

Autismo

Project Proposal

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Table of Contents

[Introduction to the Problem Area 2](#_Toc499583477)

[Target Audience 2](#_Toc499583478)

[Need Analysis 2](#_Toc499583479)

[Problem Statement 2](#_Toc499583480)

[Solution 2](#_Toc499583481)

[Solution's Novelty 3](#_Toc499583482)

[Timeline 3](#_Toc499583483)

[References 3](#_Toc499583484)

# Introduction to the Problem Area

Autism, or autism spectrum disorder, refers to a range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication, as well as by unique strengths and differences. We now know that there is not one autism but many types, caused by different combinations of genetic and environmental influences.

The term “spectrum” reflects the wide variation in challenges and strengths possessed by each person with autism.

Autism’s most-obvious signs tend to appear between 2 and 3 years of age. In some cases, it can be diagnosed as early as 18 months. Some developmental delays associated with autism can be identified and addressed even earlier. Autism Speaks urges parents with concerns to seek evaluation without delay, as early intervention can improve outcomes.

Some facts about autism

* The Centers for Disease Control and Prevention (CDC) estimates autism’s prevalence as 1 in 68 children in the United States. This includes 1 in 42 boys and 1 in 189 girls.
* An estimated 50,000 teens with autism become adults – and lose school-based autism services – each year.
* Around one third of people with autism remain nonverbal.
* Around one third of people with autism have an intellectual disability.
* Certain medical and mental health issues frequently accompany autism. They include gastrointestinal (GI) disorders, seizures, sleep disturbances, attention deficit and hyperactivity disorder (ADHD), anxiety and phobias. (What is Aitism? || Autism Speaks, n.d.)

# Target Audience

Autistic children (age group: 4-8 years), Parents, Special Education Teachers, General Education Teachers

# Need Analysis

Example of [Survey Form](https://www.google.com.pk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjZmfq6097XAhXN_aQKHZSNDC4QFggjMAA&url=http%3A%2F%2Fwww.sde.ct.gov%2Fsde%2Flib%2Fsde%2FPDF%2FDEPS%2FSpecial%2FUpdates%2FSpecialActSurvey.pdf&usg=AOvVaw3WNO7PF2wpZLdZhqaTqa0u)

# Problem Statement

Autistic children face a number of difficulties in learning basic concepts and communication. There is no known advancement in the field of ICT in this field.

# Solution

The solution is to develop an interactive mobile application specifically for autistic children and generally for all children who have basic knowledge of communication in English and have access to android enabled smart devices.

# Solution's Novelty

The application (Autismo) is supposed to play an important role in the mental growth of Autistic children. It would help them in some interactive therapies and would let them learn some basic early education concepts. Sharpen their minds with some fun games and interesting activities.

# Timeline

**Requirement elicitation:** October 25, 2017 to November 15, 2017

**Development**

Starting: December 10, 2017

Basic Modules: December 31, 2017

First working prototype: January 15, 2017

Improvements: January 25, 2017

**Deployment:** January 30, 2017

# References

*What is Aitism? || Autism Speaks*. (n.d.). Retrieved from Autism Speaks: https://www.autismspeaks.org/what-autism