Cognitive App Design Document

ISCG7436 Advance Mobile Development

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GitHub project address: https://github.com/LiQi811227/cognitive-app

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1 Lean Canvas

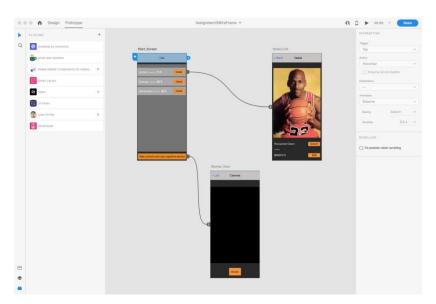
UsawUlearnt - UsawUlearnt

PROBLEM Modern dictionary only helps if the user knows how to call the object in one's own native tongue. Object like a container for water has different forms, e.g. a cup and a mug, user has the need to expand vocabulary. Some objects are not commonly used, to	SOLUTION Visual guide to let the user simply use the phone camera to take a picture of any object, the possible translation matches displayed for the user to choose. A translation allows the user to see the object in both English and Chinese language.	UNIQUE VALUE PROPOSITION You came, you saw, you undersood. There is no noues that you can't handle. Learn to say one thing at a time, life is so simple.		UNFAIR ADVANTAGE Existing apps can be easily found, the differences is down to the app UI design. Designers are bilingual, who know the pain of being unable to call an object.	CUSTOMER SEGMENTS Chinese travellers Elderly Chinese who has migrated to NZ. Chinese students who choose to start oversea education. Upgrade to allow English speakers to learn Chinese.
describe them requires using more than one dictionary or searches. EXISTING ALTERNATIVES Products made by other group's assignment from the same course. Snap & Translate - Translator - Apalon Apps. Camera Translator: Translate+ -Vulcan Labs Company Limited.	KEY METRICS App store ratings API traffics	HIGH-LEVE CONCEPT	L	CHANNELS Word of Mouth. Making keywords easier to appear in google search in both English and Chinese language when user are struggled by the PROBLEM. Tell our intent to people in the Church, who will help spreading the good app.	EARLY ADOPTERS Elderly immigrants who have little knowledge in fancy technology or confuesd by overly designed UI. Keen lingustic learner.
COST STRUCTURE Cloud service cost. e.g. Once services. iOS Developer cost	e upgrade to better Azure cogr	nitive	REVENUE STREAMS Donation. Advertisement at the bottom of the App. e.g. display language school ad. Co-existing with bigger dictionary provider.		

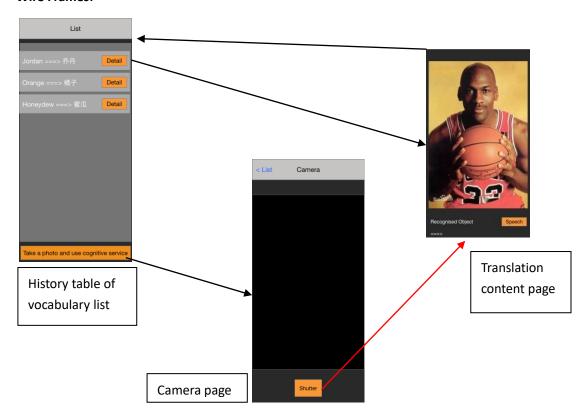
2 Wire frame design

Design Tools:

Wire frames were designed by using Adobe XD, this allows to use the "prototype" play through function, mainly to show how the navigation works in the app, also how the app appears to the user.



