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AUTOMATIC VOTING COUNTER SYSTEM BY USING ARDUINO

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EXTENDED ABSTRACT

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Abstract: In a campus, an election is one of the most important things for students to do to appoint their new leader for the campus organization. The leader is chosen by counting the most votes received from the voter. However, problems often occur regarding the counting vote process such as took a long time to finish counting and too many fake votes received, for example in a certain campus votes are often received by the same person although they already know that they can only vote once in an election. To overcome these problems, one of the easiest ways to improve counting vote process is by using an automatic vote system. It uses a Tcs230 color sensor detection of votes which sets in red, blue and green color. Voters get to choose the color of vote they want and put it in the voting box. Votes counting process will be much easier to be done and saves time. Not to mention, the number of each color vote will be displayed on the LCD and make it easier for the counters to see the results. So, the election will be finished way faster using this method rather than the manual vote counting. This can be seen clearly when manual vote counting can sometimes lead to miscalculation and of course immediate recounting need to be done from the beginning which can be tiring and waste a lot of time.

Keywords— TCS 230 Colour sensor; Arduino UNO; Node MCU;

INTRODUCTION

This project is all about new and improved version of selecting a new leader in campus by election process. An election process is very important especially in making the campus organization become more reliable and stable. The previous election process has too many problems which affect the whole process. Meanwhile, our voting project with the help of technologies made it easier for voter to understand and manage to do the vote without any problems. The problem exist from the project are the voting process took too much time to finish the vote calculation. As the results it will absolutely took longer time than expected to receive the result from the election process. Other than that, recount vote often happen as a result in wrong vote count from each voter. In order to solve this problem, color sensor was used as a sensor to count the amount of voter and help the calculation process run smoothly for each voter based on the color that they choose to represent the candidates. Meanwhile, the main objective of this project is to simply save time to calculate the vote by using color sensor detection for each color represented. This will make the vote calculation process become faster and easily done. Other than that, this project can also avoid wrong vote counts from happening.

TABLE OF CONTENTS