



CS  
000

# Teaching and Learning Qur'anic Arabic Utilizing New Technologies and ICT

Matin Abdullah and Al-Sakib Khan Pathan



Dept of Computer Science, International Islamic University Malaysia

[matin.saad@live.iium.edu.my](mailto:matin.saad@live.iium.edu.my). [sakib@iium.edu.my](mailto:sakib@iium.edu.my)

## ABSTRACT

About 80 percent of the world's Muslim populations are non-native speakers of the Arabic language. Since it is obligatory for all Muslims to recite the Qur'an in Arabic during regular prayers: Muslims, men and women, are taught the complex phonological rules of the Arabic language in the context of the Qur'an. They learn these rules and recite the "sounds" of the Qur'an understanding very little of what they are reciting. This research work aims to explore the possibilities of using user stereotypes in the creation of task models and learner models to be used in the development of a comprehensive Mobile Assisted Language Learning platform that would help the users to learn a closed set of syntactic rules and vocabularies in the context of the Qur'an, so that they can recall an idiomatic translation in their native language.

## 1. INTRODUCTION

About 80 percent of the world's Muslim populations are non-native speakers of Arabic ("Arab people", 2012). Since it is obligatory for Muslims to read and listen to the Qur'an in Arabic during Prayers, an extraordinary social phenomenon has taken place in some parts of the Muslim world: Muslims, men and women, are taught the complex phonological rules of the Arabic language in the context of the Qur'an. They learn these rules and recite the "sounds" of the Qur'an understanding very little of what they are reciting. Similarly when they listen to the Imam reciting the Qur'an in prayer they barely understand what they are listening to (Moore, 2006). Since the main learning goal of the target demography is recalling a closed set of syntactic rules and vocabularies in the context of the Qur'an, so that they can reconstruct a meaning in their native-language (L1) while reading or listening to the verses of the Qur'an, the content falls under the category of Arabic for Specific Purposes (ASP). Despite the availability of resources for this purpose, to the best of our knowledge, no empirical research has yet identified the learning environments and the unique learning requirements of the target demography and explored the possibilities of emerging E-learning technologies to address this challenge. This research work explores the possibilities of using user stereotypes in the creation of task models to be used in the development of a comprehensive Computer Assisted Language Learning (CALL) module.

