The Online Customer-Built WEB3D Middleware System for Arts and Crafts

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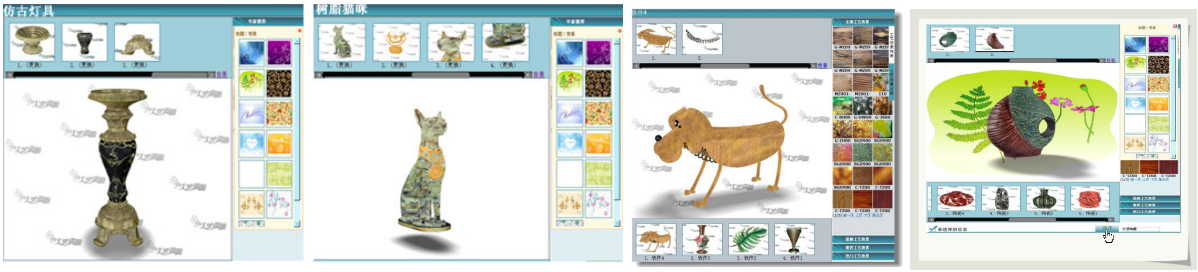

Fig.1. 3-Dimension craftwork customizing interface

1 Introduction

Recently, Xiamen University and Flying Information Technology Co.,Ltd worked together and completed the development of The Online Custom-Built WEB3D Middleware System for Arts and Crafts, which will perform as a product 3D design and display center, its main features include the product demonstration background change, 3-Dimension design, 3-Dimension product display, product component reorganization and product material replacement.

2 Design Principle

Platform adheres to customized design, focusing on the user's favors and interaction [Chen and Yao 2008], users can customize remotely to the manufacturers the needed commodity's parts, colors, and materials, etc, which has a unique business value. Users can even participate in their own product design in an effort to make product highlight their personality, bringing great creative fun.

At present, the Internet industry is suffering from economic "storm" test, companies have shifted more attention to e-commerce and Internet marketing. Under the B2C e-commerce sales model, Flying Information Technology Co.,Ltd successfully provided a good e-commerce platform for traditional industries enterprises as a third-party company in Fujian Province, and this can gives enterprises more market opportunities, direct or indirect interests.

Now, www.narkii.com, a 3-Dimension dynamic e-commerce platform, has been developed especially for the footwear, umbrellas, clothing, crafts, digital, mechanical and electrical products and many other categories of products.

3 Our Approach

Step 1: Use Autodesk 3DS Max; Rhinoceros 3-Dimension authoring software to make handicrafts sample model; and in accordance with the composition of the sample texture segment model components.

Step 2: According to the sample model material demand to render the various component parts in order to achieve a clear material texture.

Step 3: Use the current popular 3-Dimension engine technology tool to let the model display in the form of 3-dimension web page.

Step 4: Use the JAVA programming language to achieve 3D engine technology and web interfaces and data connections. The button on the interface web page can control the material and color of various component parts of the model, background change, and component parts replacement and so on by simple clicking.

References

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