



# UX RESEARCH PLAN

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## Study 1: Semi-Structured Interview

### Background

There is a trend of using mobile phones as learning tools nowadays, people usually open learning applications during their spare time, while traveling, or for fun at home. For adults who are busy with their full time work tasks, a lot of people feel the need to enhance their handwriting skills in Arabic specially in the Arabic-speaking countries, the majority of them will not come out with a perfect handwriting style from their school days. The study will focus on facilitating the task of learning for those adults .

### Research Goal

This is a study for Alkhat Alaraby UX Research, it is created to check viability of a mobile phone application targeting the adult users who want to improve their handwriting skills in Naskh and Ruqaah fonts.

I want to design the UX for a mobile app that teaches handwriting using the touch function of preconfigured writings of Naskh, Ruqaah, ... etc touch feature to practice individual letter writing virtually on-screen, a section for the Rules to read and apply, and finally a space to write either with finger or a touch pen to finish complete paragraphs.

Ease of use, photographic memory and Learning by trial and error are applied on the UX of Alkhat Alaraby so that the leisure time used in the app will progress the user as fast as possible.

I want to gather data regarding the adult user lifestyle and expected time for using the app, considering that they are working full time and will use the Alkhat Alaraby mobile App only in their free time, on transportation, or while resting at home ..etc. I also want to know the user's expectation about how a true writing is better imitated on a touch screen, and whether it is better to focus on "tracing" existing shapes for the letters and words , or to enable free writing to copy from a shape on screen.

1. User experience from actual writing by using the method of **Photographic Memory** ( by imitating a Calligraphy shape writing it many times on paper) and their expectation if on screen.
2. User experience from **Learning by Trial and Error** using a pencil and eraser on paper and their expectation if they do the same on screen.
3. User experience with **speed and efficiency of writing** on paper ( especially with Ruqaah Font) and how to apply that on the App screen ( considering the finger tip is thicker than a Pen Tip) and whether we should use a Magnifying glass feature.
4. User experience with

## Research Questions

- *[Needs]* If you will learn to enhance your hand writing in Arabic using an App, which feature you will expect from it?
  - *[explore Needs]* Can you think of features for Individual letters, words and sentences?
  - *[explore Routines]* How much time do you need for each letter to learn?
  - *[explore expectations]* How many exercises for writing words and full sentences?
  - *[explore Routines]* In total how often will you use the App every week?
- *[Behaviour]* How would you interact with the App?
  - *[elicit usability method]* Do you prefer to touch the screen and preconfigured letters are written automatically as you move your finger?
  - *[elicit usability method]* Or will you prefer free writing with your finger imitating a sample model?
  - *[elicit usability method]* Or will you prefer mixing the auto writing with the freestyle?
  - *[elicit usability method]* For the revision section would you prefer to choose the correct answer from pictures, or you also write and receive a grade for your writing style?
- *[Needs]* Do you need a section for General Rules Reading?
  - How much time will you spend reading rules of Arabic calligraphy ?
  - *[explore personal preferences]* Do you prefer detailed rules and then exercises, or short lists of rules and each one has their exercises?
  - *[explore personal preferences]* Will you have the time to click and follow Web links to more detailed rules later?

- *[explore personal preferences]* Will you need a Rule of the Day function in the app that pops up Daily, or more than once a day?

## Method

I used a Semi-Structured method mixing between an Interview of 15-20 minutes with each participant , followed by the Survey to answer the related questions.

Interview script is pre-made to guide the conversation with the participant, but he/she has had the chance for free opinion showing to add more points or features seen as useful.

## Recruiting

I recruited 4 adults using social media channels (Facebook and Twitter) ,

- Google Meet used to do the interview with 3 participants.
- Telephone call used with 1 participant for the Interview.
- Google Forms used for the Surveys.

## Interview Script

### Introduction

Hello! My name is Hany Afifi. Thank you very much for your participation in this interview and survey. I am working on a project to produce a Mobile application to help people in our Arab World to improve their handwriting skills for the Arabic language.

I would like to know more about your experience for that either in real life writing on paper or using a mobile application to learn something new and improve. This interview will take 20 minutes, then you have some time to fill in a simple survey made of 10 multiple-choice questions. Do you have any questions before we start? Fine, Let's start by getting to know about yourself.

### Interview questions

1. [Building rapport. Starting with easy questions to get to know the participant] → Could you introduce yourself?
2. [Warming up and raising interest for the topic] → Do you think beautiful Arabic writing is important?



