



Digital Logbook Maintenance System (DLMS)

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Abstract

The current system prevailing for logbook maintenance is ages old with many loop holes.

The purpose of this project is to digitalize the vehicle logbook maintenance process. It is aimed to provide digital platform to the logbook including whole repair procedure and to reduce workload and ambiguity. Hence, we will be able to mitigate all the drawbacks of the prevailing system.

Introduction

Bangladesh Army is one of the most traditional military organizations of the world. Now with the advancement of technology we are going to improve the system. As a result of our new system we can have a full secure system, the responsible officers can easily monitor all the progressive works of all the vehicles which will save time and can also plan easily on the vehicles that need to be repaired or maintained with high priority.

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Objectives

- To remove the hardcopy logbook from the system.
- To have a clear record of all the vehicles along with full security & authentication of any work
- To get the updated response on the progress on any work in the workshops.

Workflow

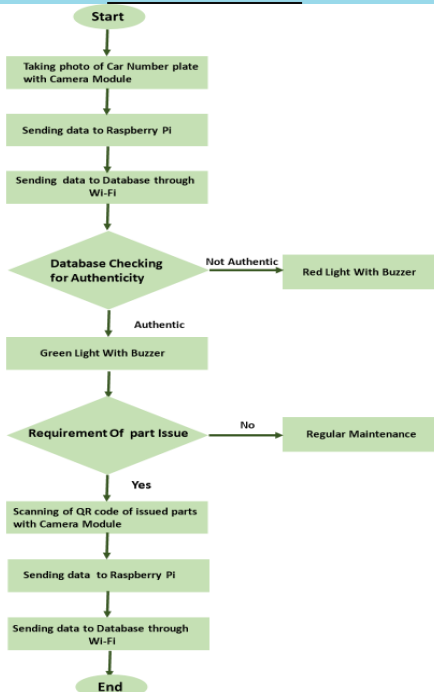
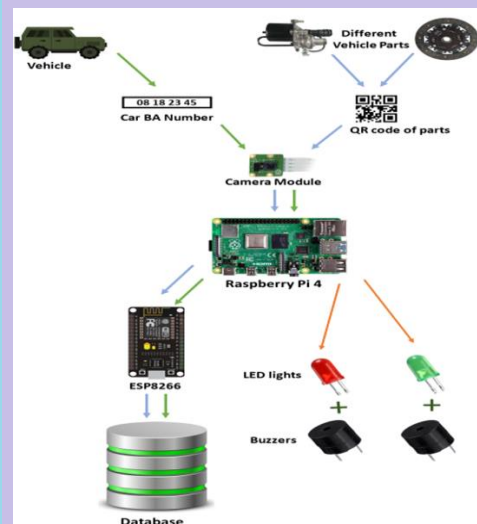


Figure: Workflow of DLMS

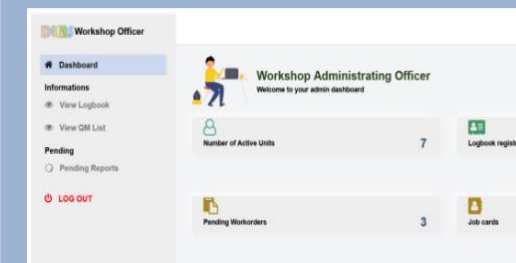
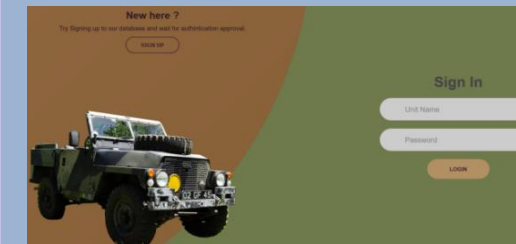
Features

- No direct connection between client and server.
- Desktop version and a database to be created
- Own secured server to be used in the workshop end.
- When a vehicle comes to workshop, BA number is scanned with the help of camera module.
- With the help of *raspberry pi* image is processed.
- A *scanner* will be used on only those parts that are going to be used for this repair purpose.

System Architecture



Methods & Modules



Future Extension

- Division HQ will be given with the authority to read the conditions of different vehicles of the division
- In future we will make an online registration form for all QM. So that, when ever the RI&I logs in he can just simply verify and accept the QM into his list.
- Improve QM's part in assisting the RI&I with providing data directly

Conclusion

The main task of an army in peace time is to prepare for war. In the wrong hands, passing down information about it to the enemy will result in a great harm for us. With this system we will be building an entirely new technology-based system for us. This will result in requirement of less man power, more time efficient and will have a clear record of all the vehicles along with full security.

References

We have uploaded all our project materials in GitHub.
<https://github.com/DigitalLogBookMaintenanceSystem/DLMS>