

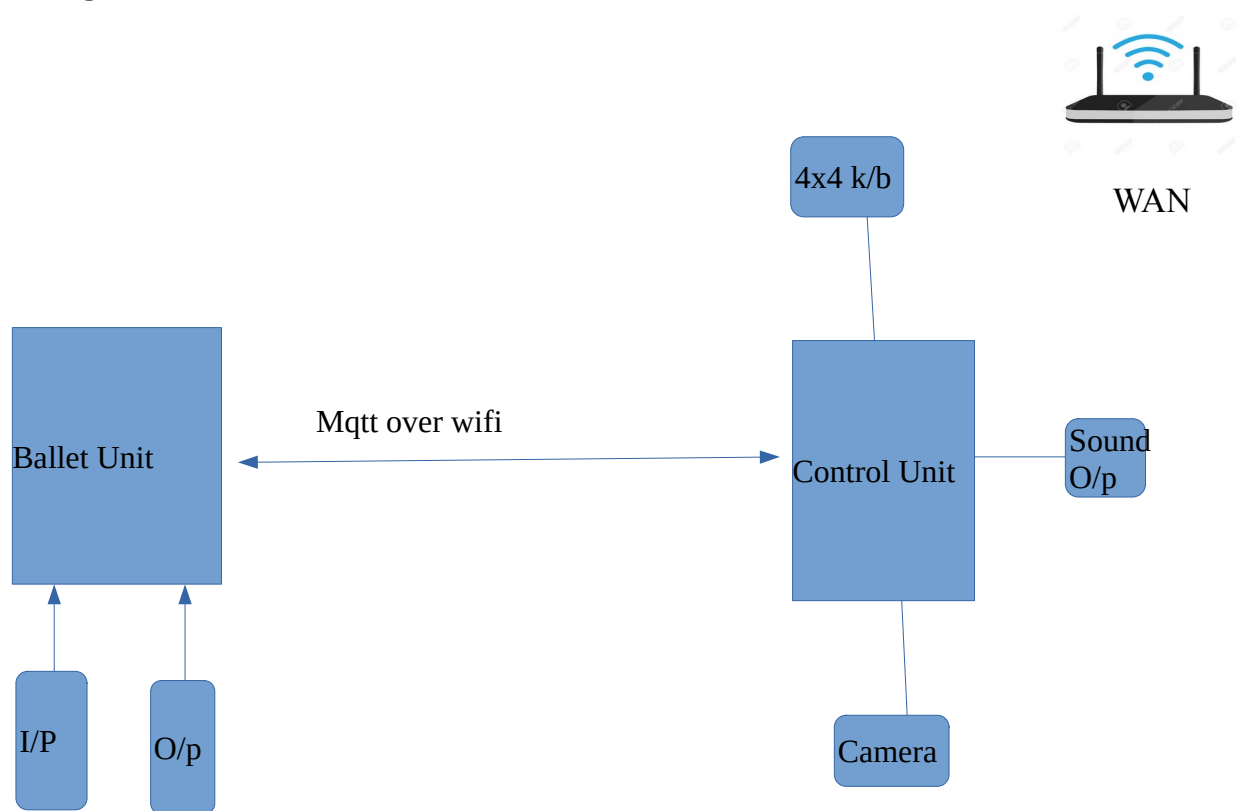
Advanced Voting System to Tackle Cross Voting Design Document

Abstract

Once again an election season is coming in few days. One of the main problems which would affect the whole election procedure is cross voting. In the present pandemic system all are advised wear mask for their protection. So there is more possibility for cross voting. Here we have system which tackles the cross voting. In this system like the ordinary voting machine it has two blocks the voting unit and the control unit. The voting unit is somewhat similar to the ordinary voting unit. But in the control unit we have a camera which interfaced to it which is situated near the voting unit. Once the polling officer enables the voting unit by entering the voters list number the camera becomes active and it takes the image of the voter and sends it to a telegram bot associated with the polling station. After that the voting system will be active and the recorded vote is sent to control unit via mqtt through wifi.

High Level Design

Block Diagram



Ballet Unit

Nodemcu
Push Buttons
Mini Buzzer

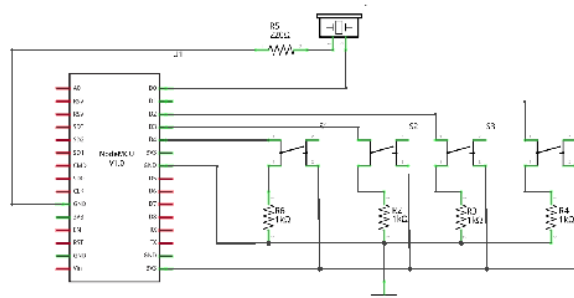
Control Unit

Raspberry Pi3
4x4 matrix keyboard
c270 camera
Mini Buzzer

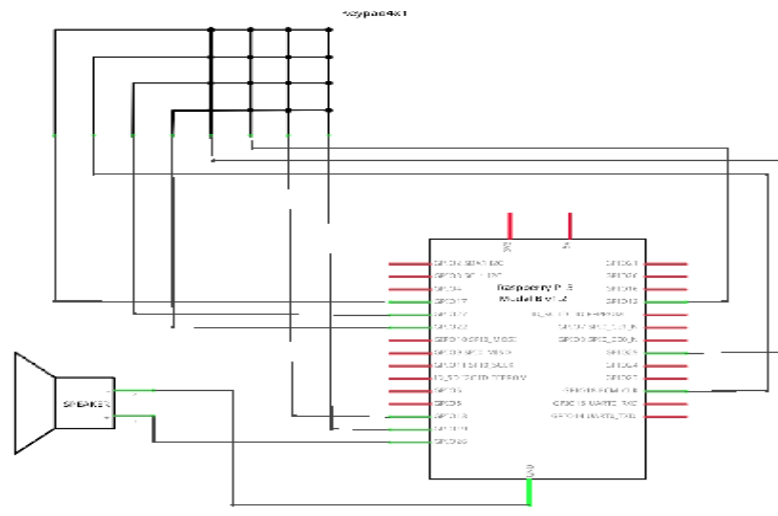
Control Unit is connected to wireless router in public network.

Schematic

Ballet Unit



Control Unit



Project Schedule

Project Schedule Phase 1			
Si NO	Task	Start Date	End Date
1	Purchase of components	11/03/21	11/03/21
2	Literature Survey	08/03/21	12/03/21
3	Set up mqtt b/w nodemcu and Rp1	13/03/21	14/03/21
4	Set up of ballet unit and control unit	14/03/21	16/03/21
5	System Testing	16/03/21	18/03/21
Phase 2			
6	Camera and telegram integration on Raspberry Pi	18/03/21	21/03/21
7	System Testing of Phase 2	21/03/21	23/03/21
Phase 3			
8	Final Integration	24/03/21	25/03/21
8	System Testing for final integration	26/03/21	28/03/21

Version Control And Tracking.

Version Control.

A git repository is created for proper version control and for collaborative working. All project related stuffs will be uploaded to created git repo.

<https://github.com/vu2swz/Advanced-Voting-System-to-Tackle-Cross-Voting>

Project Tracking

For project tracking a jira account is created. Individual tasks are allotted via jira so that we can easily track the status of the work.

<https://vu2swz.atlassian.net/secure/BrowseProjects.jspa>

A Google sheet is maintained online to add the weekly Status of the work

https://docs.google.com/spreadsheets/d/15y8IqyVAe3e9kO8HYBn5R3zeuBPukgr9fXfNyfvK9_k/edit?usp=sharing