

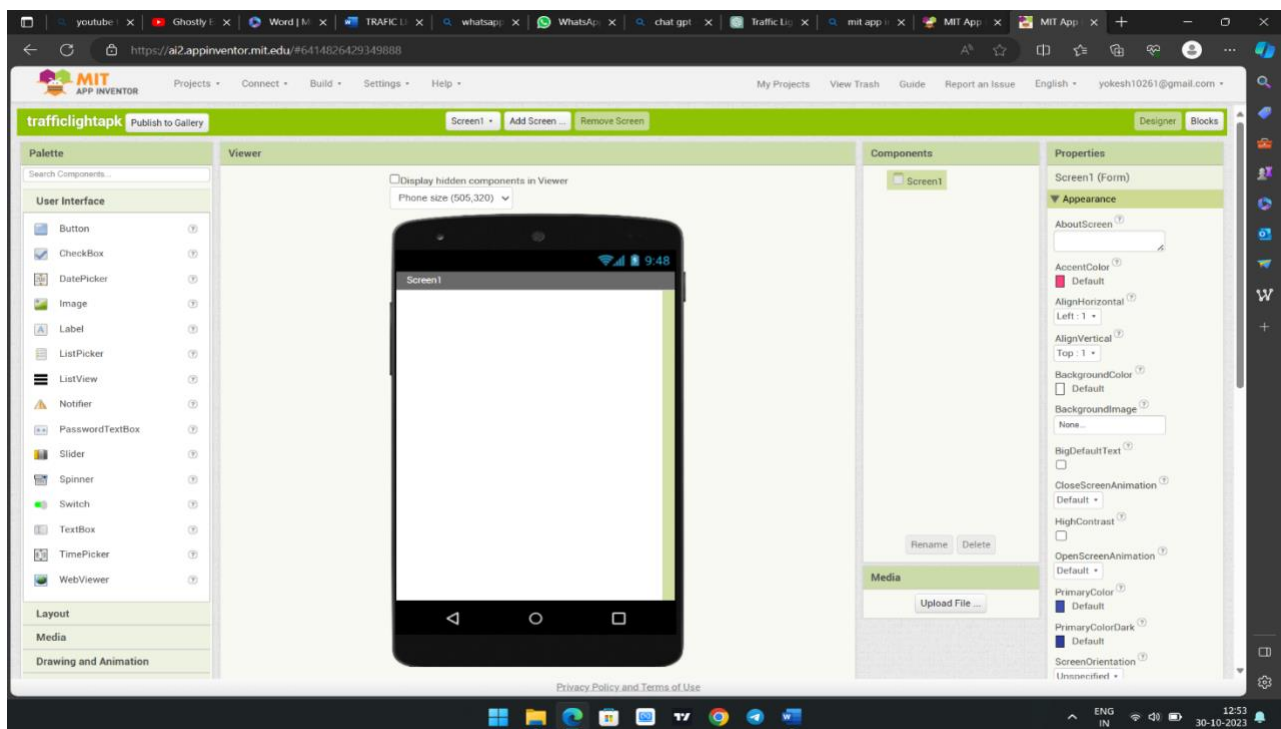
# TRAFFIC LIGHT ANDROID APPLICATION

## Why MIT app inventor?

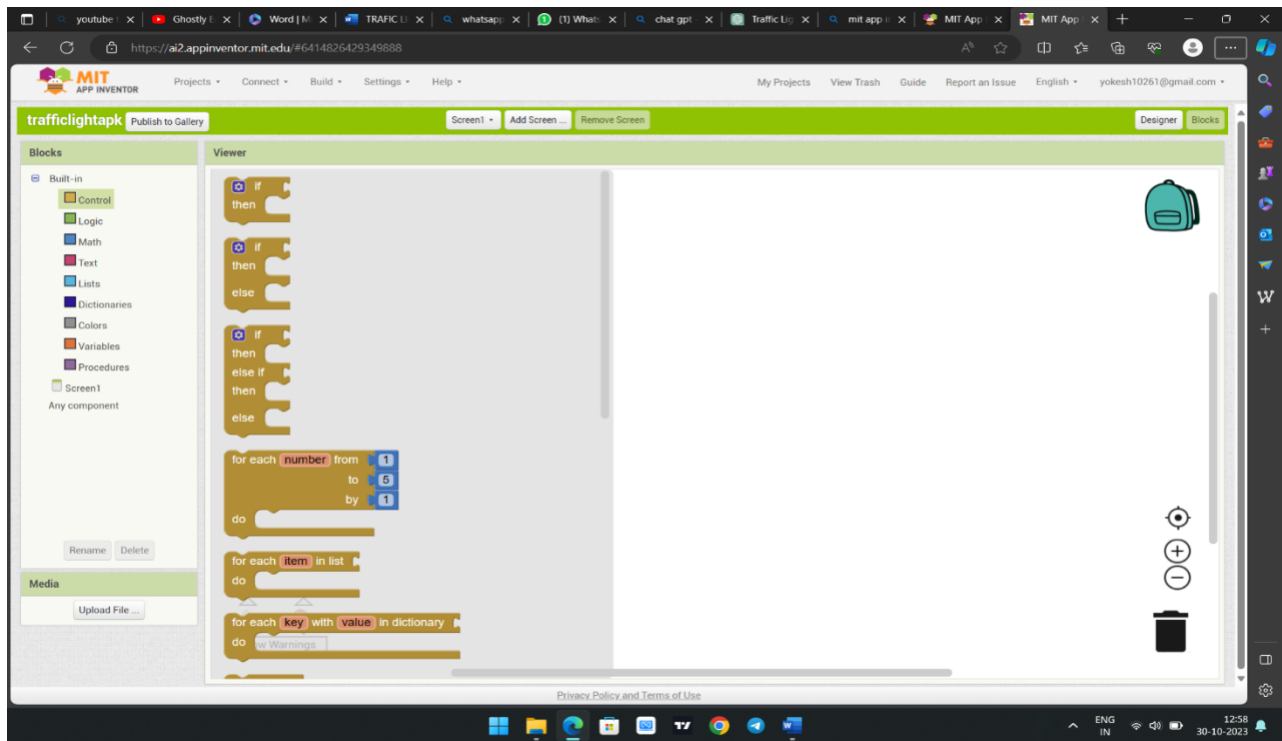
Traffic light application is very simple to use, and you can build any android application in minutes by just dragging and dropping components. Also, the MIT app inventor has been very popular among the young kids who start with STEM education, as block programming helps them understand the programming concept.

