

Visual Identity and User interface design of the virtual museum of food and nutrition of the island of Cyprus

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Abstract: The paper presents the virtual museum of food and nutrition of the island of Cyprus and analyzes the website's overall feel and look, visual identity and user interface. It addresses the design considerations taken into account at the time the visual identity and the user interface were designed. It then presents an evaluation by multimedia students of the visual identity and user interface design. The feedback of the students was collected through a questionnaire, which assisted in identifying the strengths and weakness of the application, and also provided useful suggestions for future updates.

Introduction

The virtual museum web application is currently online for testing and will be accessible to the public in the following months. The virtual museum includes the history of Cypriot traditional foods and ingredients, preparation techniques, cookware and traditional recipes.

The application accommodates a large database of recipes with various search options including; search by recipe, ingredients, geographic location and historical period. The project's researching team has created the initial database while the application will facilitate the user with the option to add on traditional recipes and share their knowledge on gastronomic traditions preserved through the centuries and passed on to them through the word of mouth.

The benefits of this application include cataloguing and preserving the Cypriot traditional recipes, making them accessible through the World Wide Web to the younger Cypriot generation as well as the rest of the world. The preservation of the Cypriot traditional cuisine could also be considered of world heritage importance if one considers that Mediterranean cuisine is recognized by contemporary nutritionists as one of the healthiest in the world, at a time when the processed food industry is rapidly taking over with devastating health effects.

The paper will address the design considerations taken into account at the time the visual identity and the user interface were designed. It will then present an evaluation of the visual identity and user interface by students. The application will be presented to multimedia students during a class. The students will be given the chance to use it themselves during the class. The feedback of the students will be collected through a questionnaire, which will assist in identifying the strengths and weakness of the application, and also provide useful suggestions for future updates.

The rest of this paper is organized as follows: Section 2 presents the design considerations taken into account when developing the visual identity and user interface of the application. Section 3 presents the interface of the application together with some supporting explanations. Section 4 presents the students' evaluation of the interface. Finally conclusions address our future work emanating from the students' feedback.

Design Considerations for Developing the Visual Identity and User Interface

This section presents the visual identity and the two stages for developing the user interface of the application, namely:

1. Visual Identity
2. Identification of the Audience
3. Determination of the Setting and the kind of the Application

Visual Identity

Visual Identity is the sum of all the visual elements used by an organization or company to distinguish itself from its competitors. That is, the symbol, colors, formats and other visual elements of the brand signature.

In designing the visual identity for the virtual museum of food and nutrition for the island of Cyprus the researchers were asked to provide a list with the most commonly used ingredients in the traditional Cypriot cuisine. The top three items on the list were grapes, wheat and olives, and that created the basis for the identity design. These three popular items were then illustrated in a simplified monochromatic style, in such a way that they could be readily recognizable while used in a very small size. The illustrations were then tested on a small but selected group of individuals from various ages to ensure that our broad target audience could identify them.

Due to the large amount of text that had to be incorporated in the logo, a simple sans-serif font was used in capital letters to ensure readability. The emphasis was given on the two most important words of the title, “Cypriot food,” which became the focal point of the logotype with the use of larger type and darker color.

In order to give the logotype a stronger Cypriot identity, a research was performed into Cypriot antiquities in search of a commonly used pattern to be incorporated into the visual identity. The research resulted in the use of the circular pattern at the lower end of the logo making it more complete and adding the Cypriot touch we were aiming for.

Green colors were used, as they are commonly considered appropriate in representing food, while the green color can also be found on the Cypriot flag.



Figure 1: Visual Identity / logotype

Identification of the Audience

The virtual food museum web application cannot be tied to a specific target group. It aims for regular visits by food and culture enthusiasts of all ages from Cyprus and abroad. That makes it almost impossible to build up a profile of the potential users other than their interest in food, for example their multimedia literacy level and their expectations on how they would prefer the information to be presented. The ages can vary between approximately 18 and 60 years of both genders. Their prior knowledge and experience in using computers cannot be identified. In such case the user interface needs to be simplified that quickly delivers the message and easy to understand and interact with. A more “sophisticated” interface, appealing to users with more computer knowledge, would leave out a big percentage of the overall number of potential users.

Determination of the Setting and the kind of the Application

The best way to communicate the content was to create an application where users would have the opportunity to have a “one on one” experience in the privacy of their homes during their leisure time. A website, which has the advantage of being accessible from virtually everywhere, could achieve that. In addition the website provides users with the ability to add their own comments and recipes and that strengthens the cultural heritage contribution of this application.

The Interface

The main objectives in designing the user interface was to ergonomically and strategically present the content in order to communicate the information in a way that would serve the user best.

In order to obtain this I have employed a number of Human-Computer Interaction techniques to guide me in designing a user-friendly interface based on the profile of the prospective users identified previously. Human-Computer Interaction is “a discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them” (Hewett, et al 2002).

