P.E.T.

Personal Emotion Trainer

Team X (pronounced Team X)

Executive Summary

Introduction   What is the P.E.T? Who is it for? Why do they need it?

Version I   Current functionality of P.E.T with a demo

Testing   How did we test our code?

What's Next?   What to expect in Version II and III

The Personal Emotion Trainer

Who is the P.E.T for?

What function does P.E.T provide?

How does the P.E.T provide this function?

Who?

Autism Spectrum Disorders

PDD—NOS	AUTISTIC DISORDER	ASPERGER'S DISORDER
Impaired social interaction	Impaired social interaction	Impaired social interaction
or	*and*	*and*
Impaired communication	Impaired communication	Normal communication/ language development
or	*and*	*and*
Restricted repetitive and stereo-typed patterns or behaviors, interests and activities	Restricted repetitive and stereo-typed patterns or behaviors, interests and activities	Restricted repetitive and stereo-typed patterns or behaviors, interests and activities

What?

How?

- Emotion recognition quiz

- Fun, safe way to learn

- Saves user progress

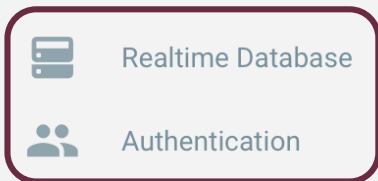- Increasing difficulty

Version I - Implemented Features

- UI Design and Navigation

- User Authentication

- Database Integration

- Gameplay Mechanics

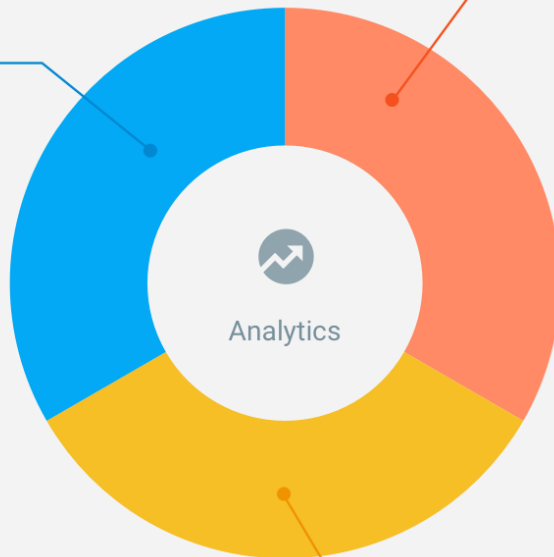- Gameplay Tutorial

Firebase SDK

DEVELOP

- Realtime Database
- Authentication
- Cloud Messaging
- Storage
- Hosting
- Test Lab
- Crash Reporting

Analytics

GROW

- Notifications
- Remote Config
- App Indexing
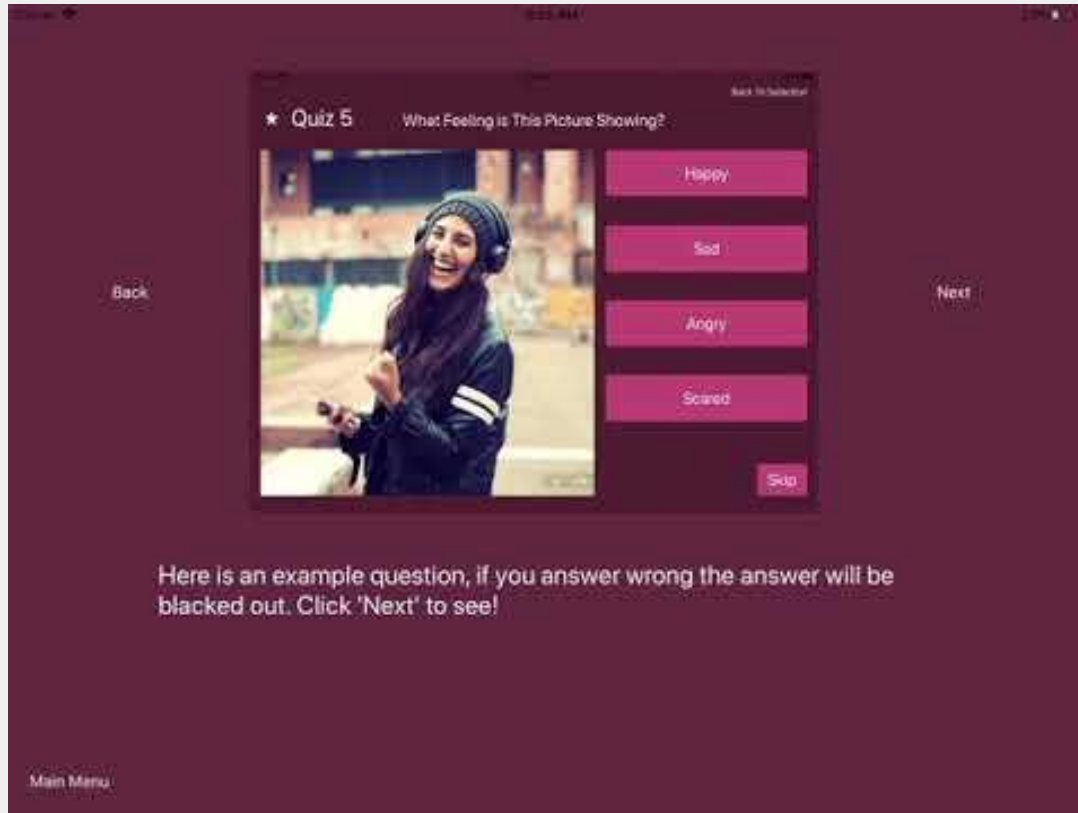- Dynamic Links
- Invites
- AdWords