## Introduction to MIT app inventor:

### MIT app inventor window:



**You can do the back-end development in the block menu, like how a specific button will behave when clicking on it.**

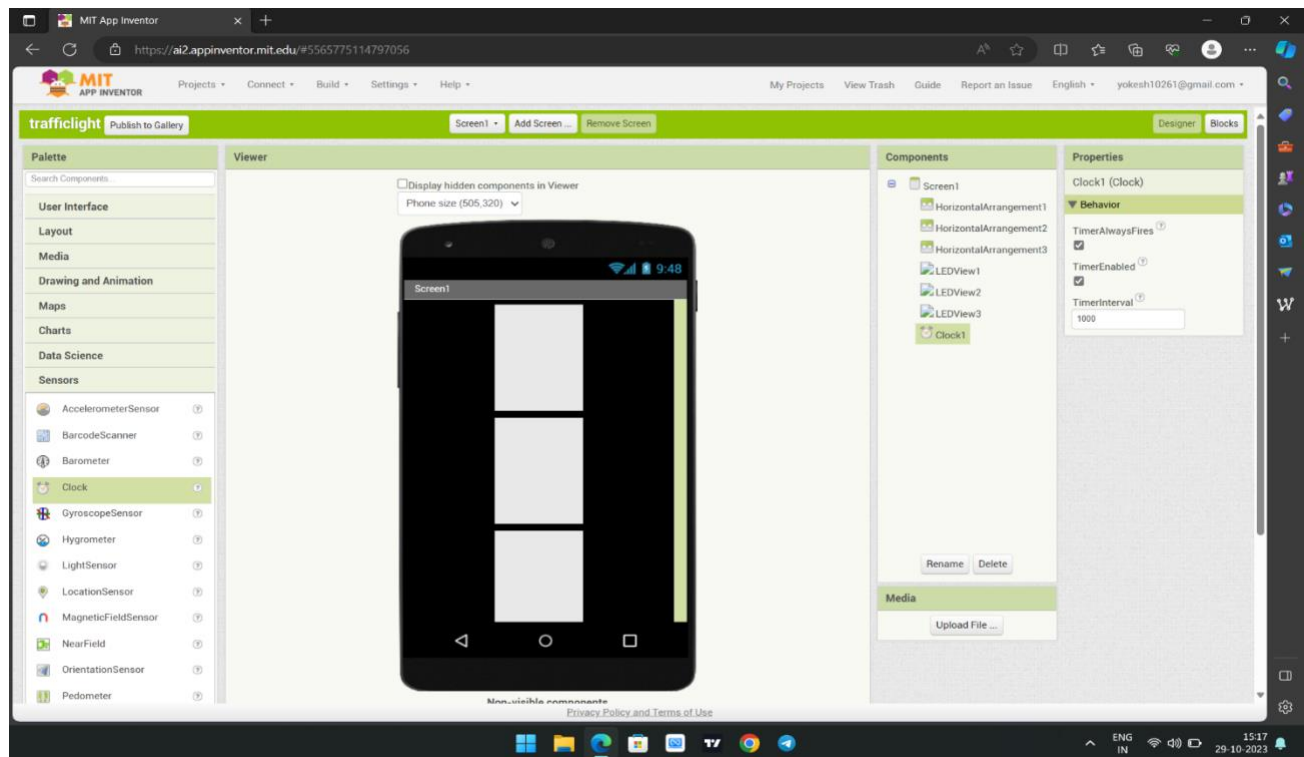


## Creating Layout:

**By dragging a vertical layout in our screen, all the items are in