



Final Report

*Dancing Robot with flashing
light, automatically turn on cell
phone music*

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I. INTRODUCAION

This report describe the development procedure of dancing Robot with flashing light, automatically turn on cell phone music. The robot starts dancing and turn on music when with clapping. The dancing robot is shown in Figure 01

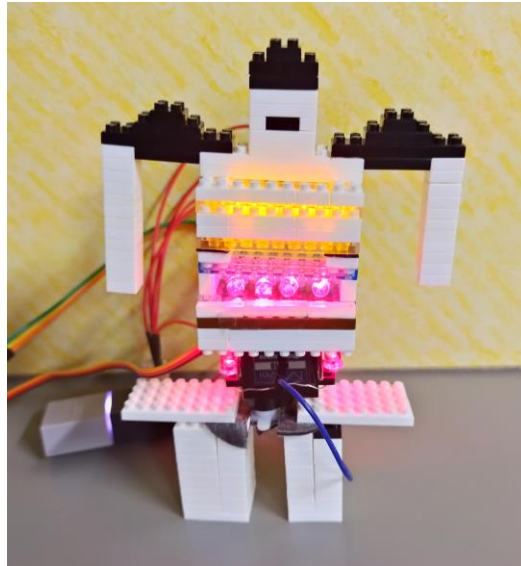


Figure 1 Dancing Robot

II. LIST OF NECESSARY ITEMS

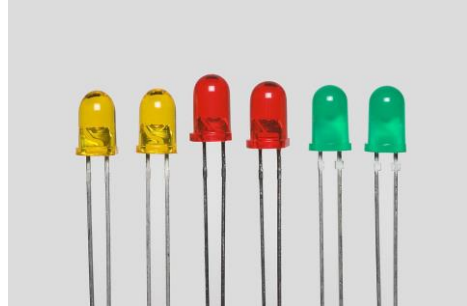
1) MESH-100GP: GPIO tag



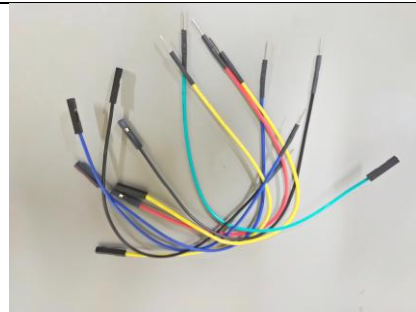
2) Blocks



3) LED lights having different colour



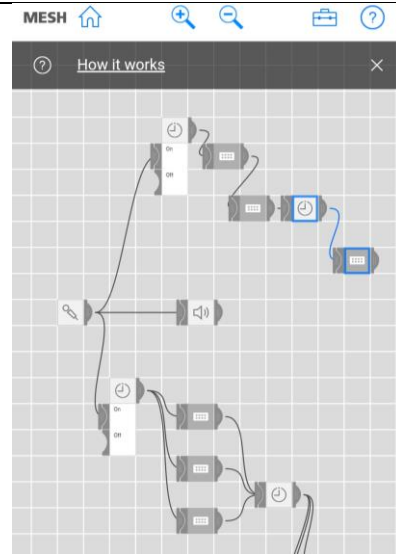
4) Connecting wires



