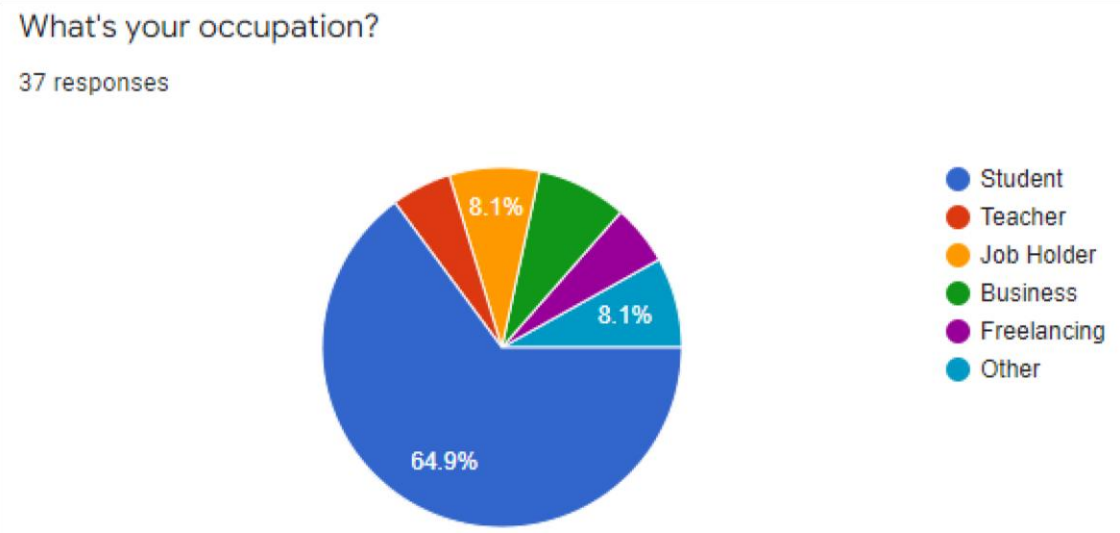
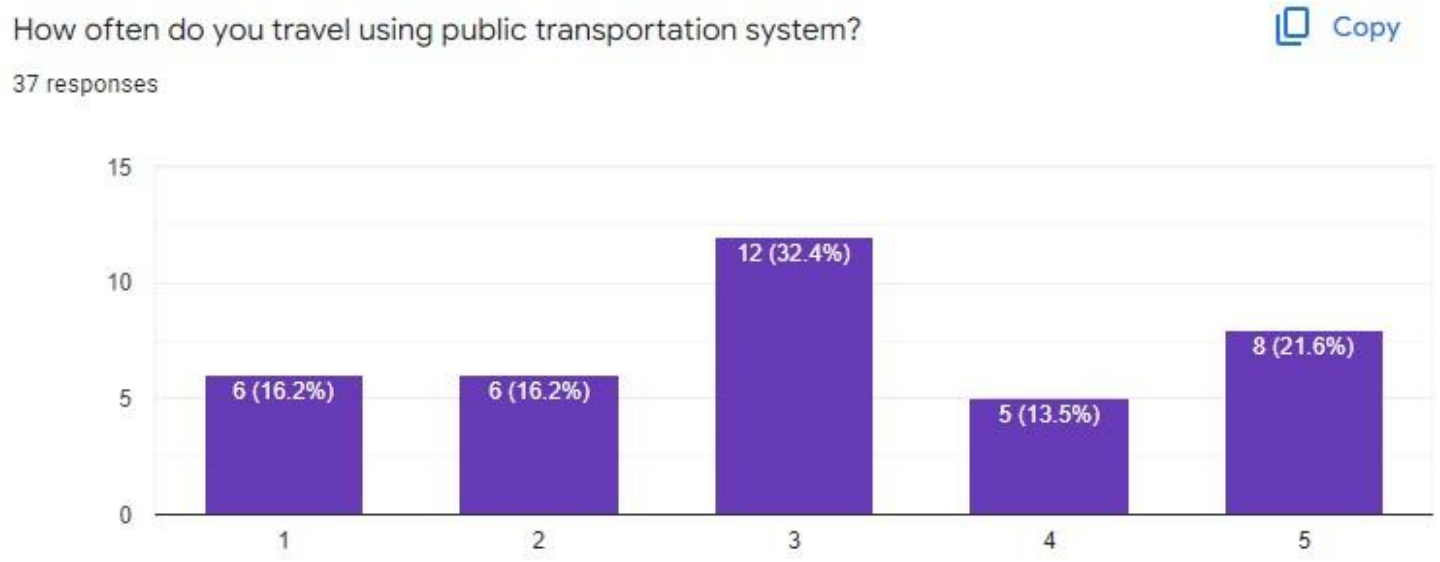
American International University – Bangladesh
Faculty of Engineering
Department of EEE & CoE

