

**School Name: PM SHRI Kendriya Vidyalaya No. 4, Bhubaneswar**

## **TITLE: LEARN WITH DIGITAL FRIEND (KALAM)**

- **ATL In-Charge and Guide: Mr. Mon Mohan Kar**
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### **1. Focus Area**

Robotics

### **2. Problem statement**

In many families, both parents are in job and the kids stay at home alone with grandparents or with house maid. The education of the child gets hampered due to unavailability of educated parents with the kid the whole day. Therefore, the kid spends time with computers or video games by which his/her eyesight gets affected. Kids love to play with friends. Therefore, in this project we have given a concept of Digital Friend. The Digital friend is a human like robot having knowledge like a human and also it has mobility. Therefore, with our limited expertise we have developed a prototype, which can move with our instruction/through mobile control and also it can answer our queries like a human. It can also have eye blinking.

### **3. Causes of the problem**

- i) The education of the child gets hampered due to unavailability of educated parents with the kid the whole day.
- ii) Kid spends time with computers or video games by which his/her eyesight gets affected.

### **4. Effects of the problem**

- i) Education of child hampered
- ii) Health problems due for using video games.

### **5. Who all are facing this problem?**

Small students studying in schools.

## **6. Solution :- How does it work, who is it helping, and how will it solve the problem.**

Kids love to play with friends. Therefore, in this project we have given a concept of Digital Friend. The Digital friend is a human like robot having knowledge like a human and also it has mobility. Therefore, with our limited expertise we have developed a prototype, which can move with our instruction/through mobile control and also it can answer our queries like a human. It can also have eye blinking. Google assistant is used for question and answering by the Digital Friend Node MCU is used to interface with Mobile phone for movement control using a mobile app. Gear motors and its drivers are used for making the movement of the robot (Digital Friend)

## **7. The actions my team did in problem solving journey**

We did the full problem solving journey by ourselves.

We got feedback on our problem and modified it.

We got feedback on our idea and modified it

## **8. Equipments / Materials Used**

i)Google assistant is used for question and answering by the Digital Friend

ii)Node MCU is used to interface with Mobile phone for movement control using a mobile app.

iii)Gear motors and its drivers are used for making the movement of the robot (Digital Friend)



**Photo of the Digital Friend**

YOUTUBE VIDEO LINK :-

[https://youtu.be/pNAcdPyv\\_Og?si=YIV9njE9QwawZv3V](https://youtu.be/pNAcdPyv_Og?si=YIV9njE9QwawZv3V)