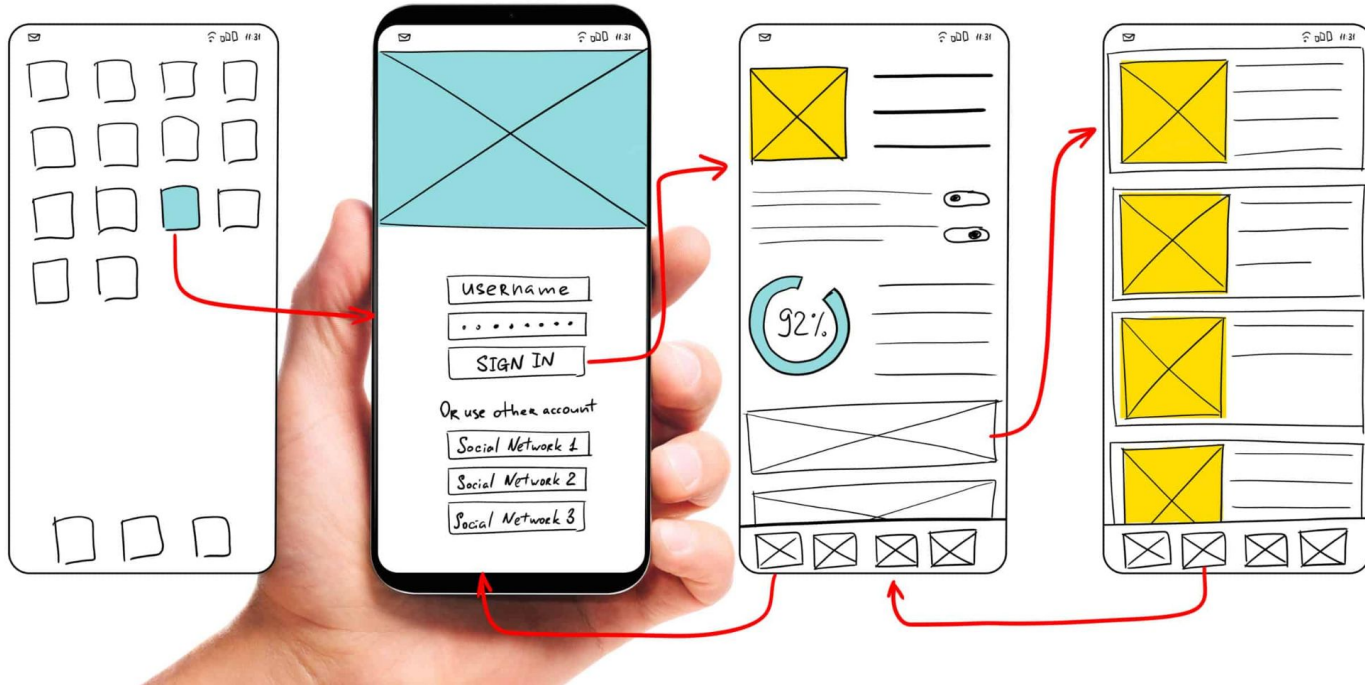


# How can AI impact the mobile app user experience ?



By Ludmyla Almeida

# What is UX design?



# What is AI?

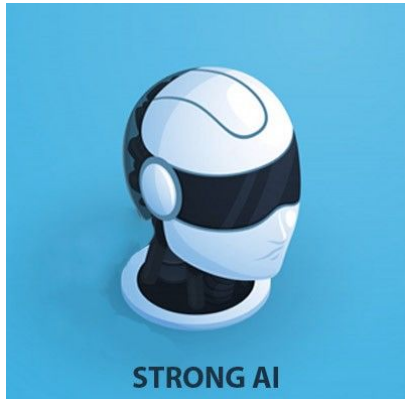
"The ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings" (Britannica)



# What is AI?

## Strong AI

"The idea that a computer can be made or raised to intelligence levels that match human beings"

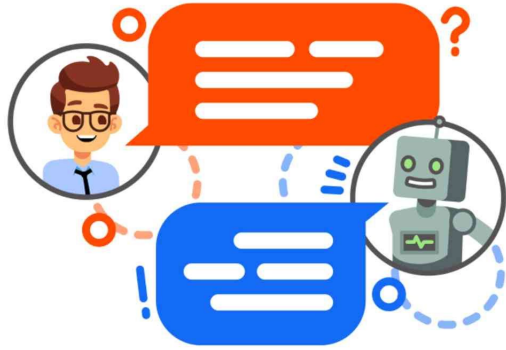


## Weak AI

"The idea that computers can provide features that mirror or mimic thought or thinking processes."