## 2. INITIAL PROTOTYPE

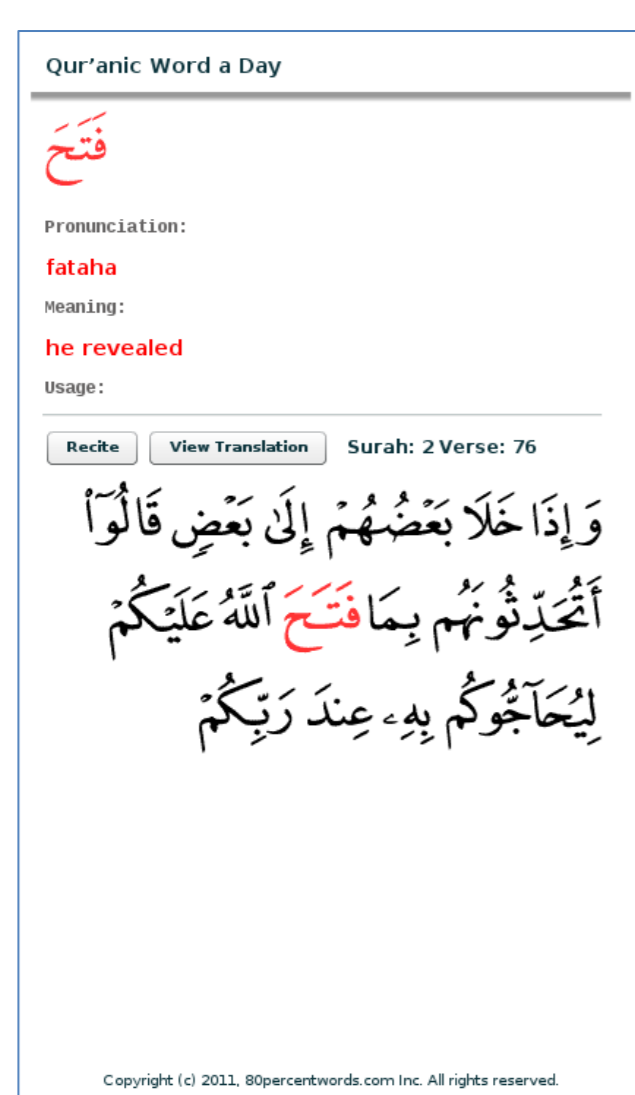


Fig1: Flash based Word-a-day

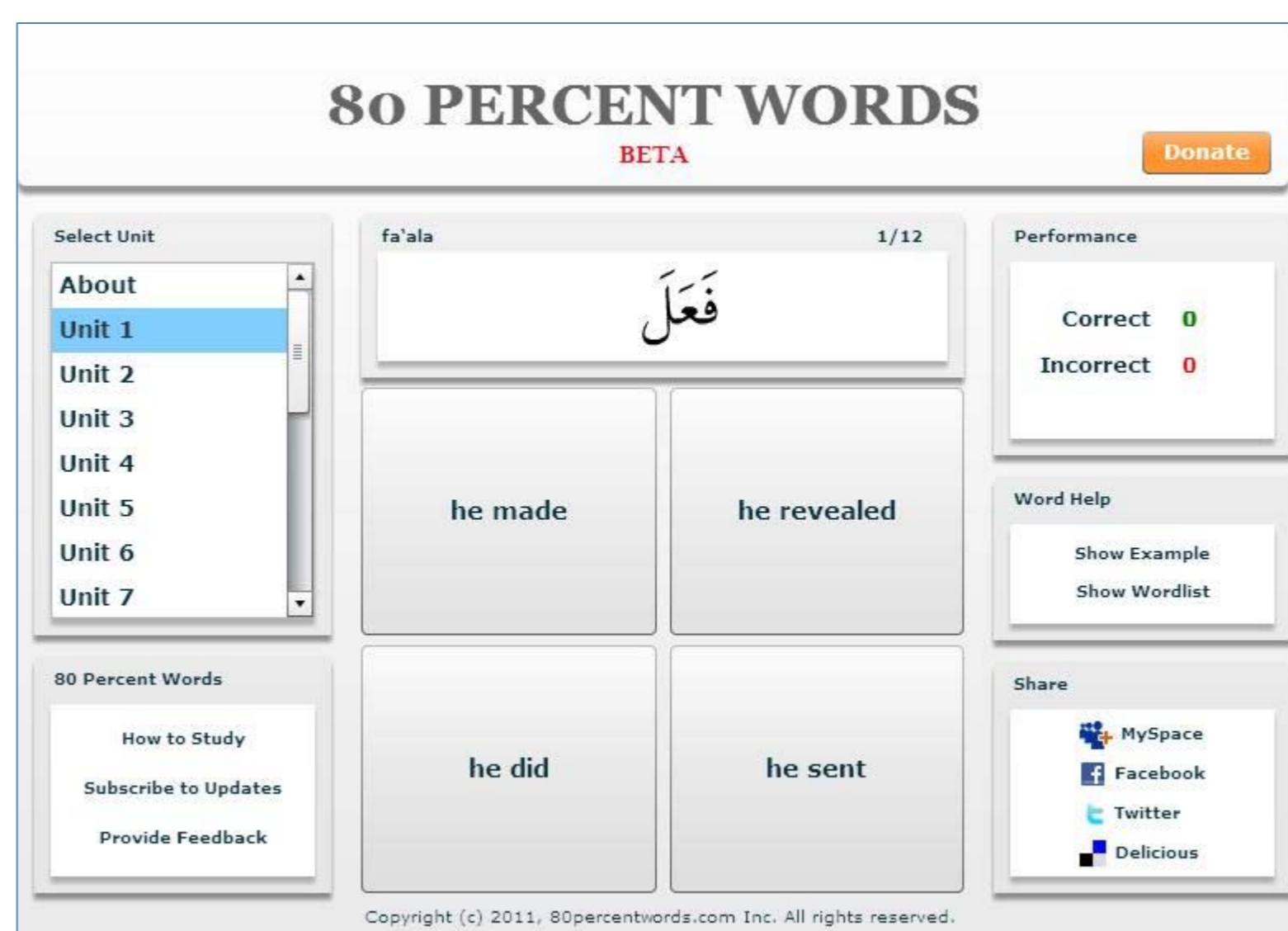


Fig2: Initial quiz module interface

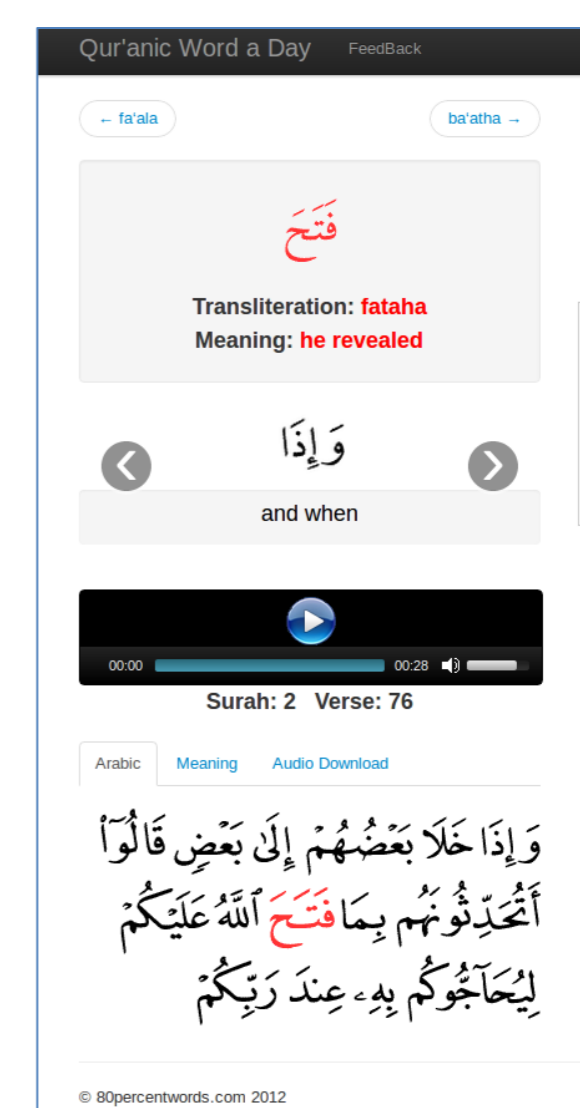


Fig3: HTML5 based Word-a-day

The goal of this initial prototype was to perform a quasi-experimental data gathering effort to conduct an initial needs analysis, based on the LSP principles, of a web-based interactive software that can complement the Grammar Translation Method used in the available Qur'anic Arabic material to help the learners memorize the lexical items with optimal effort; the primary objective was to gather insight about the user-base and the system requirements. The initial implementation of the software was designed for accompanying the UnderstandQuran.com website maintained by Dr. Abdulazeez Abdurraheem. There were two phases to the initial implementation. In phase one an accompanying web site called 80percentwords.com was set up (see Fig2). The goal was to teach the different forms of the verbs and their meanings by using an online vocabulary game. While answering a question the user could access an example of that word in the context of the Qur'an where s/he could learn the other meaning of the other individual words in the context promoting incidental vocabulary learning.

