**Synopsis**

The advancing technology has the potential of transforming the nation into a global trading power. But the future is in the hands of our children, and it is our duty to prepare them for it.

According to 2011 census in india there are 372.4M children in the age group of 0 to 14, among which 73.46% (273.6 mil) are from rural and rest from urban and a survey made from National sample survey office (NSSO.)

30% of the above stated figures are approximately underprivileged that means they are going to be the last set of people to become digitally literate

There are 1.5M (1522346) number of schools in india among which 72.4%(1102783) are government, 5.5%(83787) are government aided and rest are private schools.

This implies that majority of the children in our country are being educated at a govt./ govt. aided schools. It is upto us enable to get the children ready for a future of digital revolution.

We present to you “ROBOL” - the product that is going to help the younger generation lay the foundation needed for their future.  **Project description**

Robol is a technology that helps children learn programming in a simple manner.

Today’s children are immersed in technology from a very young age. This exposes them to some of the biggest vision-related risks; minimising this is our primary motivation in creating a “screen-free product.” There is no radiation emitting display present in our product.

Our product comprises of 2 major parts - the bot and the slate.

The bot is given a set of commands by placing coins in the slate; each coin represents a specific keyword - this includes almost 40+ keywords directly taken from today’s computer programming. Our Product is also capable of taking in input commands through different types of sensors such as touch, rain and obstacle detection, which are embedded in the bot.

We also cater to the needs of those who are visually impaired, by integrating the braille system into products.

It is also our mission to integrate all the local languages of our country. While we have a long way to go, we can proudly say that our product is already accessible in three different languages - English, Hindi and Kannada.

**Summary**

Emerging technologies like industrial robots, artificial intelligence, and machine learning are advancing at a rapid pace which is a key component of economic development. These technologies are revolutionising personal and professional lives of the people which should be carried forward by the new innovative minds to increase digital literacy.

India is going to become global producers, and it’s important to train the coming generations in programming and robotics.

This requirement enabled us to come up with a new product ROBOL which can help children to learn the basics of programming. It creates an impetus within the child to learn more and further enhance the skills

**Conclusion**

Our aim behind this project is to provide children a harmless, simple-to-understand approach to prepare for their future, and more importantly, to have fun while learning.

We believe that we have checked all the right boxes, and that it is time for us to take this product further.

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**Product Elements**

The **bot** is given a set of commands by placing coins in the slate. It is also capable of taking in input commands through different types of sensors such as touch, rain and obstacle detection, which are embedded in the bot.

The **slate** scans the coins when they are placed in their slots, and sends their commands to the bot.

Each **coin** represents a specific keyword - this includes almost 40+ keywords directly taken from today’s computer programming.