2nd SYMPOSIUM
OF APPLIED
RESEARCH

Interactive Platform for Children with Attention Deficit

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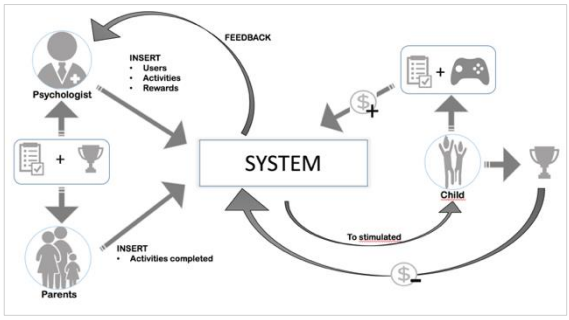
BACKGROUND: Attention Deficit Hyperactivity Disorder (ADHD) is characterized by severe and persistent symptoms of inattention, hyperactive behaviors, and impulsivity. This disorder begins in childhood and can continue until adolescence or adulthood.

In this project we intend to create a web platform with a set of games that promote cognitive stimulation such as attention, working memory, information processing speed, inhibitory control and cognitive flexibility, that also provide feedback about the child process for all caregivers.

OBJECTIVES: The main purpose of this project is to develop small games that promote the basic scholar skills of children with ADHD. Educational agents play an active role in controlling and monitoring the platform activities.

In addition to educational games this application will contain techniques based on behavioral theories such as punctuation, reward systems and positive reinforcement. Rewards will be given when children complete their tasks successfully and are previously negotiated with parents and psychologists.



METHODOLOGY: In order to meet our objectives, the methodology will be based on the definition of requirements and schematization, user collaborative interface design, implementation and unit testing. After the development phase, a set of receptivity pre-tests involving three participants will be performed.

RESULTS AND CONCLUSIONS: As a result, this platform is expected to be a first contribution to have some insight about the efficacy of digital games in promoting cognitive and behavioral stimulation of children with ADHD, to assist pharmacological treatment, to provide positive feedback from key stakeholders through continuous monitoring and ultimately to positively reflect on the teaching and learning of the child.

Keywords: Computing, Interface Design, Games, Children, ADHD, Psychology, Neuroscience