1. **Introduction**

**1.1 Purpose:**

The purpose of this document is to outline a detailed description of the special needs (autism spectrum disorder). It will explain the functions of the system, the use of the system, the system features, the interfaces of the system, how the system will perform, and other non-functional requirements.

**1.2 Description:**

Autism spectrum disorder (ASD) is a complex development condition that is related to brain development which involves difficulties and challenges in social interactions, communication, speech and pronunciation. The disorder also includes repetitive patterns of behavior. The term "spectrum" refers to the wide range of symptoms and severity. The effects and levels of symptoms of ASD are different from one to another, ASD is usually diagnosed in early childhood mostly around 2-3 years old. Moreover, autism is a long-life condition, however, many children diagnosed with ASD can continue living their lives independently by following different daily treatments, therefore as they grow up, some children with spectrum disorder can interact and engage with people more often.

**1.3 Problem statement:**

1. Social interaction and communication problems: includes difficulties in communicating with people, generating conversations, responding to his/her name, showing emotions. As well as difficulties in understating other’s people words, emotions. And difficulty in understanding, responding to facial expressions, and eye contacts.
2. Difficulty related to people, events, and things: includes difficulty in making social friends and starting a conversation, interacting in social events.
3. Repetitive patterns of behavior: Includes repeated words or phrases without knowing when or how to use them, also includes repeated action or movements such as jumping, or spinning repeatedly.

**1.4 Scenario:**

As a child with autism disorder, they face many problems such as: social interaction and communication problems, difficulty related to people, events, and things, and repetitive patterns of behavior. The application can serve these children by including different sections, each section includes a picture, word, and sound. Such pictures can help them into visualizing important objects, words can help them to improve their reading skills, and sounds can help them in pronouncing. Overall the application provides these sections where the user can press and use them repeatedly until they successfully learn and benefit from this application.

**1.5 Project description:**

This system is the process of developing the skills and behaviors of the children with autism disorder through the application. The application is well designed to meet the user needs such as the user can use the app to read phrases, listen to the phrases, and visualize the pictures, all relating to the same word. This application intends to serve the users in a way that is a fast and efficient, plus it saves the time and money from registering the children in special schools.

This system It is easy to use, reliable, well designed, secure and fast.

**2. System requirements:**

**2.1 Functional requirement**

1. User can select different kinds of sections which are: action, pronunciation, object and behavior.
2. Different words are provided in each section.
3. Each word produces a corresponding sound to the word.

**2.2 Non-functional requirement**

## 3. System features:

## 3.1 User can select different kinds of sections

* 1. **Description**
     1. Action: includes daily action words such as
     2. Pronunciation: includes all the alphabetic.
     3. Object: includes the important object words such as

**3.1.4** Behavior: includes behavior statements such as

## 3.2 Different words are provided in each section

**3.2 Description**

Each section will have its own words.

**3.3 Stimulus/Response Sequences**

User should click the corresponding section.

## 3.4 Each word produces a corresponding sound to the word

**3.4 Description**

The user will click the word to hear the sound of the word.

**3.5 Stimulus/Response Sequences**

User should click the corresponding word.