# The Development of a Videogame That Serves as a Diagnostic Tool for Depression in Teenagers

Gonzalez -Romano, Daniela (School: The San Juan Math, Science and Technology Center)

Major depressive disorder, commonly known as MDD, is a mental illness that severely deteriorates and affects the brain in many ways. It impacts the way someone thinks and acts. Because of the COVID-19 pandemic, approximately 25% of the world's population (more than 1.9 billion individuals) currently suffer from MDD. The most affected age group is from 12 to 17 years old in the USA alone. Annually, in the USA, there are approximately 100,000 suicides among adolescents (13-17 y/o). MDD can be a single diagnosis or a symptom of a wider spectrum of illnesses. It can also stem from prolonged exposure to a neurotransmitter called cortisol; this triggers an effect that causes the brain to lose mass. The aim was to create a video game that serves as a diagnostic tool for depression in students from Middle School and High School (12-17 y/o). The game consists of nine questions; the demo currently withholds four, to demonstrate the mechanics of the game. The questions are based on different scales of depression used as diagnostic tools in young adults and teenagers, and allure to symptoms aligning the major depressive disorder and allow the mental health professional to review them and ascertain if the patient qualifies as a MDD diagnosis. These questions were reviewed by mental health professionals and created with different diagnostic charts. The video game will be a new and innovative way to diagnose teenagers and young adults with a life-threatening mental illness while providing a more pleasant process for the patient. ?

**Awards Won:**