Wire Frames:



3 X code Testing:

X code has provided build-in app testing tools, we tested the following functions:

```
Override func setUp() {
              // Put setup code here. This method is called before the invocation of
       each test method in the class.
              itemList = [
                 Item(id:1,date: Date(), image: "jodan.jpg", wordFrom: "Jodan",
       wordTo: "乔丹", soundFrom: "", soundTo: ""),
                 Item(id:2,date: Date(), image: "james.jpg", wordFrom: "James",
       wordTo: "詹姆士", soundFrom: "", soundTo: ""),
                 Item(id:3,date: Date(), image: "kury.jpg", wordFrom: "Kury", wordTo:
       "库里", soundFrom: "", soundTo: "")
              wirteData()
          override func tearDown() {
              // Put teardown code here. This method is called after the invocation of
       each test method in the class.
              clearData()
          }
          func testReadData() {
              //Given
              print("-----")
              //When
              let list:[Any] = readData() as! [Any]
              print(list.count)
              //Then
              XCTAssert(list.count==3, "Sandbox does not have the expected number of
       items!")
          }
          func testWirteData() {
              //Given
              clearData()
              //When
              wirteData()
              //Then
              let list:[Any] = readData() as! [Any]
              XCTAssert(list.count==3, "Sandbox does not have the expected number of
       items!")
          func testAddItem() {
```

```
//Given
       var itemWillBeAdded = Item(id:5,date: Date(), image: "jodan.jpg",
wordFrom: "Jodan", wordTo: "乔丹", soundFrom: "", soundTo: "")
       addItem(itemWillBeAdded)
       //Then
       let list:[Any] = readData() as! [Any]
       XCTAssert(list.count==4, "Sandbox does not have the expected number of
items!")
   }
   func testClearData() {
       //Given
       //When
       clearData()
       //Then
       XCTAssert(FileManager.default.fileExists(atPath:
archiveURL.path)==false,"Plist file is not being deleted!")
   }
   func testSaveImageToSandBox() {
       //Given
       guard let image = UIImage(named:"Jodan.jpg") else { return }
       //When
       saveImageToSandBox("Jodantest",image)
       //Then
       XCTAssert(FileManager.default.fileExists(atPath:
getImageFromSandBox(fileName:"Jodantest"))==true,"Wrong image saving!")
   }
```

4 Self and Peer Evaluation Form 1

Use this form to evaluate yourself and your peers. Write your name and the name of the person you are evaluating. For each person, indicate the extent to which you agree with the statement on the left column, using a scale of -2 to 2 (-2=strongly disagree; -1=disagree; 0=neutral; 1= agree; 2=strongly agree). Total the numbers at the end of each column.

Your name: Li Qi

Team member's name: Dian Jiao

Evaluation Criteria	Myself	Team member
Demonstrates a cooperative and supportive attitude.	2	2
Responds well to feedback and criticism	2	2
Completes assigned tasks on time.	2	2
Prepares work in a quality manner.	2	2
Contributes significantly to the success of the project.	2	2
TOTAL	10	10

General comments on performance:

The Student account for azure stopped working during the development of the app, Teammate was confused. I had to use my personal account to apply for a temporary access to Cognitive service. Not sure when is the API key going to expire.

Team mate has got out dated hardware which can only run Swift 4.2 and iOS Ver. 12.1, therefore has to adapt Pair Programming.

5 Self and Peer Evaluation Form 2

Use this form to evaluate yourself and your peers. Write your name and the name of the person you are evaluating. For each person, indicate the extent to which you agree with the statement on the left column, using a scale of -2 to 2 (-2=strongly disagree; -1=disagree; 0=neutral; 1= agree; 2=strongly agree). Total the numbers at the end of each column.

Your name: Dian Jiao

Team member's name: Li Qi

Evaluation Criteria	Myself	Team member
Demonstrates a cooperative and	2	2
supportive attitude.		
Responds well to feedback and	2	2
criticism		
Completes assigned tasks on time.	2	2
Prepares work in a quality manner.	2	2
Contributes significantly to the success	2	2
of the project.		
TOTAL	10	10

General comments on performance:

It is very pleasant to work with Li Qi, but due to my hardware limitation and the team wishes to develop in higher version of Swift, I can only work on the App when Li Qi is around physically, and therefore my response to change and task managing is low.

The Azure account for student is not working, and I was wrong to determine that there should be other cognitive service available; the unstable environment really slows down the development. Apart from that the assignment process is very smooth and interesting.