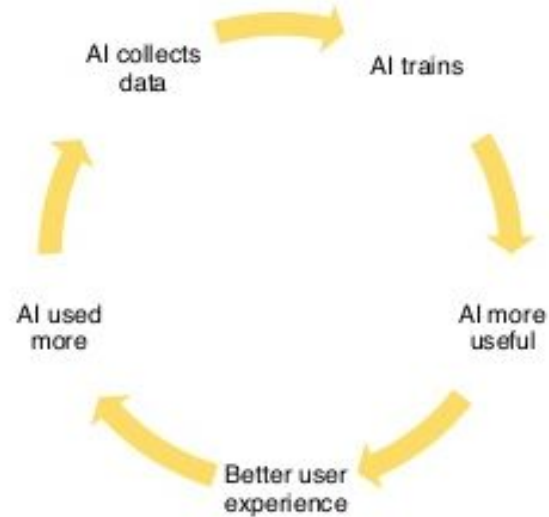


# Weak AI



# How does UX and AI connect?

It connects by using AI to solve problems in an application to make it more robust, intelligent, and efficient.



# How to Add AI to your mobile app?

## Some common ways to use AI:

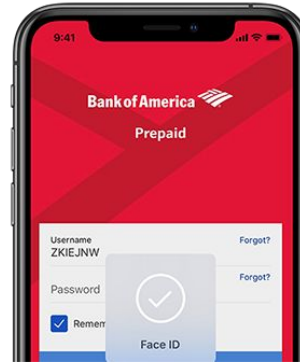
- ❑ Optimize the searching process of the mobile application.
- ❑ Integrate audio or video recognition in the app.
- ❑ Learning behavior patterns of the app users.
- ❑ Create an intelligent and friendly digital assistant.

