Creation of a Mobile Application to Enhance Communication in Children with Autism

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Autism is a brain development disorder that is accompanied by a variety of indicators that include problems with communication and social interactions, as well as repetitive behavior (Hodge, 2010). Autistic children tend to have difficulties interacting with others. For that reason, the objective of this research is to develop an application that can successfully help children with autism to communicate more efficiently. This study aims to determine if an application can help people with autism to socialize and communicate, by facilitating interactions between the individual with autism and their parent or guardian. The mobile application that was created simulates a conversation with the child; this technology is called a chatbot. The application has a series of stages; first, the guardian will input some basic information, so the app can adjust to the child's needs. It was designed to acquire information about the child by using customizations on the app and identifying things the individual might like. The second stage is where the child starts "talking" to the application through text. In the last stage, the application compiles the information, analyzes it and presents it to the parent or guardian in order to identify the things that the individual with autism likes, but cannot communicate. This way the parent or guardian can relate and better understand the child. Consequently, the way they communicate with the person will be more efficient.

Awards Won:

Oracle Academy: Award of $5,000 for outstanding project in the systems software category.