5) Servo motors



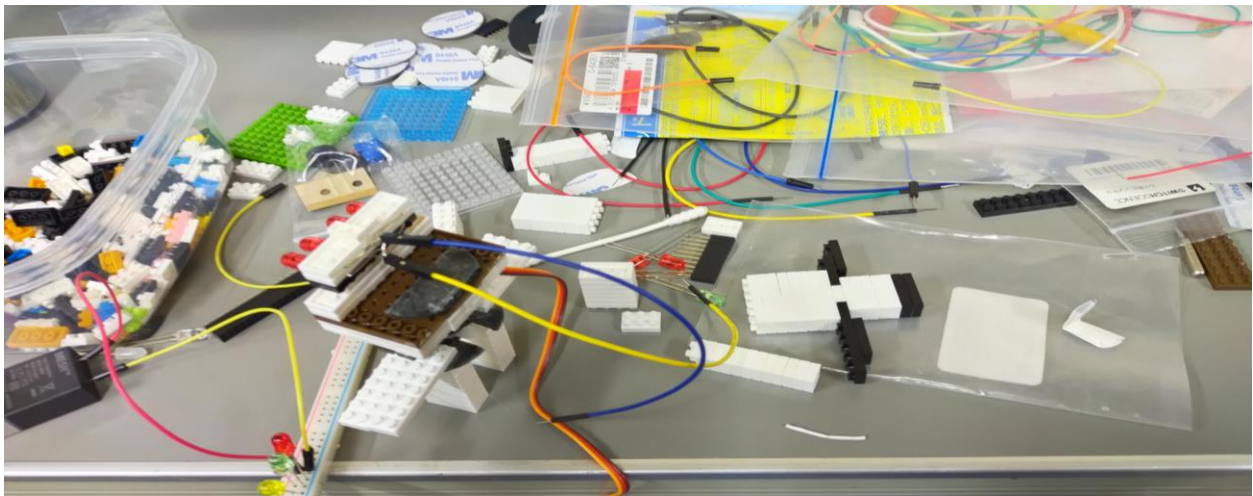
6) Mesh App installed in cell phone



III. FLOW OF THIS MESH WORK

This work is consists on three main tasks

- Develop robot body design using blocks
- Connect the servo wires with MESH
- Connect the LED lights with MESH



Develop robot body design using blocks

It is most innovative part of this work. To design a robot body which can perform the dance task efficiently is very challenging task. I design many different model and after testing those model I found that those model are not efficient. The pictures of some of these failed model are shown in Figure 02 to Figure 05

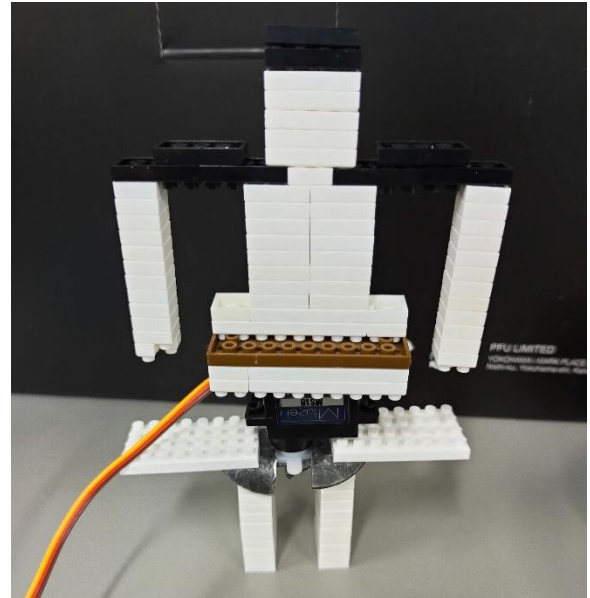
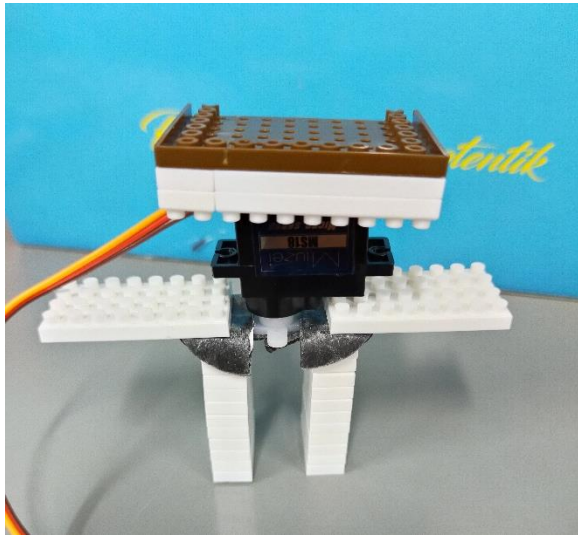