# Face detection

**What is it?** A secure way to authenticate users by setting up a face id or biometrics

**Power:** Making the login experience more efficient and user friendly

**Usage:** App login, authorize mobile payment...



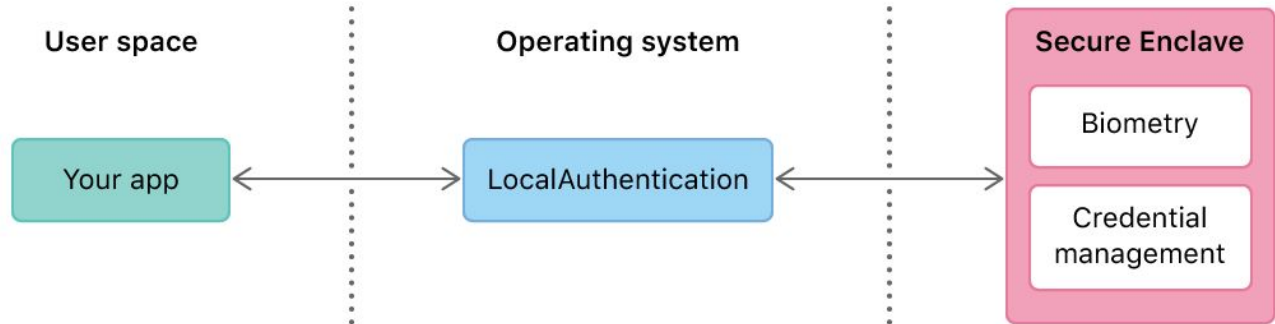


# Face detection

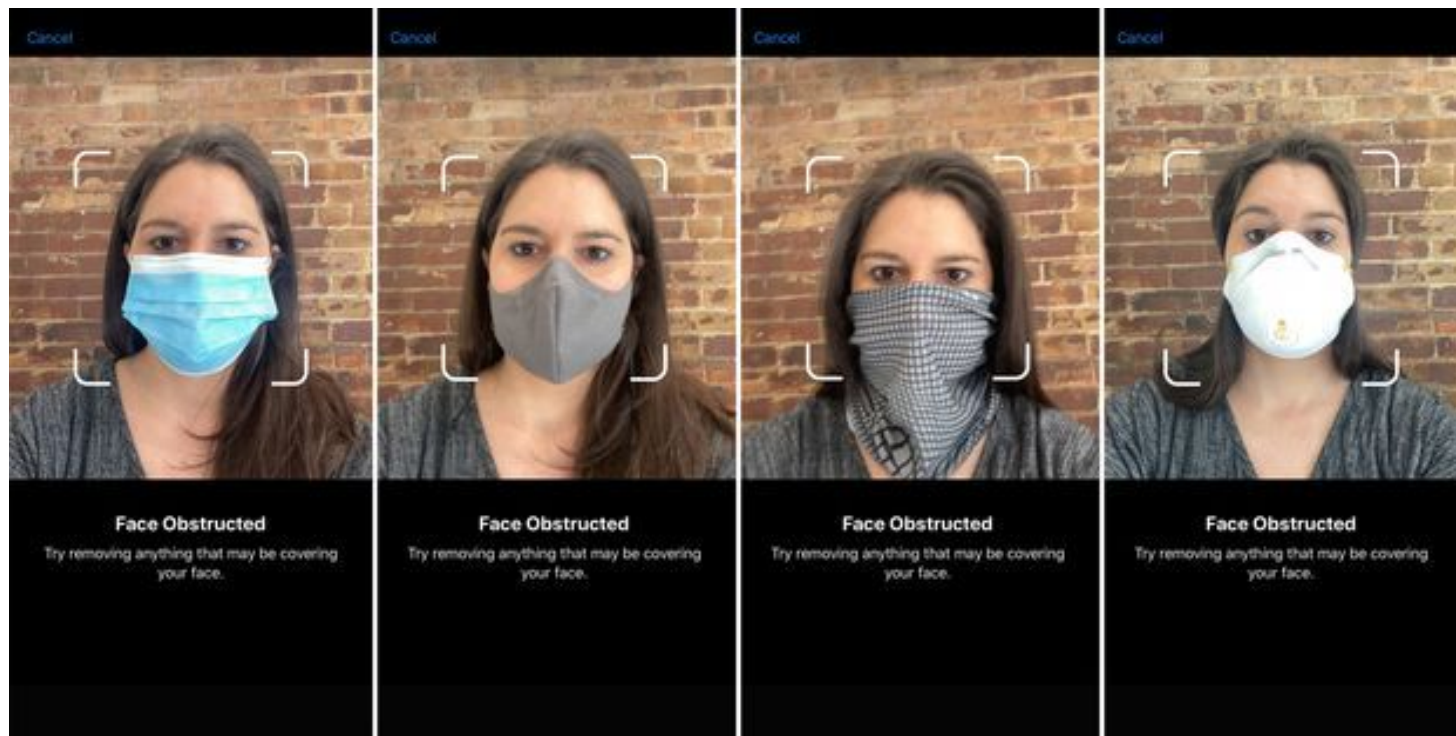
How to implement?

**iPhone:** Using Apple's framework called "Local Authentication".

**Android:** Using the Biometric library on android studio



# Problems



# 2 Speech Recognition

**What is it?** The ability to automatically and accurately recognize human speech.

**Power:** Siri and Google Assistant decode and convert human speech into a format that the phone understands. This can help with accessibility for apps.

**Usage:** Voice search, Audio to text



# 2 Speech Recognition

How to implement?

**iPhone:** Use Speech Framework

**Android:** SpeechRecognizer library on android  
and Google Cloud Text-to-Speech API.



# 3 Image Recognition

**What is it?** The ability to identify objects, places, people, writing and actions in images

**Power:** Minimize user input

**Usage:** Check deposit, adding credit cards, document scan...





# 3 Image Recognition



Cloud Vision API

## How to implement?

**Create Models:** Tensorflow is an open source library for machine learning from Google.

**Library with existing models:** OpenCV is a popular machine vision library that has thousands of algorithms to process and analyze images.





# Predictive Analytics

**What is it?** Based on the users likes, technology can study user behavior and their pattern to provide them with exactly what they are looking for.

