

# **MARANI'S MIND MAKER OUT OF THE BOX EXPERIENCE**

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To make students familiar with neurological pathways, Leiden University Medical Center has been using a board game for several years. This game, Marani's Mind Maker, associated questions, puzzles or even riddles to neuroanatomical features. It used question cards and a dice to lead students through a cardboard playing field representing a neurological pathway. Students answered questions in turns. The correctness of answers dictated the students' progress along the pathway. The game worked well, but the distribution and maintenance of the boxes with the games became a problem, as well as the lack of logging of the way the game was played. Logging would be useful in improving the game.

Making a computer-based version was an obvious solution. At first a stand-alone Visual Basic program was developed, which solved the distribution problem but did not enable logging because the game was played offline on the students' own computers. Therefore the program was converted to DHTML and made available on the Internet through the web-based Lesson Registration System (LRS.NET). User authentication and storage of the log data were taken care of by LRS.NET. The web-version also enabled a multi-client multiplayer mode of the game.

A first test of the program in an actual course with 20 students of the University of Twente showed that the multi-client multiplayer mode was hardly used and none of the multi-client multiplayer games were finished. This might be due to several factors:

- The teacher required the students to complete a game (another "advantage" of logging). The students soon found out that the fastest way of completing it is doing it in single-player mode.
- The current setup lacks a "chat" mode. All communication between players, like starting a common multiplayer game and taking turns, is done through standard messages issued by the program. The players cannot react on the success or failure of the other players, and this lack of social communication diminishes the attractiveness of the multi-client multiplayer mode.