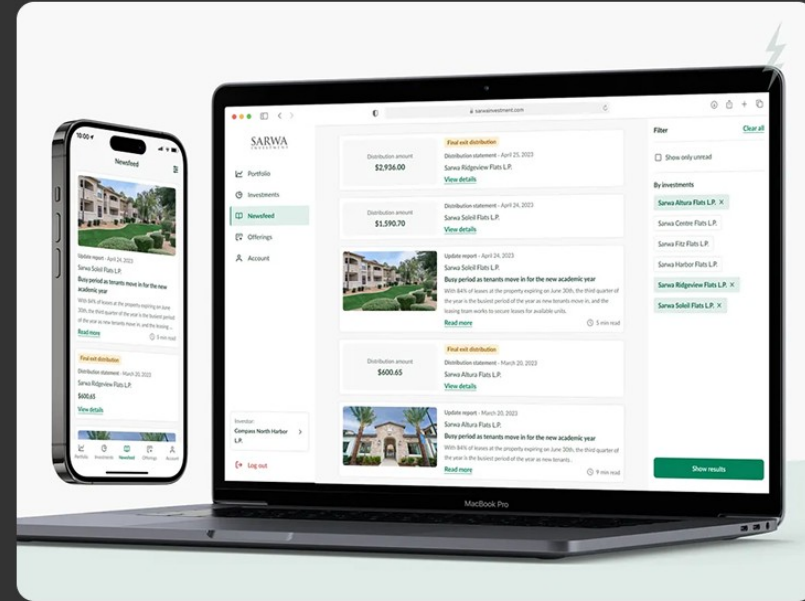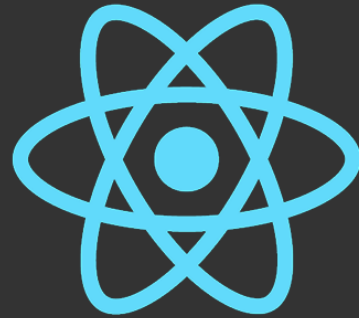MAUI

# Cross platform apps

- Supports multiple platforms from a single codebase

- Cross platform frameworks are used to build these applications

- Preffered for making multi platform projects

# Cross platform frameworks

- Allows sharing of business logic between different plaforms

- Access to native api's and UI elements are handled by the framework

- Updating the application is much more streamlined

- React Native, Flutter ,UNO and MAUI are the popular examples
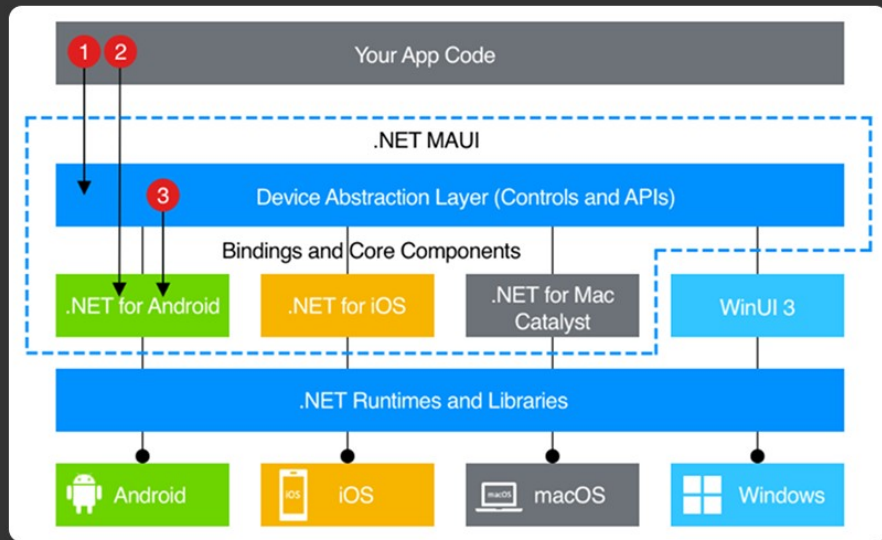
React Native

# what is MAUI?

○ Multi platform App UI (MAUI) is an application framework made by Microsoft

○ Built for cross platform app development

○ Powered by the **.NET** framework

○ Uses CSharp and XAML

# why use MAUI?

○ Supports iOS, android, macOS and windows app development

○ Provides access to platform specific api's

○ Uses native UI components

# How does MAUI work?



○ Program code accesses native api's using built in abstraction layers

○ Abstraction layer is made up of MAUI Controls and MAUI api's

○ Abstraction layers gets mapped to platform specific api's

# React Native

- Developed by facebook in order to create iOS and android apps using a single codebase

- Uses React JS for creating native UI elements

- Lightweight and fast prototyping

- Fast UI refresh in development environment

- Allows creation of native elements using platform specific code

# Flutter

- Developed by Google in order to create cross platform applications

- Uses Dart, which is also made by Google, for creating GUI applications

- Dart is compiled to native machine code on production builds, so fast and responsive UI

- Uses Skia, a custom C++ renderer, which renders every UI element the same on every platform

- Made for iOS, Android, MacOS, Linux, Web and Windows application development