vertical arrangement and set the width of layout to fill-parent.**

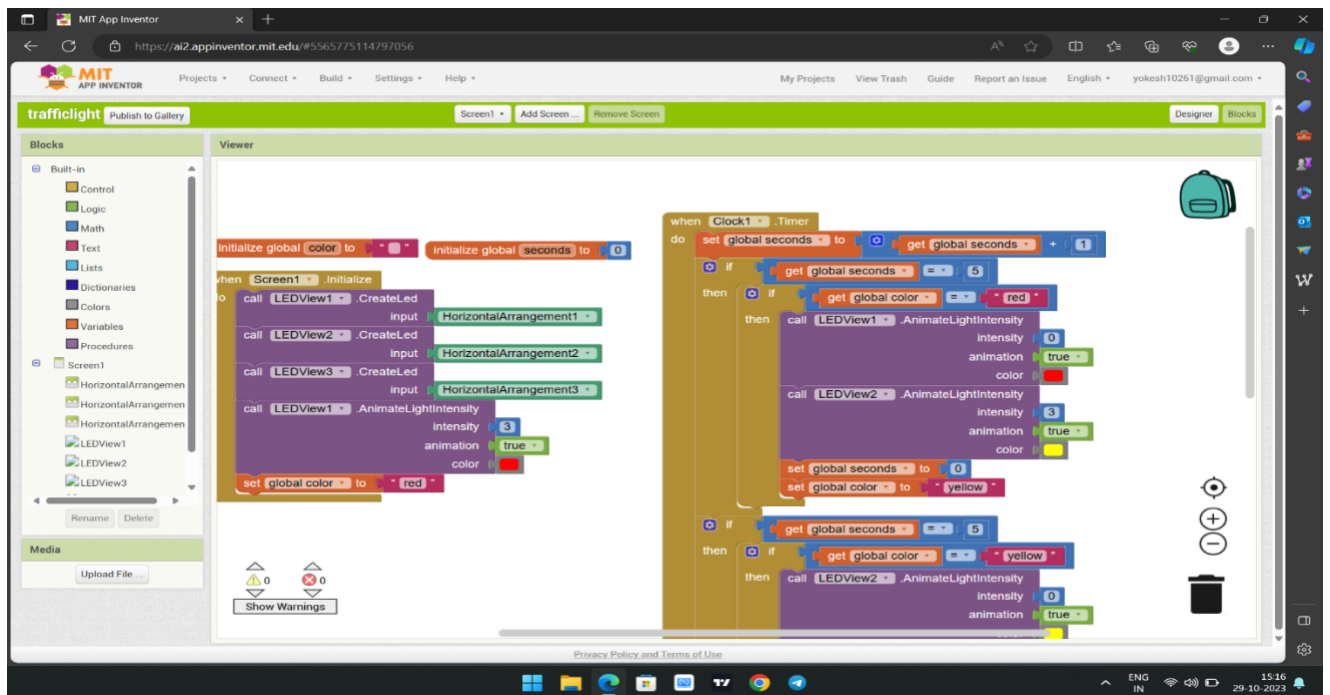
**We will add a horizontal layout, and inside it, we will add a label to show the title TRAFFIC LIGHT dashboard, and in the right menu, you can play with parameters to adjust the size, width, height alignment, etc.**