EARN

- AdMob

Model Implementation

Gameplay Mechanics

Demo

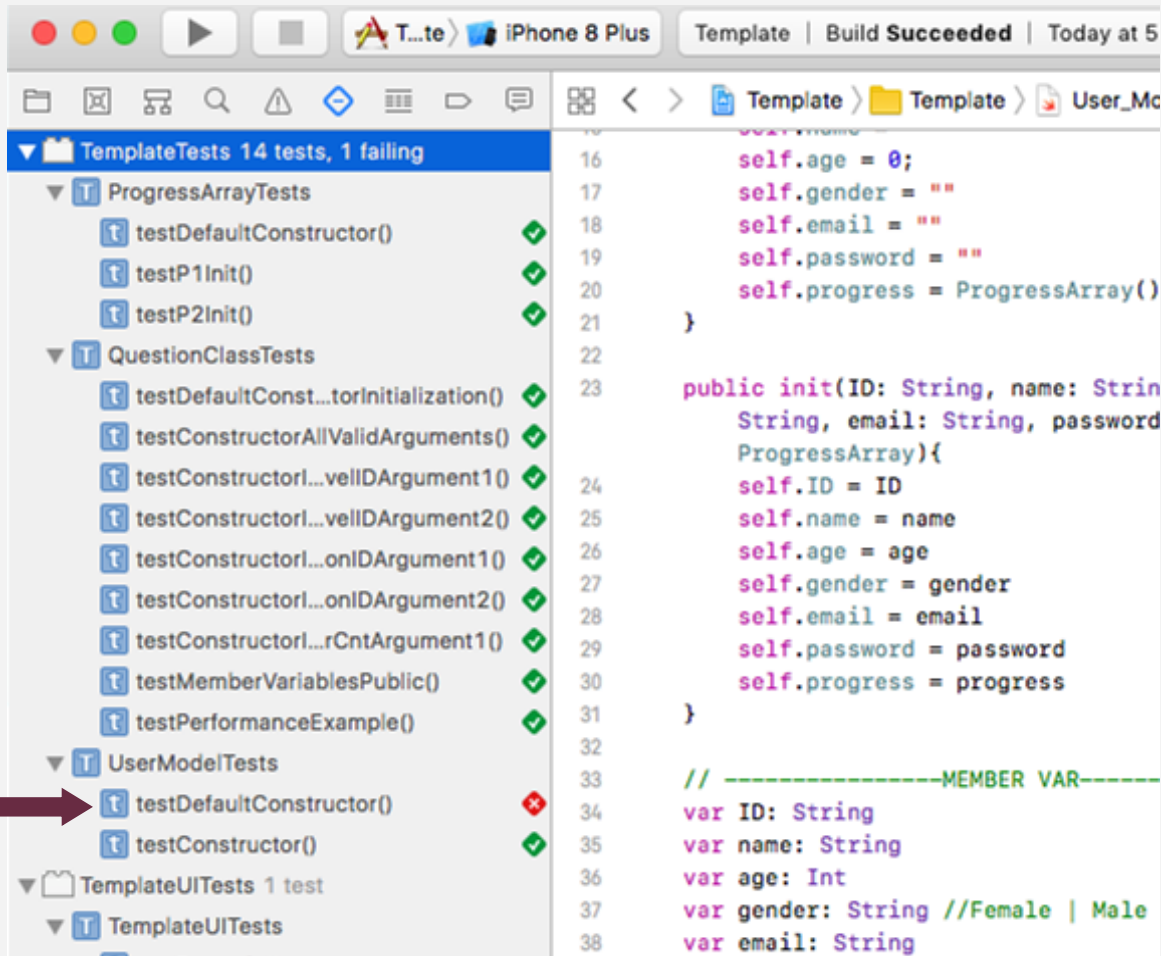https://www.youtube.com/watch?v=YQCA5BIvrkw&feature=youtu.be