MICROPROCESSOR & EMBEDDED SYSTEM PROJECT PROPOSAL FORM

SEMESTER: Summer 2021-2022
PROJECT TITLE: RFID BASED BUS SCHEDULING & TICKETING SYSTEM.
Survey to develop process for complex engineering problems considering

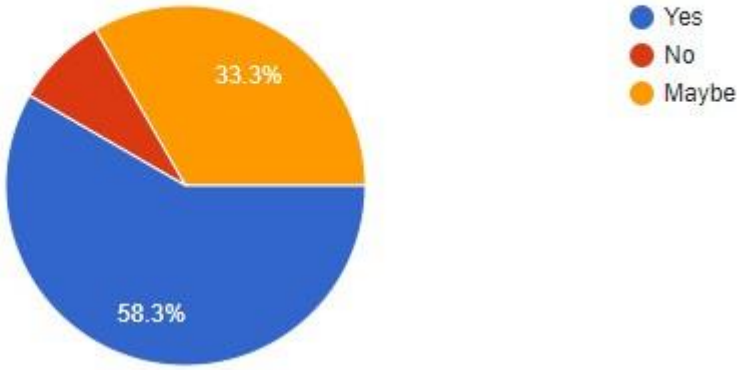
cultural and societal factors(use pie chart):





Do you think a unified way to pay for transportation fare is useful?

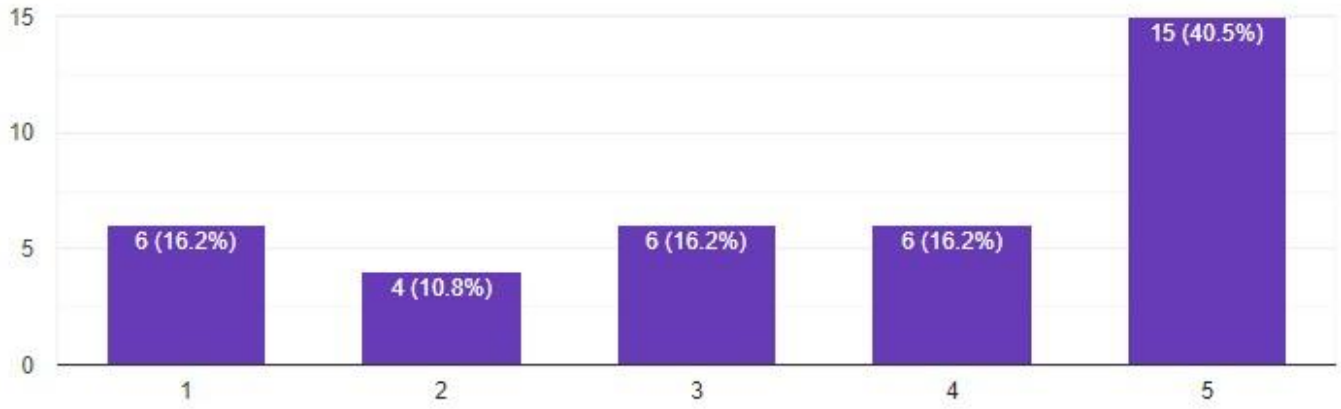
36 responses



How likely are you to use a card based system to pay for the travel expenses?