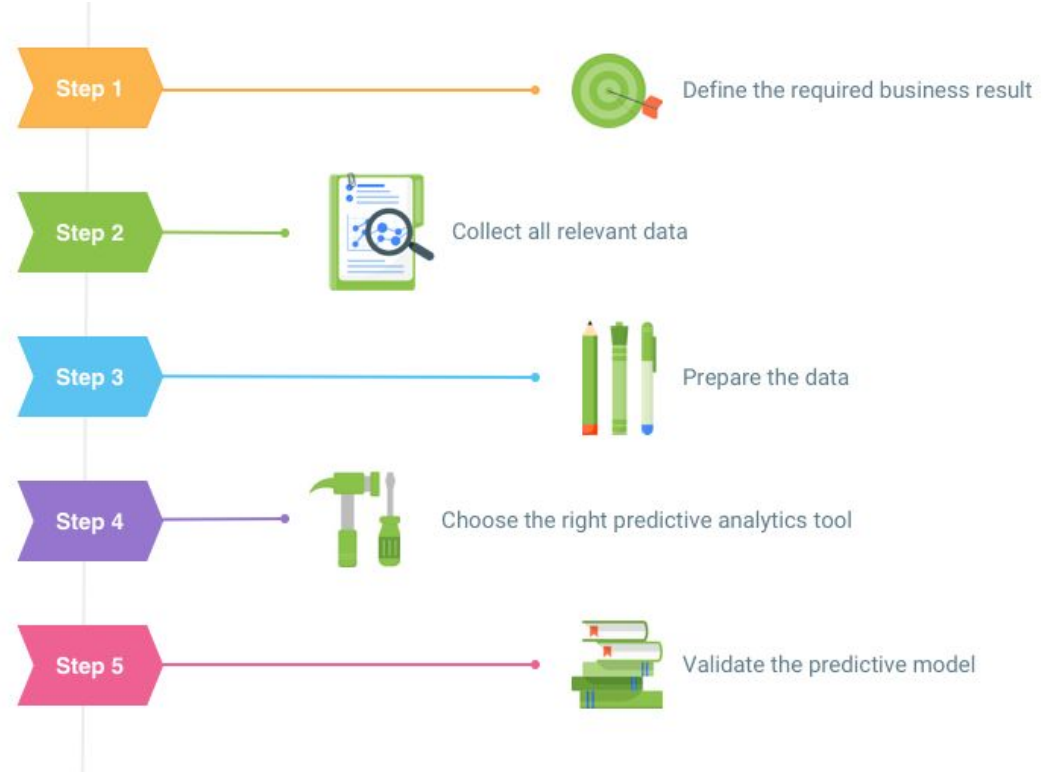
**Power:** Provide better app personalization, Draw deep insights about users

**Usage:** Netflix recommendations, instagram explore, mobile App shopping, and banks can analyze the customer's average monthly spending and purchase history.



# Predictive Analytics

## How to implement?



# 5 Chatbots

**What is it?** Chatbots are computer programs able to conduct conversations with human beings through a messaging interface.

**Power:** Eliminate the need of phone customer support over common questions.

**Usage:** Chatbots can initiate insurance claims, make payments.



# 5 Chatbots

## How to implement?

**Iphone:** Can develop a chatbot using Swift or Objective-C

**Android:** The developer needs to create an agent through Dialogflow or Kommunicate.



## Dispute a charge



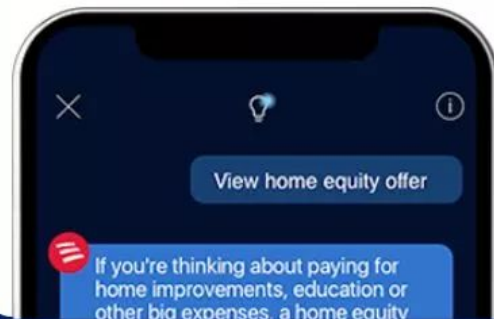
## Balance watch

Get notified if your balance is trending towards zero so you can take action.



## Home equity line of credit

Erica notifies you about available HELOC offers.



## Spend Path

Get a weekly snapshot of your month-to-date spending.



## Monitor recurring charges



## Preferred Rewards

Stay on top of important changes to your Preferred Rewards eligibility.

<https://developer.apple.com/documentation/localauthentication/>  
<https://developer.android.com/training/sign-in/biometric-auth>  
<https://medium.com/hackers-at-cambridge/adding-voice-control-to-your-projects-7096fdee7c45>  
<https://www.getapp.com/resources/how-to-use-predictive-analytics/>  
<https://medium.com/@mobindustry/how-to-integrate-machine-learning-into-an-android-app-best-image-recognition-tools-1ba837c27903>