



DEVELOPING A PROGRAM FOR THE AUTOMATION OF TAILORING THE GARMENTS

Ayjemal Gurbanmyradovna Ussayeva^{1*}, Annageldi Meretmuhammedovich Orazov²

^{1,2}*Oguz Han Engineering and Technology University of Turkmenistan, Ashgabat, Turkmenistan.*

*Corresponding author

DoI: <https://doi.org/10.5281/zenodo.7775831>

Computer technology has a very functional structure. It currently includes the following sections: programming, system work and management, database, networking and internet, graphics and decorating, multimedia technologies, and etc.

Capabilities of computer graphics help to automate designing and drawing processes. Taking advantage of these opportunities, programs to automate the process of drawing out the original designs for garment sewing are used in large factories as well as in the shops serving for individual customers.

Before describing the functions of the program, let's look at the concepts of vector and raster graphics. In Raster graphics, images are pixels, that is, dots on the surface of a computer screen. Vector graphics, on the other hand, depict images in the form of sequences of points connected by straight or curved lines. These features determine the pros and cons of the two graphical methods. Raster images allow to capture high-quality images in a fixed size. When the screen or image is resized, the quality of the image decreases. When the Raster image is enlarged, the image appears to be clustered due to the magnification of the dots on the screen. When the image size is reduced, the image quality decreases with the loss of some pixels.

Raster images require more memory because they have to keep the color value of each pixel in memory. The graphic elements in the vector file are called objects. Each object is a unique unit of character, such as color, shape, line thickness, size, coordinates of the beginning and end points of the section. Therefore, the size of vector graphics files is significantly smaller than the size of raster files. When the dimensions of vector images are changed, their quality do not change, because the graphic objects are redrawn each time according to their properties and the new dimension [1]. It has been suggested that vector formatting for graphic images should be used in the tailoring program. The graphics in the program consist of dots and straight or curved lines that connect them.

In this article was developed a program for the automation of tailoring the garments using VisualBasic [2] programming language. In the program, the length of the lines in the shape of the tailoring, that is the distance between the two points can also be calculated by the formula. In this formula, the costume style (garment tailoring) can be automatically adjusted by entering the customer's measurements which means when the dimensions change, the shape of the tailoring also changes automatically. The postfix record of formulas was used in the program to calculate the value of the entered formula.

Computer technology, along with facilitating and accelerating work, allows to eliminate human errors (human factors) that occur at work. The main features of this program include: allows to accurately, quickly and easily enter the shape of the tailor into the computer; the entered tailoring can be customized quickly according to the dimensions of the other client; the shape of the finished tailoring can be easily transferred to the surface of the fabric through the projector; it is possible to maintain a database of tailoring shape of different models.

REFERENCES

- [1]. L. A. Zalogova. Computer graphics. Elective course: Practicum. - M.: BINOM. Knowledge Laboratory, 2005
- [2]. B. L. Bykov. Programming basics in Visual Basic 6.0: manual - Brest: BSTU, 2002