Talking Keyboard for the Blind

Amer, Layan

With the development and advancement of life, and the spread of modern communication technologies, with an emphasis on the computer, it is a right for people with special needs to use the computer. But how can I let the blind type on the keyboard without seeing the buttons? That was the focus of my project. The purpose of this project was to enable the blind to type on the computer keyboard easily and without asking for help from anyone else. The blind person cannot see the keyboard characters but can feel them. He/she can use a keyboard with raised buttons in Braille. The blind person also has a strong sense of hearing, so why not use these abilities to develop a keyboard specifically with this trait? Actually, I experimented with a number of solutions including the use of plastic adhesive and staples. We faced difficulties including the lack of pins with different head sizes. After continuous trials, I chose to paste beads in two sizes according to Braille to replace the letters typed on the keypad buttons. Then, I turned to the idea of having talking letters by pressing them through a computerized program that has been designed and written in the programming language C Sharp. Then I carried out the experiment. A blind student typed about 50 words easily with a sense of comfort and happiness. It was a simple solution with low cost and simple principle at work. It is a piece that is available and anyone can afford. In addition there is an ease of downloading this talking keyboard software for the blind on any computer.

Awards Won: