Ancient Egyptian Learning Tool (A.E.L.T.)

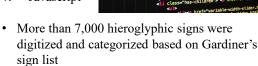
Introduction

- The use of computers in archaeology goes back many years ago. Even though it started very cautiously, today archaeology is one of the most digitized disciplines among the historical and social sciences. Computer based tools have opened new avenues for archaeological enquiry, significantly broadening our understanding of the human past and helping us presenting it. The fast development of digital technology is giving us new opportunities and new methods to bring our archaeological efforts to the next level.
- Ancient Egyptian Learning Tool (A.E.L.T.) is a management information system that enables learning and translation, as well as other basic information, of a hieroglyphic text. My PhD dissertation presents a hieroglyph writing and learning tool which focuses on the digitization and interactive usage of the Egyptian language and script. The purpose of this research is to implement and develop a system capable of recording ancient Egyptian hieroglyphs, learning to compose and recognize the main terms of a sentence. Also, it will contain a verbs and verbs structure database. And all these by considering modern digitization processes and the contemporary needs at a time when digitization constantly mutates and has entered interactively in the modern lifestyle.

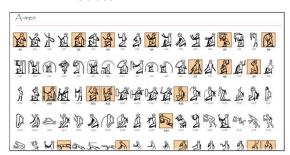
Technical Characteristics

• Five Programming Languages

- i. Html
- ii. Css
- iii. Php
- iv. Jquery
- v. Javascript



• More than 50.000 lines of code were written



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Description

• The application's home page http://www.hieroglyphs.gr/



Main Menu



- · Categories
- i. <u>Hieroglyphs Book</u> with 7.000 hieroglyphic sign digitized and categorized according to Gardiner's sign list
- ii. Ancient Egyptian Grammar (e-book)
- iii. Verbs Database (verbs structure)
- iv. Hieroglyphs Text Editor with advanced features:
 - > Operation of file manipulation, create new file, open existing file, save opened file, print file
 - > Text Formatting, change font size, type, color
 - Selection and manipulate of text, copy, paste, cut of selected text
 - > Operations of undo and redo by selecting one or more hieroglyphs
 - Search operation, find and replace with Gardiner's coding
 - Display Hieroglyphic symbols and ability to format them
 - Grammatical analyze a text document with a specific format that can be read only through AELT.
 - > Ability to extract and import text



Results

 A.E.L.T. is a learning tool that interacts to both, teacher and student, allowing and helping the learning of hieroglyphic writing. Hieroglyphs, as distinct signs that utilizes characters as pictures, may be read either as pictures, as symbols for pictures, or as symbols for sounds. The aim of this research is to design a comprehensive teaching tool with the ability to fully interact with its users by searing, exchanging and evaluating every project/document in the tool's databases.

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