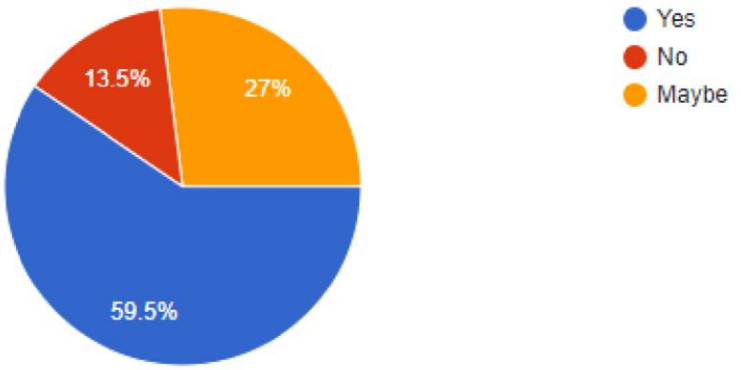
Copy

37 responses



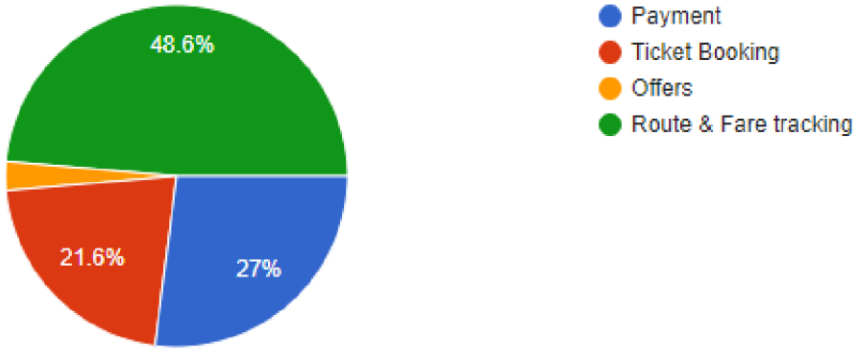
Would you prefer the card base system to track what bus was used and how much the fare was?

37 responses



What kind of features do you want to see in this system?

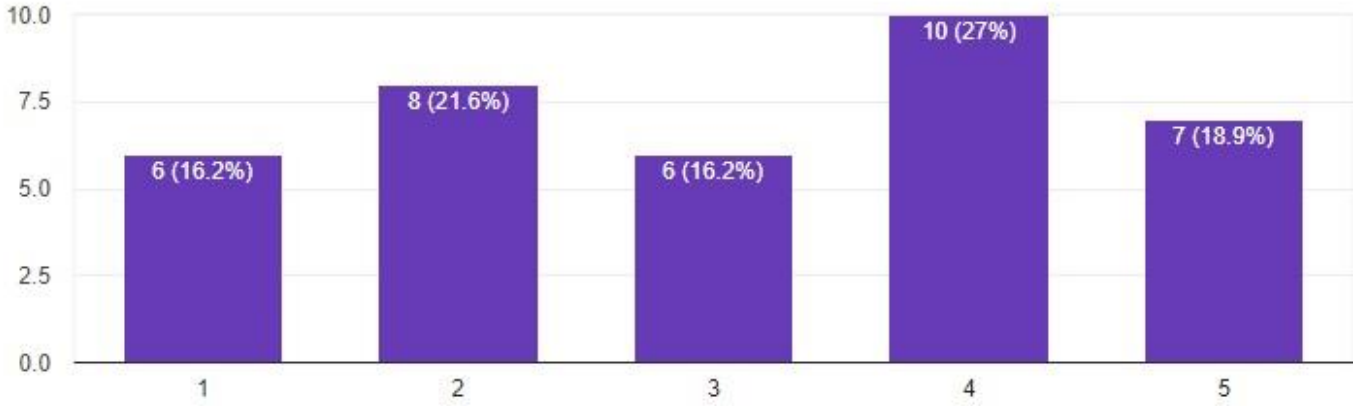
37 responses



How familiar are you with RFID technology?

