

## Design and Development of a Memory Based Board Game for the Elderly Suffering from Mild Cognitive Impairment



**K. Nidhin Vinod**

nithin.vinodh@gmail.com  
Ph. No: 0 96639 17319

<b>Student's Name</b>	<b>K. Nidhin Vinod</b>	<b>PD (FT-2012)</b>
<b>Academic Supervisor(s)</b>	H. S. Lohit and C. Gopinath	
<b>Industrial Supervisor(s)</b>		

**Keywords:** Memory Improvement, Motivate to Play, Memory Boosting, Board Game

**Abstract:**

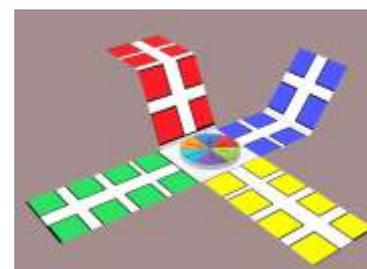
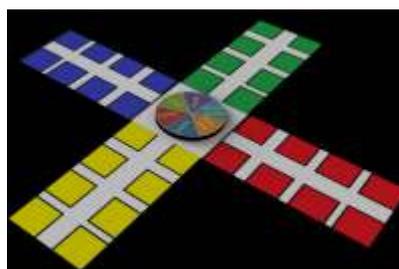
As the proverb says "health is wealth", health is the most essential thing for every humans in the world. There are lots of people suffering from different disease. "Mild Cognitive impairment" is one of them, which affects the memory of the patient, ability to remember things. Health care industry is one of the fastest growing in the world, which never shown a decline. There is huge potential for board game for MCI patients, this project is an attempt to bring improvement of MCI patient memory status through a board game.

Design process started with a primary research and an identified need in memory improvement. The need for a board game, which could improve the memory of the patients has proposed. Data collection was carried out by adopting different methods such as literature review, product study, market study and product environment study. Stake holders were interviewed in ethnography and personal interviews to understand their needs and aspirations. Ergonomic study was conducted for deciding product parameters and user interface. QFD and PDS were generated based upon data analysis. Concepts were generated with respect to the derived PDS and shortlisted by ethnographic research. Various issues and needs identified through data collection have been addressed in developed concepts. Final concept was selected by weighted ranking method.

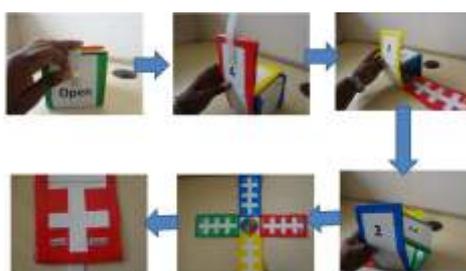
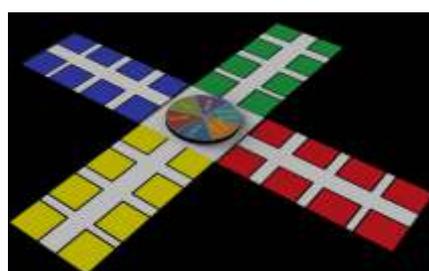
A 1:1 working model has been made to validate the final concept and feedback was collected from users. The product is having good memory boosting capabilities, easy to use and highly motivational for patients to play. Ergonomics and aesthetical appeal of the product made it a unique one. Major user needs such as simple interface for usability, aesthetics and ergonomics were satisfied the final design. User response on the final design was positive and satisfying.



**Various concepts of board game**



**Final product**



**Final concept**