Figure 2 First Model of Robot body

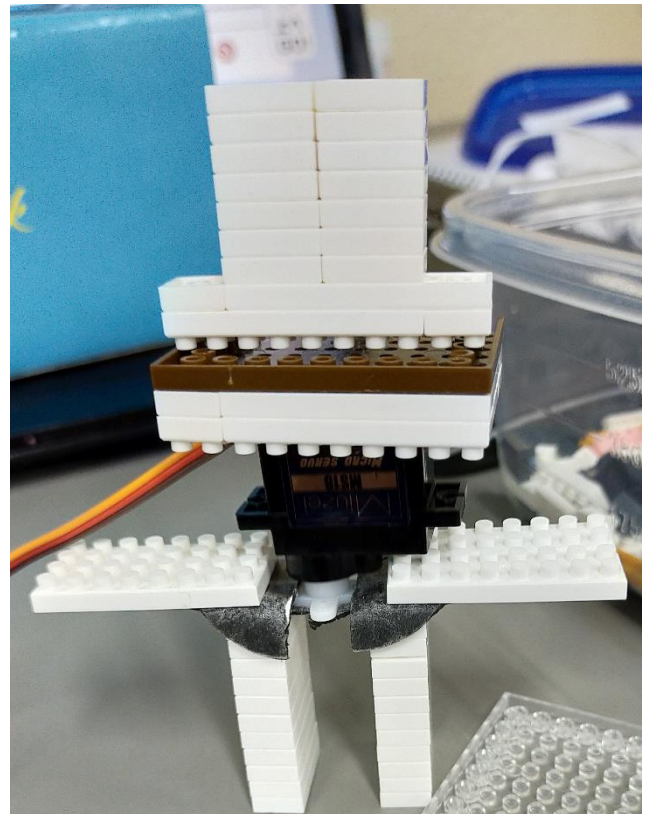
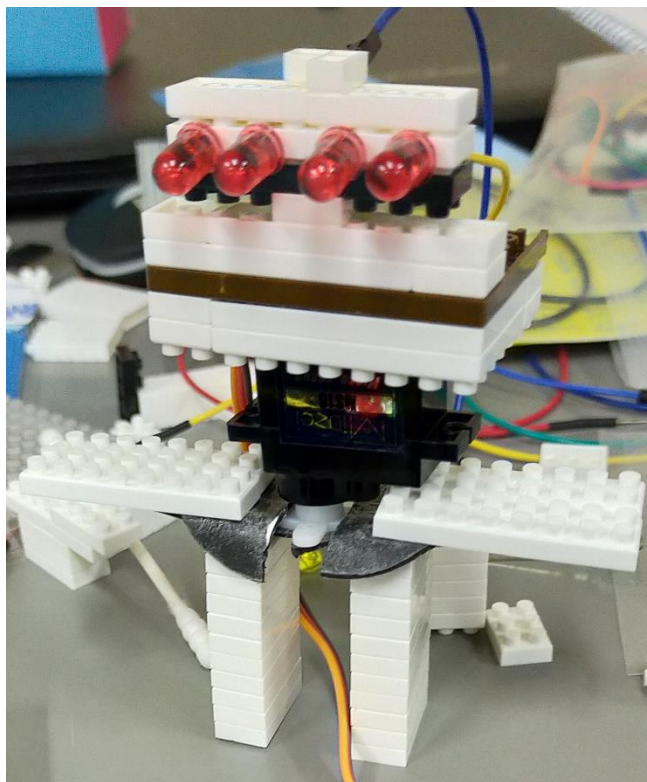