In the second phase (see Fig1) of the implementation a Qur'anic word-a-day component was introduced to increase user interaction. Each day, a word with its meaning and an example in the context of the Qur'an was sent to the user. The example had both the interlinear and phrase translation so that incidental vocabulary learning could occur. Implementation of this phase was automated by pre-populating a Wordpress [34] blog with the relevant data and then email notification was sent to the users using Feedburner and Facebook page.

In the third phase, (see Fig3) some of the initial user information was taken as a guideline and the word-a-day component was re-implemented to support mobile devices.

## 3. CONCLUSION

The main focus of this study was to examine the potential for an e-Learning system for learning the Arabic of the Qur'an keeping our target demography in mind. The user perception and the traffic analysis of the initial prototype of a ubiquitous web based language learning software indicate the potential of this approach and highlight the areas where improvement is required. Some suggestions and directions that came out of this study were:

- An overwhelming need and potential for software of this nature.
- The growing need for mobile accessibility for the purpose of e-learning.
- The distributed nature of the user location and the diversity of their system requirements.
- The need for user modeling to customize the user experience and give users an opportunity to track their progress.
- A deeper integration with the social media so that the user has control over sharing the user data with their friends on the social network to create an environment of social learning

Organized by KICT and PGSS 2013/2014

Postgraduate Students Colloquium (PGSC)