

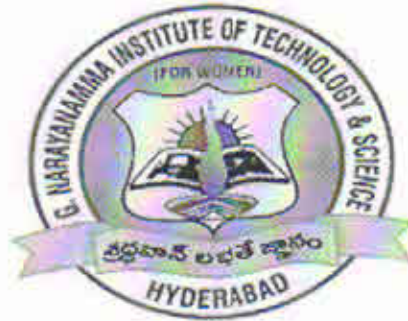
# G. Narayanamma Institute of Technology & Science

(For women)

(Approved by AICTE, Affiliated To JNTUH, Accredited by NBA & NAAC)  
(An ISO 9001:2015 Certified Institution)

Shaikpet, Hyderabad – 500 104

Department of Computer Science & Engineering



II Year II Semester

BATCH 13

Class & Section: CSE-B

**TITLE: Cortex - A Game Therapy**

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## ABSTRACT

ADHD stands for **attention deficit hyperactivity disorder**. A person with ADHD has differences in brain development and brain activity that affect attention, the ability to sit still, and self-control. According to recent studies, it's shown that game therapy can help people suffering from ADHD cope with their symptoms and presumably be a cure. There are also ongoing clinical trials to determine if game therapy could help people suffering from **COVID related 'brain fog'**. Symptoms of brain fog could include memory problem, poor concentration, anxiety, dietary changes (from prolonged loss in taste and smell) and many more.

The game developed uses simple **Front-end Development languages** (HTML, CSS and JavaScript) in order to target few of those areas. By playing a game, we put the brain into action and as addictive as games are, we force it to concentrate thus relieving from other symptoms. Clinical Trials have been conducted with daily tasks each about 25 minutes targeting areas like memory, muscle-brain communication (in form of joystick or keyboard or stylus) and interpretation. The game developed focuses on these areas along with incorporating the user's experience ensuring that they do not feel it's a mere treatment and actually enjoys playing it. The game is divided into two levels: a memory match where two cards of the same type have to be matched with the criteria being the number of moves required and the a shape match where two shapes of the same dimensions should be matched by drag and drop with the criteria being time.

## SYSTEM REQUIREMENTS:

### Software Requirements:

Operating System	- Windows 10
Front End	- HTML, CSS, JavaScript
Development Tool	- Visual Studio Code, Notepad

### Hardware Requirements:

Name of the Processor-	Intel(R) Core (TM) i7-10710U CPU @ 1.10GHz 1.61 GHz
Hard Disk Capacity	- 1 TB
RAM Capacity	- 16.0 GB