Figure 3 Second Model of Robot body

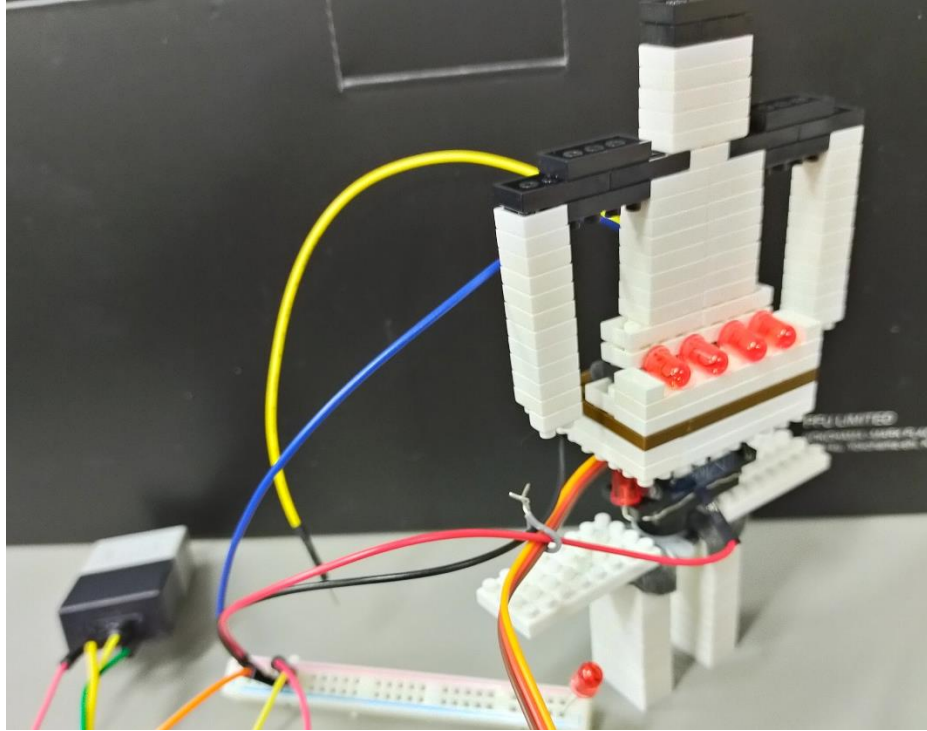


Figure 4 Third Model