**We need to add a button for connecting to the TRAFFIC LIGHT broker. So, I will copy the same horizontal layout, and instead of the image, I will press a button. Then rename it to “connect” and change the label text as well.**

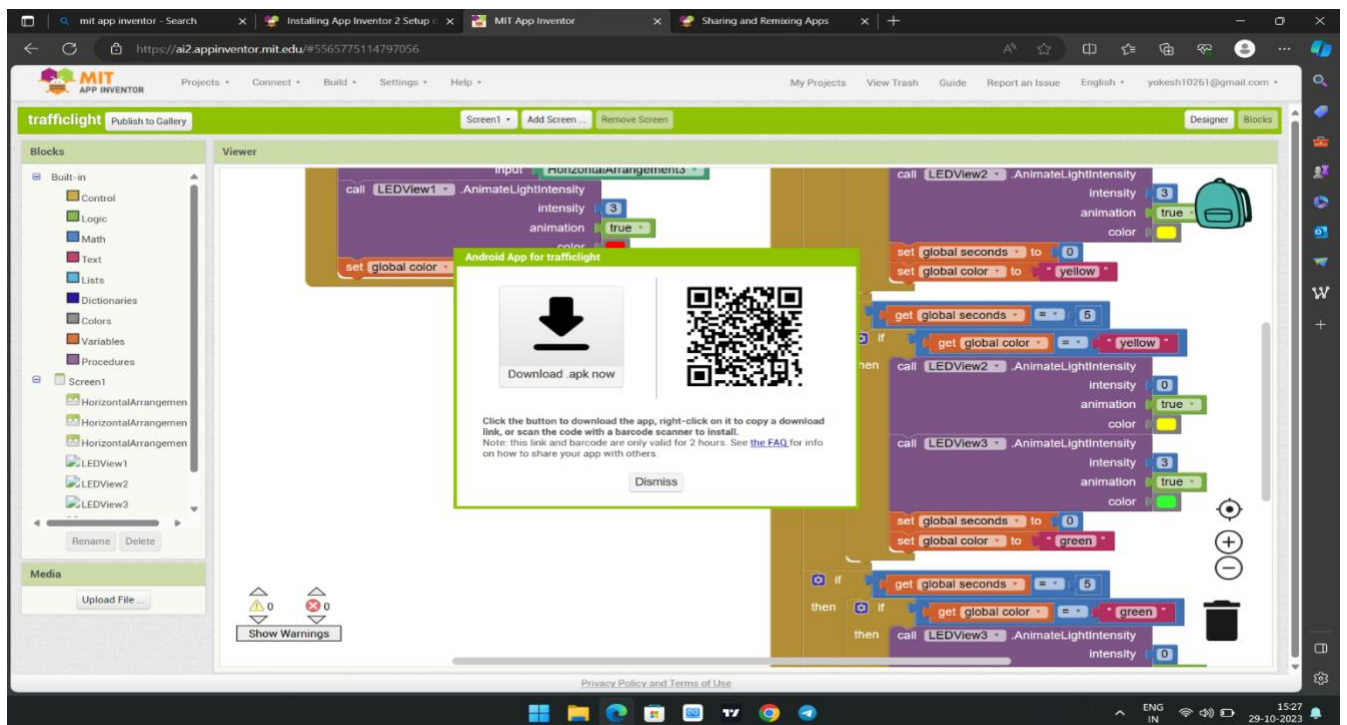


## Programming TRAFFIC LIGHT android app:

**we must download the LEDVIEW extension after the download the file will its I shown in the zip file extract the file after we upload the file to the Mit app inventor, and it will show like**

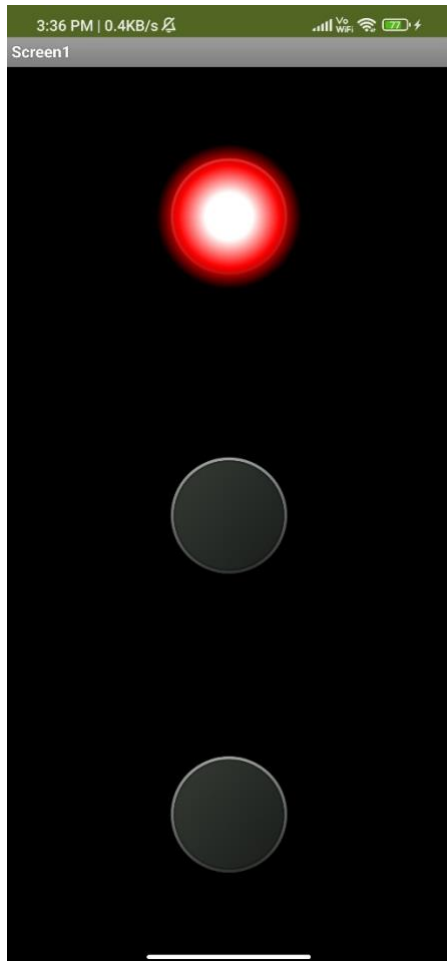


Building APK and running it:

