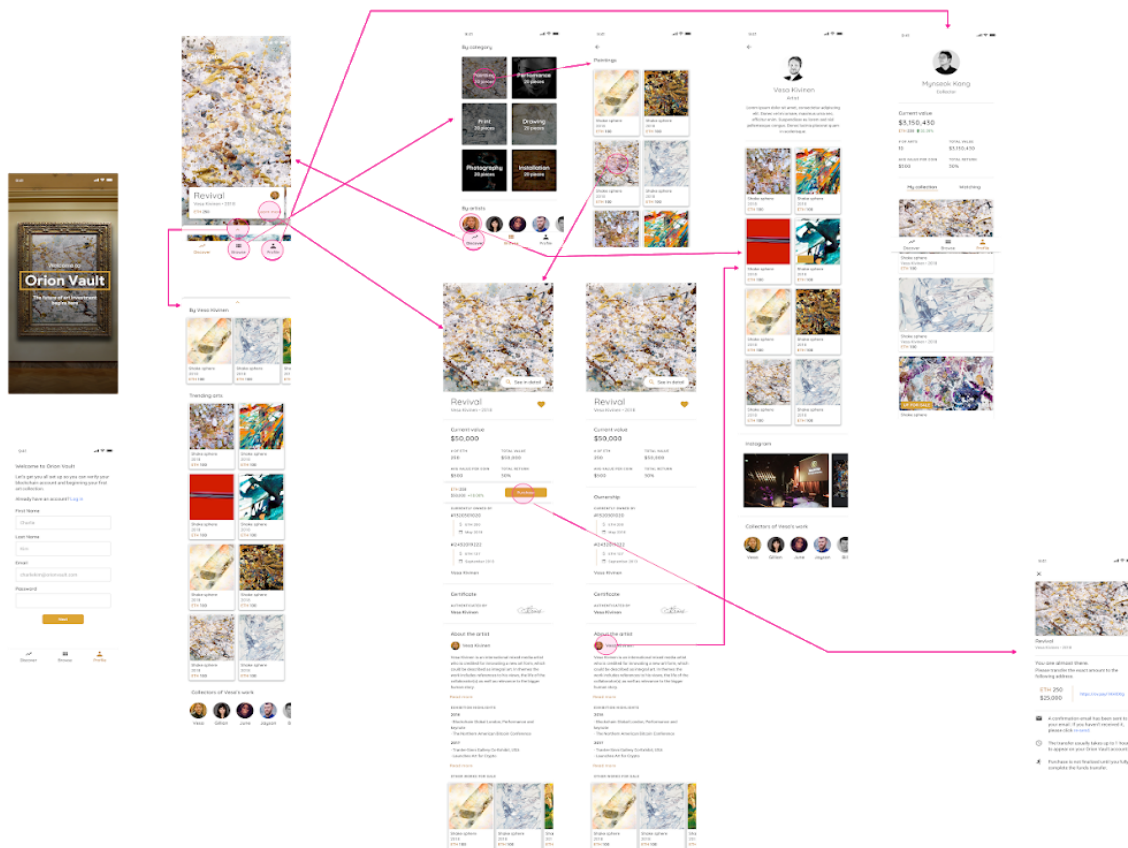# Orion Vault Mobile App

Intro

The mobile app is the main means of interaction from customers with Orion Vault. Within the Android and iOS mobile apps Orion Vault users can browse and discover art, follow artists, purchase art pieces, etc.
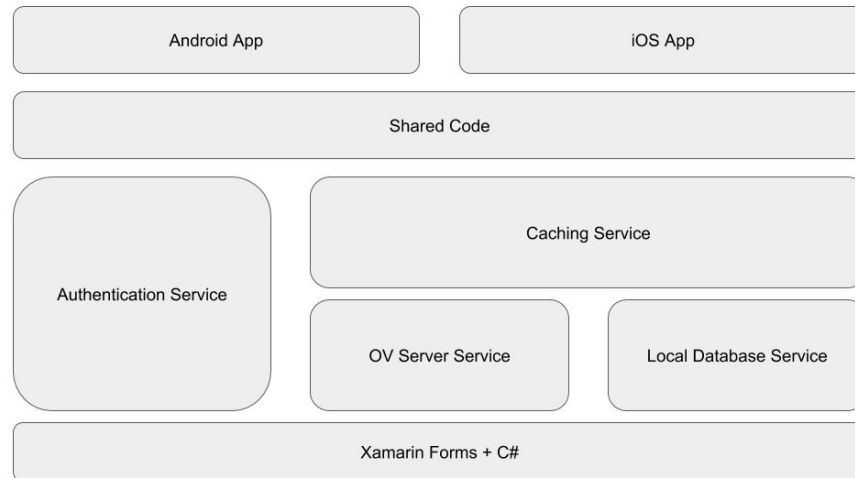
Mockup

Technical Design

The mobile app is built in Visual Studio 2017 using the Xamarin Forms tools. This approach allow us to code the business logic once in C#, and to share that code between Android and iOS, while at the same time using native components and libraries for both platforms.
The app is made of multiple layers as described below:

Android App

iOS App

Shared Code

Authentication Service

Caching Service

OV Server Service

Local Database Service

Xamarin Forms + C#

- Xamarin froms + C#: The underlying tools and programming language the app is build on
- Service layer:
  - Authentication Service: Allows for authentication leveraging third party accounts such as Google and Facebook. Additionally it provides Microsoft Azure authentication, and a dedicated Orion Vault authentication server
  - OV Server Service: provides the mobile app with access to the orion vault server for authentication, profiles, art, and artist management
  - Local Database Service: used as a cache of local data when the mobile device is not connected to the internet
  - Caching Service: manages the access to the server data and cache data
- Shared Code: programmed in C#, it represents the core of the application, contains the business logic, access to services, and the application's UI
- Android and iOS App: contains platform specific code for Android and iOS

Application Content

The following user screens are contain within the application:
- **Splash Screen:** Showed for a few second while the mobile app starts
- **Login Screen:** Presented at the start of the application if the user is not already logged in, or by user demand. It allows the user to login using a Google, Facebook, or an Orion Vault account
- **Sign up:** Used to create a new account
- **Forgot Password:** Used for password recovery
- **Discovery:** Presents trending art, art by a specific artis, and most of the information a user requires the discover new and interesting art pieces.
- **Browse:** Allows the user to look for art by category; paintings, sculptures, etc.
- **Art Detail:** Presents in detail one art piece with an action to purchase

- **Artist Detail:** Presents in detail one artist with the option to explore in detail the artist's art pieces.
- **Profile:** Present all details about the current user including their blockchain account ID.