of Robot body

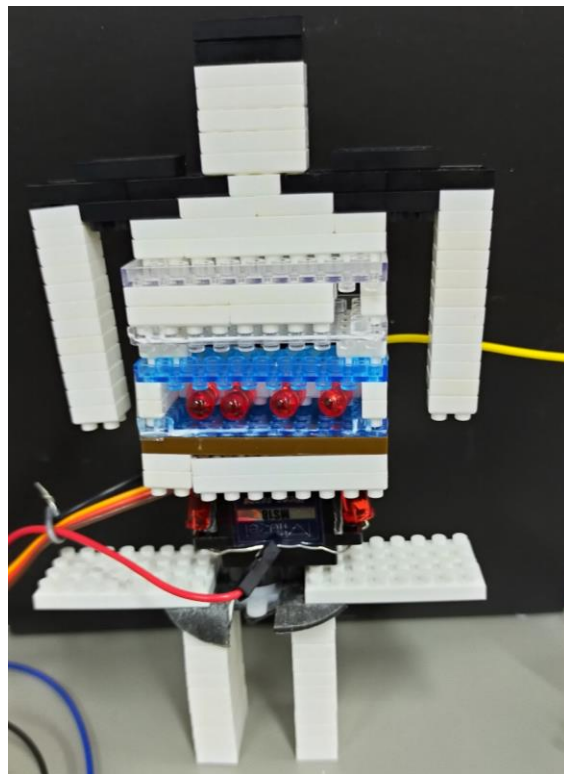
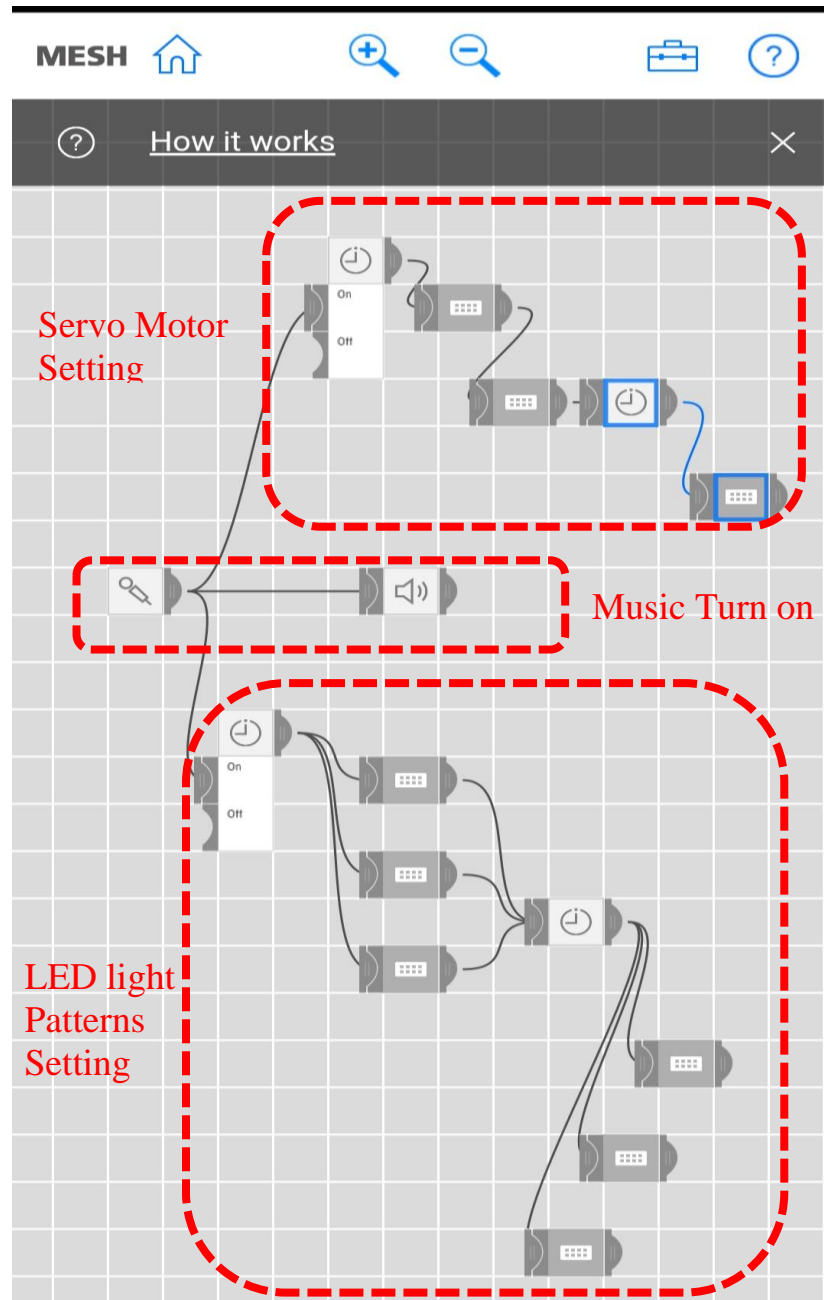