3. [Warming up and raising interest for the topic] → Can you write Arabic on paper in Naskh and/or Rugaah fonts?
4. [Building rapport] → How fine is your writing in Arabic?
5. [Building rapport] → Can you write fast and still produce beautiful font letters?
6. [Exploring the user needs ] → Do you use your mobile phone application to learn and entertain yourself?
7. [Exploring the user needs ] → Which applications do you use often?
8. [Exploring the user routine ] → How much time do you spend with such apps?
9. [Building rapport] → If there is an application to learn Arabic calligraphy, do you think it will help?
10. [Exploring the user needs ] → How much time will you spend practicing Arabic writing and calligraphy with such an app?
11. [elicit user suggestions ] → Suppose you find an app for Arabic writing, which features do you expect from it?
12. [Exploring how to overcome expected difficulties ] → Will you use your finger to trace and write or your mobile phone has an electronic pencil to use?
13. [elicit user suggestions ] → Do you like to see a competition online via such an application for best Arabic calligraphy writers?
14. [elicit user suggestions ] → I have a plan for an app that has 3 sections; First section teaches letters and words by tracing calligraphy, the second includes practising free writing on screen, and the third is a mini-game to write paragraphs within a limited time. Do you suggest any other features?
15. [Exploring the user needs ] →How much time will you spend reading rules of Arabic calligraphy ?

## Wrap-up

It was a very nice conversation with you, thank you for sharing your experience with me. Please don't hesitate to share with me your other thoughts or suggestions to the email: [hany.saidafifiali@gmail.com](mailto:hany.saidafifiali@gmail.com) Later on I will send you a simple survey on Google Forms on the same topic. Please fill in and send it back to my email.

## Study 2: Survey

### What are the best Mobile App features to practise Arabic writing?

#### Background

As shown from my Interviews , there is a trend of using mobile applications everyday. Most of my participants use their mobile phones instead of computers to know the latest news, follow up with events, entertain themselves and to learn something new.

#### Survey Goal

targeting their expectations about the best features of Arabic writing learning applications.

#### Survey Questions

1. [Exploring the user abilities ] → Which Arabic Font can you write efficiently on paper ?
  - a. Ruqaah
  - b. Naskh
  - c. Kufi
  - d. Farsi
2. [Exploring the user needs ] → Which Arabic Font would you like to learn more?
  - a. Ruqaah
  - b. Naskh
  - c. Kufi
  - d. Farsi
3. [Exploring the user routines ] → How often do you write Arabic on paper in your daily life?
  - a. Every day
  - b. Few times a week
  - c. Once a week
  - d. Few times a month
4. [Exploring the user abilities ] → How would you evaluate your own Arabic writing style?
  - a. Excellent
  - b. Normal

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- c. Bad
  - d. Very Bad
5. [Exploring the user abilities ] → What would be the best mobile app to help enhance your Arabic writing? - An app that ...
- a. would help me practise writing everywhere
  - b. would help me learn good writing by Trial and Error
  - c. would help me recognised the Rules of Arabic Fonts
  - d. All of the previous answers
6. [Eliciting user suggestions ] → How would you prefer to interact with a mobile application to learn writing
- a. Using my finger to trace and write or a pencil on my Note-like mobile device
  - b. Watching a video showing how to write then write on paper
  - c. Choosing the best writing from multiple choice
  - d. All of the previous answers
7. [Exploring the user needs ] → How do you prefer to write in the application?
- a. Tracing the letter will fill in inc inside outlined or dotted letters
  - b. Tracing the letters will duplicate the words above the line I am in
  - c. After finishing all words the whole sentences appears
  - d. Give me that choice in application setting
8. [Eliciting user suggestions ] → Would you like to compete with others in a competition
- a. Yes, a challenge with myself to enhance
  - b. Yes, a challenge with other application users
  - c. No, I prefer to practise only
  - d. Give me that choice in application setting
9. [Eliciting user suggestions ] → Do you prefer to see a Gallery of famous calligraphy in the app
- a. Yes, I think that a motivation
  - b. Yes, but make it limited
  - c. Yes, but only links to resources in the browser
  - d. No, that would be a distraction
10. [Exploring the user needs ] → What about a Game inside the app?
- a. Yes, that is fun
  - b. Yes, but make it limited
  - c. Yes, and show my score on top of the UI
  - d. No, that would be a distraction