Unit and Integration Testing

White Box Unit Testing with XCTest Framework

Manual Integration Testing Using XCode Simulator

Test Failed

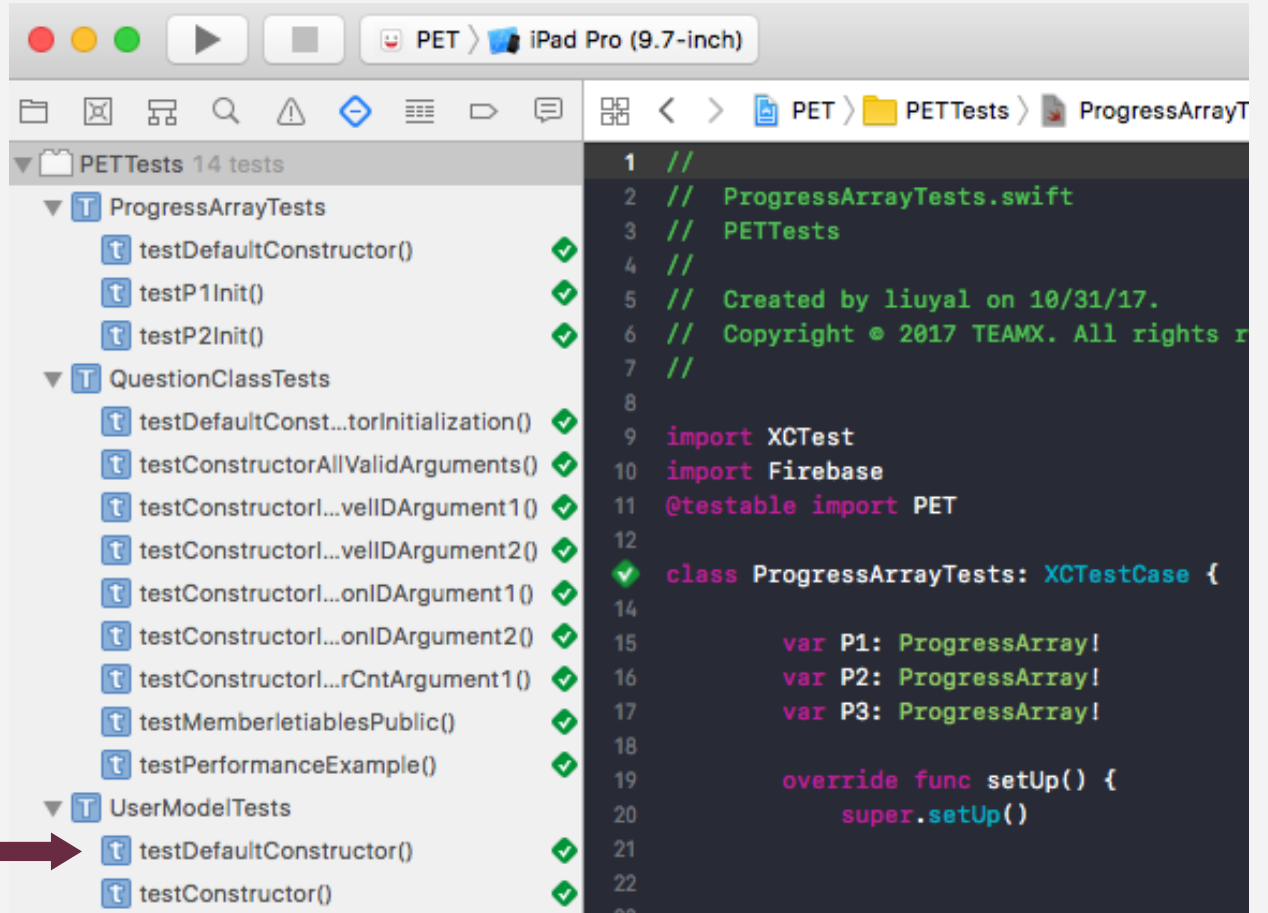# Tests Passed

Future Versions

- Version II
  - Custom Question Maker
  - UI Improvements
  - Expand question capacity
  - Camera Integration
  - Photo Gallery Integration

- Version III
  - Emotion Recognition (Affectiva) SDK Integration
  - Minor updates and improvements

