Tobii test of EyeWrite by Jacob O. Wobbrock

EyeWrite is a letter-like text entry method that uses eye gestures

Tested in August 2010 by Måns Östberg

Eyewrite is built on Edgewrite, *"…a unistroke text entry method that works on a variety of devices. Its benefits include increased physical stability, tactility, accuracy, and the ability to function with very minimal sensing. The innovative alphabet allows letter-like gestures to be made on almost any device, often where text entry was not formerly feasible."* (http://depts.washington.edu/ewrite)

Eyewrite has been developed by Jacob O. Wobbrock at the University of Washington and Andrew T. Duchowski at Clemson University.

Test details

Test performed 2010-08-03 on EyeWrite version 3.5.1, released in July 2010. The test was performed on the following equipment:
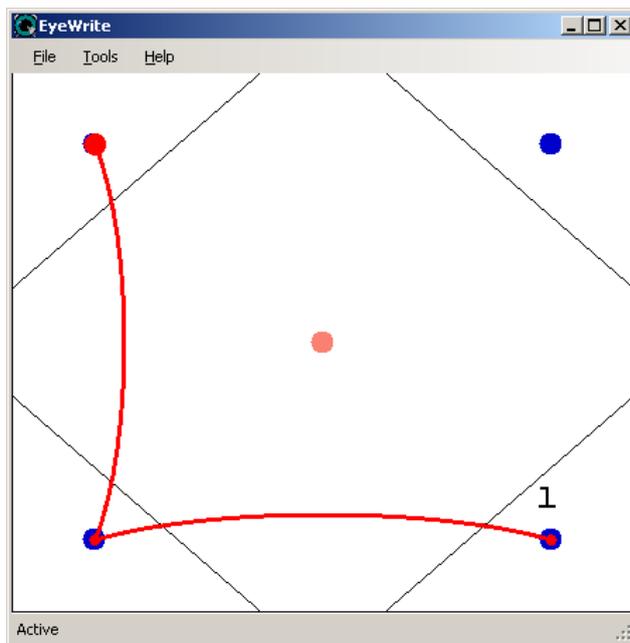
- Eyetracker: Tobii T60 XL, firmware 1.2.21
- Computer: FujitsuSiemens laptop LIFEBOOK BS034 (2 GB ram, 2 GHz Intel Core2 T7200 CPU at 2 GHz)
- Operating system: Windows XP service pack 3

Test Results

The EyeWrite applications works fine. EyeWrite works by analyzing the mouse cursor, so you need another program that allows you to control the mouse cursor with your gaze.

Overview

The interface of EyeWrite can be seen in picture Picture 1 below. You write by looking at the corners in different order depending on what you want to write. You finish each letter or symbol by looking at the middle dot. In Picture 1 the user is writing the letter L.
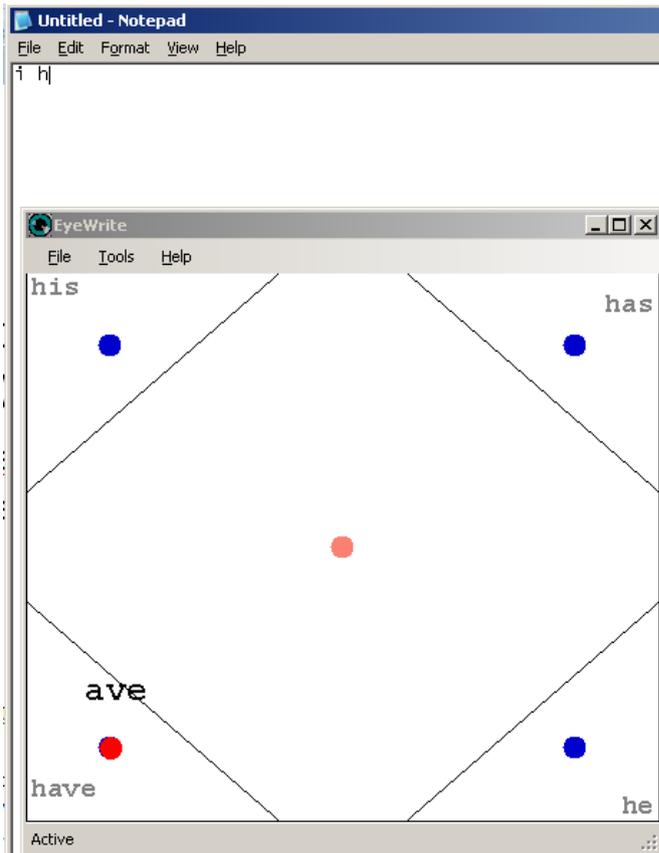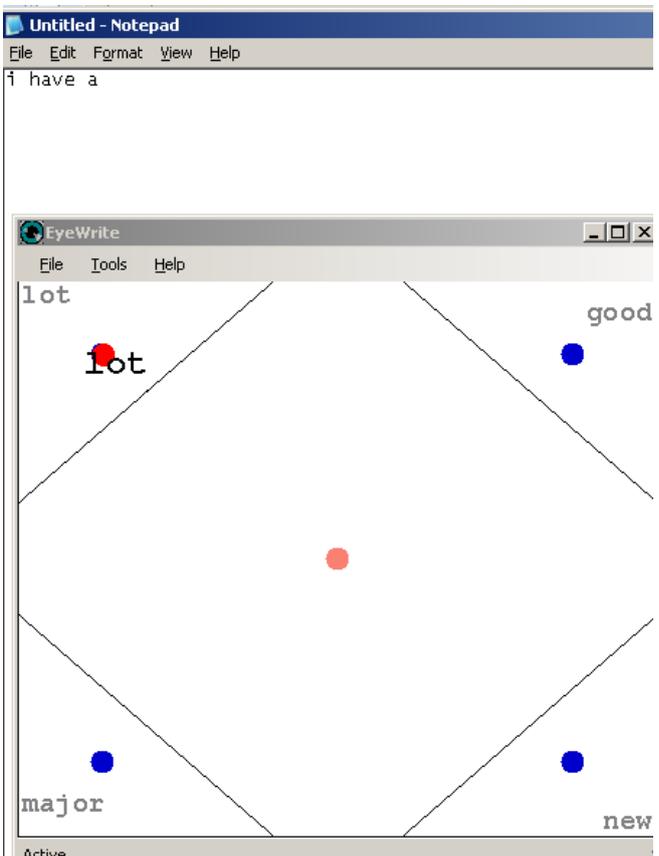
EyeWrite doesn't directly trace the users' point of gaze by connecting to an eye tracker; instead it traces the mouse cursor. Therefore you can try the application without an eye tracker. To try it with an eye tracker you need some other software to control the mouse cursor with your gaze.

EyeWrite can also do word predicting if you provide a dictionary. There is one available at http://depts.washington.edu/ewrite/, click on the link *For developers*. In Picture 2 and Picture 3 below you can see the word prediction in action.

On http://depts.washington.edu/ewrite/eyewrite.html and http://depts.washington.edu/ewrite/ there is more information and several published articles available.

Picture 2

Picture 3

Get going

The download is a zipfile with two folders, *app* and *tobii*. *App* contains EyeWrite and *tobii* contains an application for controlling the mouse cursor with your eyes. The second application does not work according to our tests.