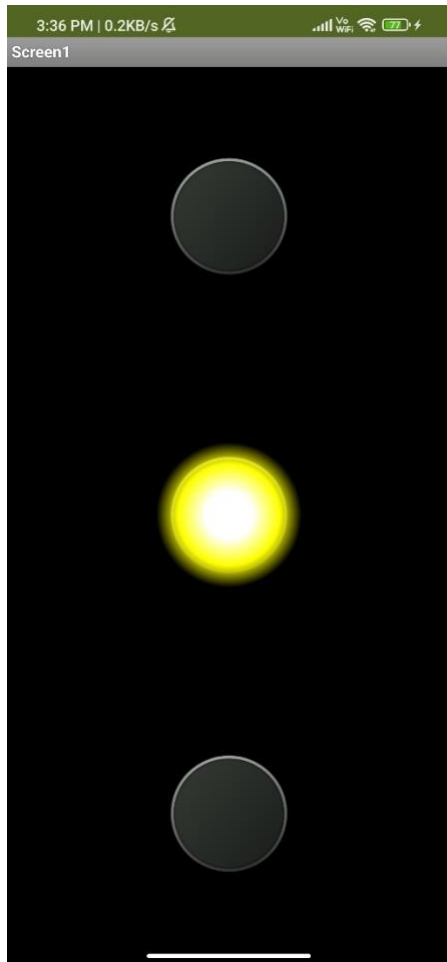


Output:

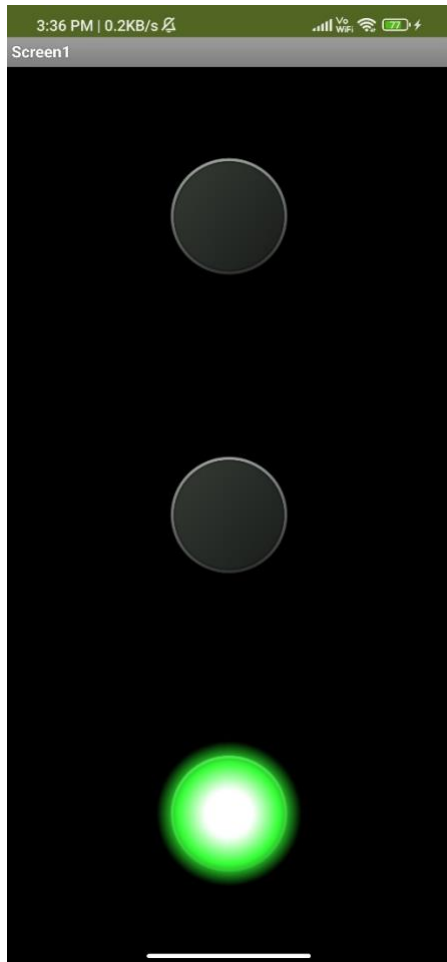
Click on build and then android app (Apk), you will get two options either to download it or you can directly download from your android device by scanning the qr code



- The Traffic light application blows **RED** Light in Five seconds.



- After five seconds, it will blow **YELLOW** light.



- After the yellow light it will blow **GREEN** light.

## App Logic:

The app would have underlying logic to control the behavior of the traffic light. This logic determines when each light should be turned on and for how long. Typically, a traffic light follows a sequence

- Red light: Stop
- Yellow light: Prepare to move
- Green light: Go

To see my project using MIT app inventor I attached my app below:



## CONCLUSION:

- There are several traffic light apps available on the Google Play Store. One such app is My Traffic Light .
- This app lets you control the order of signal changes via preset cycles and lets you change the signal light cover patterns by choosing one of three lenses (a blank lens, a striped lens, or an LED lens) .
- You can use the automated timer or turn it off and control when the signal changes manually .
- Another app is Traffic light detection & MP3 . This app can automatically lock the red light or manually lock the red or green light, and notify the user immediately if the light changes .
- When you wait for the traffic lights, you don't have to keep looking at the lights .