Version II - Camera/Photo Gallery Integration
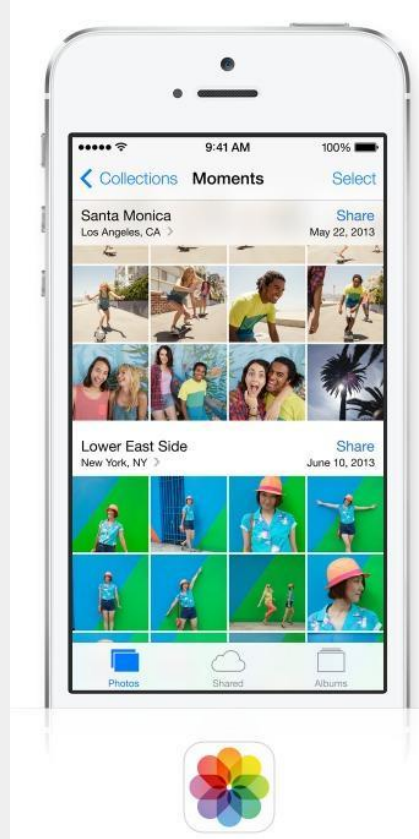
Version II - Custom Question Maker

Version III - Emotion Recognition with

- A free Emotion recognition SDK

  - World's Largest Emotion Database

  - Easy to Integrate

  - Real-time Tracking of Facial

    Expressions

Thank You

Questions?

Backup Slides

AppDelegate

UIView

ViewController

Question Editor View
+Question Tier: button
+Select Question: button
+Upload Image: button

Question Editor Controller
StorePhoto()
generateDummyAnswers()
storeQuestions()

Local Data Model
getUserInfo()
questionBank()
getImages()
getLocalStats()

Login Page Controller
createAccount()
validateCredentials()
Exit()

Login Page View
+Username: text field
+passwird: text field
+Create Account: button
+Login: button

Tutorial View
+Play Tutorial: button
+next/Prev: button
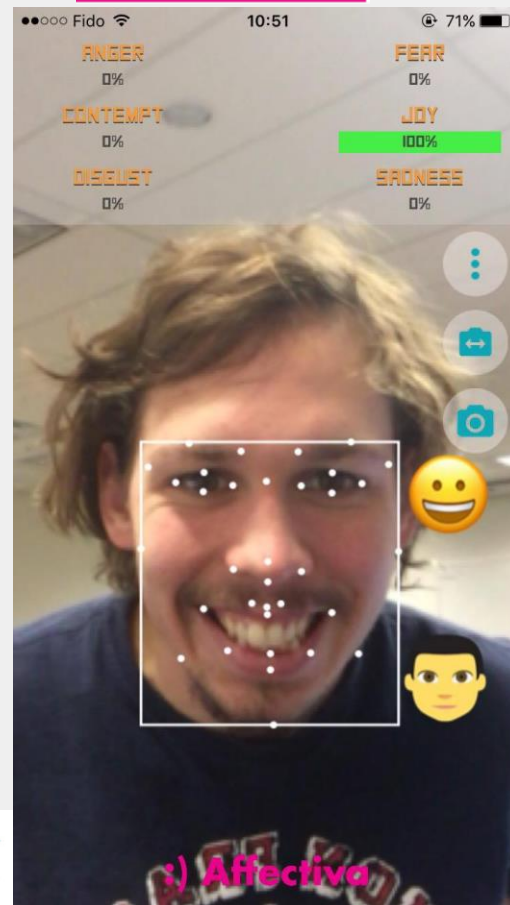+Exit: button

Tutorial Controller
PlayTutorial()
Exit()

Cache Data Model
manageData()
sendtoDevice()
sendtoDBModel()

Create Account Controller
addUserCredentials()
exit()

Create Account View
+Accountinfo: textfield
+Create Account: button
+Return: button

Gameplay View
+DisplayImage: image
+DisplayText: string
+UIButtons: button

Gameplay Controller
verifyAnswer()
reportResult()
storeResult()
Exit()

Home Page Controller
goToSettings()
goToLevelSelection()
goToTutorial()
exit()

Home Page View
+Play: button
+Tutorial: button
+Settings: button
+QuestionManager: button
+Logout: button

NetworkDBBridge Model
sendtoDB()

Settings Controller
getLocalStats()
questionBank()
getImages()
addQuestion()

Settings View
+Volume: button
+Statistics: button
+ResetProgress

Level Selection Controller
goToQuestionTier()
loadQuestion()
exit()

Level Selection View
+Question Tier: button
+Select Question: button
+Return: button