Guidelines that were incorporated in the design were ‘The Magic Number Seven, Plus or Minus Two’ (Miller, 1956) for the number of our menu items on the screen, carefully selected and clear content material (Laghos and Zaphiris, 2004) which users find to be of great importance, and consistent menu structures (Colbert and Long, 1996) which are more learnable and help the users feel more comfortable with the system.

The Functionality of the Interface

The functionality in this application is handled by grouping the functions together in two special locations; the main navigational bar located at the left hand side of the interface and the secondary navigational bar located right below the top banner. Grouping functions by location clarifies the interface. The side navigational bar, which is considerably more vivid than the secondary menu located below the top banner, provides a dedicated space for all the main navigational functions. In addition the six most important links also appear in the main body of the interface and they are presented in a more attractive for the end user way, using both typography and colorful images. This becomes the main focal point of the landing page. This clean, contained space orients the users in the application as they can easily see and understand what is contained in it.

All of these functions (option buttons) are accessible to the users wherever they are in the application. They are located at the same place and are graphically presented in the same way. This is very essential as consistency in an interface builds confidence in the user. Once users trust that certain options will always be available, they feel free to explore further.

Navigation wise, a good interface design can be judged by the degree that it goes unnoticed. In the case of the virtual museum of food and nutrition for the island of Cyprus, due to the navigation’s simplicity, users do not need to spend time figuring it out, thus focusing away from the actual content of the application.

The hot spots, or areas on the screen that are currently interactive, are identified by the use of animated feedback commonly known as rollovers. Rollovers are altered animated graphics that display themselves when the user simply rolls over a hot spot with the cursor. The provided feedback not only let the users know whether or not the computer is responding, but it also helps to guide the flow of user interaction.



Figure 2: The user interface design

Feel and Look

Visuals play a key role in user interface design because people rely heavily on eyesight to interact with the world. It is the visual design that will first attract the user to interact with the application, and then give them clues about how to interact.

In the case of the interface of the virtual museum of food and nutrition for the island of Cyprus, a linear design style was used. This was separated into three virtual lines or stripes. The first one, commonly described as a top banner, consists of a manipulated image of a wheat field. This image presents a very characteristic picture of the landscape of Cyprus during late spring when the crops are ready for harvesting. Such image also shows prosperity as it implies that the year was satisfying in terms of rainfall, as the wheat looks healthy and fully-grown. The second stripe becomes the focal point of interface due to the darker color and colorful images, and it consists of the main

navigational bar including all the important selections that the users can make. The third stripe consists of a small introductory paragraph in two columns for better legibility, some secondary facilities and links and the logos of the sponsors.

For footer the design utilizes the Cypriot pattern, which derives from the logotype of the virtual museum.

Within the first two stripes, which make up the visual identity of the project, all the rectangular shapes used are designed with rounded edges for friendliness and food-like appearance.

Students' Evaluation of the User Interface

A class of Multimedia students evaluated the interface of the application. The students were introduced to the website by their lecturer and then were given one hour to interact with it. They were then presented with a questionnaire consisting of multiple-choice questions and were asked to rate the functionality/facility of the interface using a scale from 1 to 5 (1 -> Strongly Disagree, 2 -> Disagree, 3 -> Neutral, 4 -> Agree, 5 -> Strongly Agree). Table 1 below shows the average of the student responses and clearly indicates the strong acceptance of the interface and its functionality (most averages are greater than 4.6 and the average of all averages is 4.68)

In addition to multiple-choice questions, students were given the chance to express their opinion about the interface through two open-ended questions, which were inviting them to provide the positive and negative aspects of the interface. Students stated that the interface was easy and simple to use, aesthetically pleasing and appropriate for the subject, consistent and complete, well organized and easy to use. As far as improvements are concerned, they mentioned that they would like to see more images, which is something that the researching team is already working on.

Functionality/Facility	Average Score
Simple and Natural Language	4.82
Information, Navigation, Options and Other Features are Presented in a Consistent Manner	4.71
Meaningful Feedback is Provided to the User	4.75
Documentation is Helpful	4.73
Easy to Learn how to use the Application	4.83
Features and Functions are Easy to Remember	4.65
Links are Labeled Meaningfully	4.76
Using the Application Helps the User Learn the Content	4.52
The User is Always Informed About the Location s/he is	4.48
The Interface Provides the User Sufficient Control and Freedom to Accomplish Tasks	4.41
The User can Easily Locate Information	4.53
The Interface is Aesthetically Pleasing	4.84
The Interface Design is Appropriate for the Subject	4.76
Information is Organized Meaningfully	4.67
The Overall Experience from Using this Interface was Satisfactory	4.78
Average	4.68

Table 1: Student ratings of the Interface

Conclusions

This paper has presented the visual identity and user interface of the virtual museum of food and nutrition for the island of Cyprus. It addressed the design considerations taken into account at the time the visual identity and user interface was developed and presented an evaluation of the interface by students. Results showed that the application's functionality and interface were satisfactory with the interface aesthetics getting the highest ratings (4.84).

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