Old World Seven Wonders

Educational Software for Kids (Age 6-9)

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Graduation Project: Postgraduate Diploma of Educational Technology National Institute for Educational Studies & Research, Cairo University

General Outline: Postgraduate Diploma of Educational Technology, Cairo University is designed to fill-in the gap in the market in relation to the availability of educational software that are specially designed to Arabic speakers in different age / educational levels (Pre-School to Secondary School/Year 12). During this postgraduate diploma, we were educated to use different software – including MS Office Package (and mainly MS Access), MS Visual Basic Programming, Macromedia Director, Adobe Premiere, Adobe Photoshop, Audio/Video Editing Tools. In the project, we were required to apply pedagogical theory to design and develop a teaching plan – and produce a software that achieves this plan.

Project Outline: We formed a team and worked together to prepare a teaching plan to educate kids (6 to 9 years old) the old world seven wonders in a carton style – using Sindbad as a flying character over the carpet that travels and flying around these wonders – and he tells the story of these wonders to his accompanied Bird Jasmine. At the end of each story there is a quiz where kids can answer about these wonders.

Project Phases: The Project included a number of phases:

- 1) *Literature Review:* In this phase, the team has prepared the educational materials for the project including history of these wonders, images, and educational theory and principals to teach the age level of 6-9 years old, and best strategies to assess their learning.
- 2) *Market Research:* In this phase, the team has explored different educational software available in the market (mainly were in English), to deepen the understanding about how animation, sound, lessons and assessments etc are incorporated together to produce the educational software.
- 3) **Software Planning:** In this phase, the team planned for different stages of developing the software including the list of software to be used, how the educational plan be implemented in the different screens of the software, and the assigned tasks for each member of the team.
- 4) **Software Implementation:** The team has used the following software packages to develop the content and multimedia for the software:
 - a. *MS Access:* Access database was used to store the content of lessons about wonders (texts), the audio/video files, the users, the assessments, and users-assessments records.
 - b. *Adobe Photoshop:* Photoshop is used to prepare the images that are used during the lessons including the wonders, Sindbad, Jasmine.
 - c. *Macromedia Director:* Director was used to develop the animation of the characters that are used within the software including the Sindbad over the flying carpet and bird Jasmine, and the wonders from different angels.
 - d. *Adobe Premiere*: We used Premiere to merge certain audios and animations to produce videos including sound effects.
 - e. Audio/Video Editing Tools: Different tools were used to prepare and edits recordings and videos.
 - f. *MS Visual Basic:* VB was used in the programming. VB scripts coordinate the retrieval of data from the database, timing and presentation of the wonder windows, and recording information about users (kids) and their achievement in the database.
- 5) **Software Testing:** During this phase, the software was tested to debug any programming errors, and to ensure that every lesson is working and assessments are performed well and records of achievements are stored and updated well. Then, the software was tested with kids, who provided their feedback and some of the feedback were incorporated such as allowing the ability to re-play the lesson.
- 6) **Software Publishing:** The source code and media files of the project are owned by National Institute for Educational Studies & Research, Cairo University, and they are responsible to produce and market the software to schools and private libraries.