Figure 5 Fourth Model of Robot body

IV. MESH APPLICATION SETTINGS

The Mesh application development is shown in below Figure.



V. FINAL DESIGN OF ROBOT WITH DIFFERENT BLINKING PATTERN

The final design of robot with blinking LED is shown in below figure.

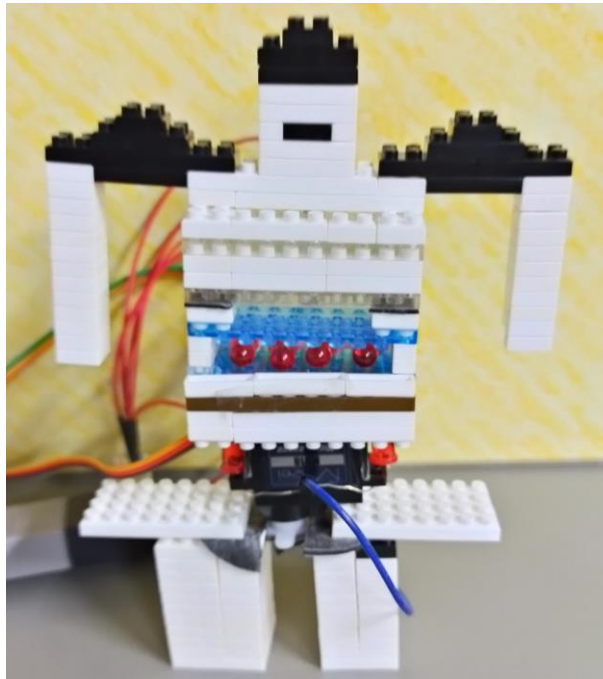


Figure 6 Robot at state when no LED is blinking

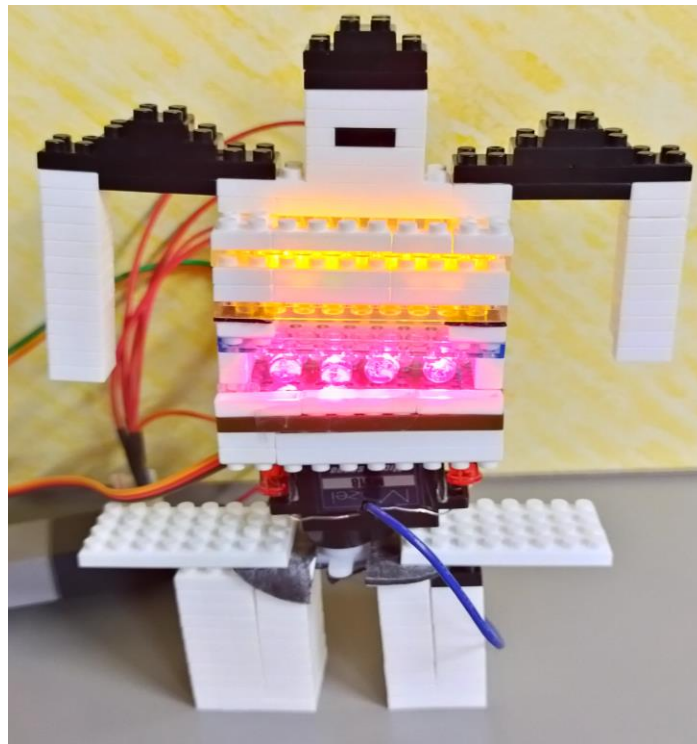


Figure 7 Robot at state when first two lines of LED are blinking

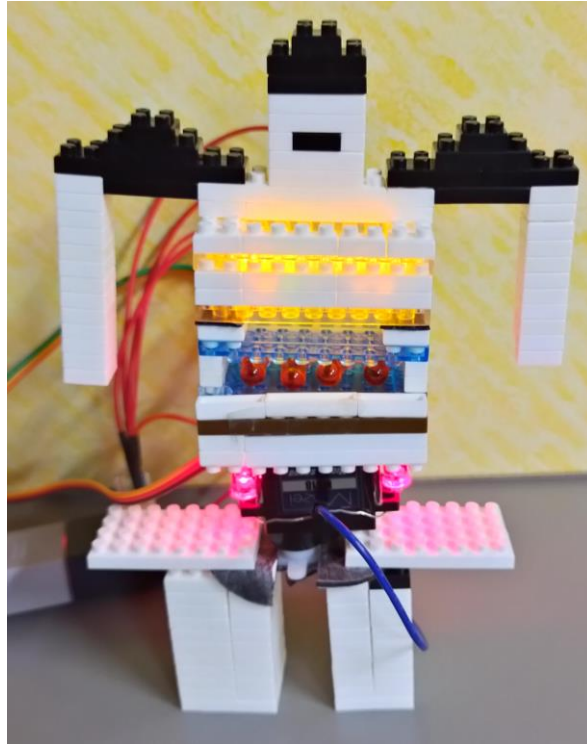


Figure 8 Robot at state when first and last lines of LED are blinking

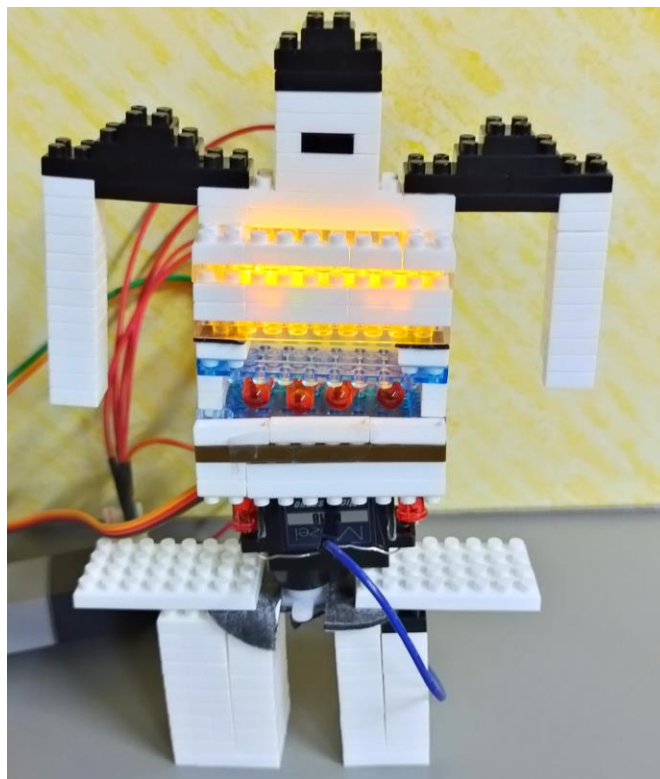


Figure 9 Robot at state when only first line of LED is blinking