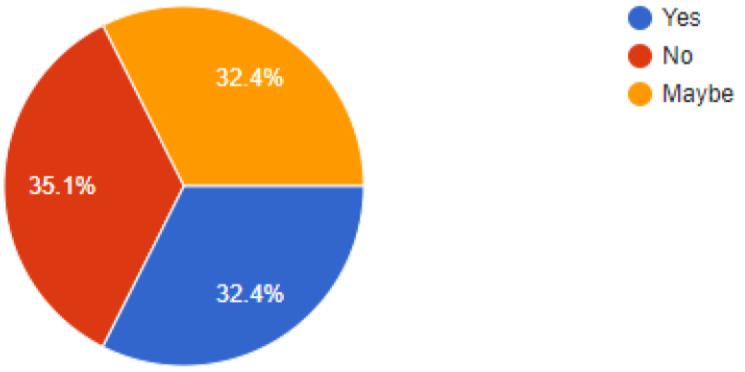
Copy

37 responses



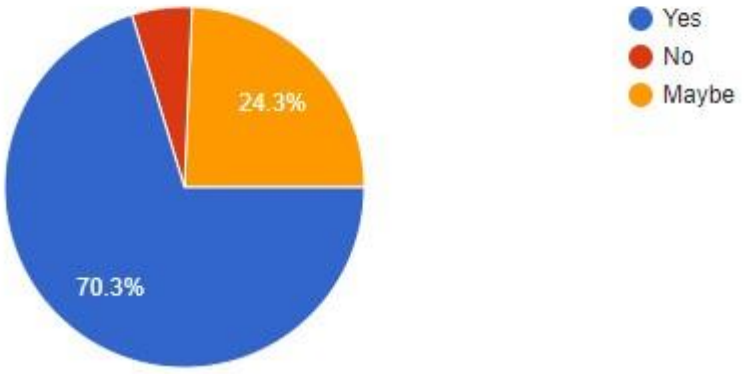
Are you using any existing RFID system?

37 responses



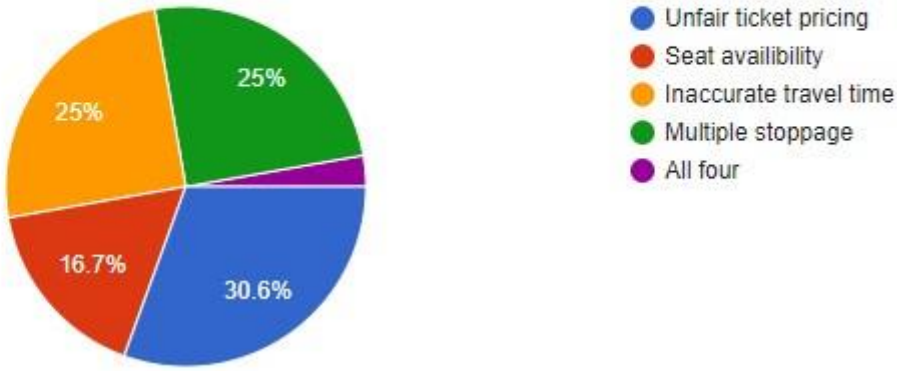
Would this kind of bus ticketing system help with the issues you face while travelling?

37 responses



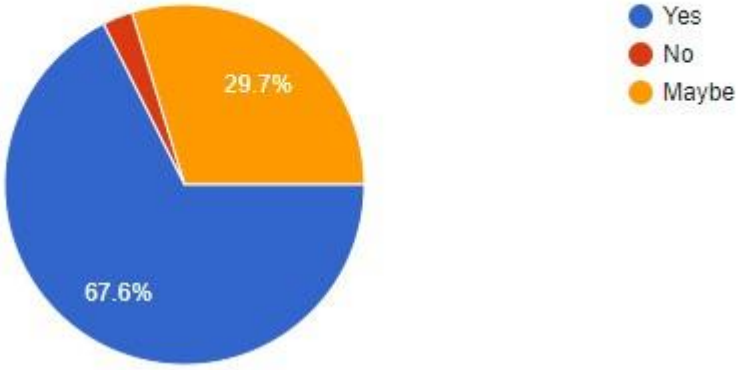
What kind of issues do you face while travlling using public transportation system?

36 responses



Would you recommend this type of service to anyone?

37 responses



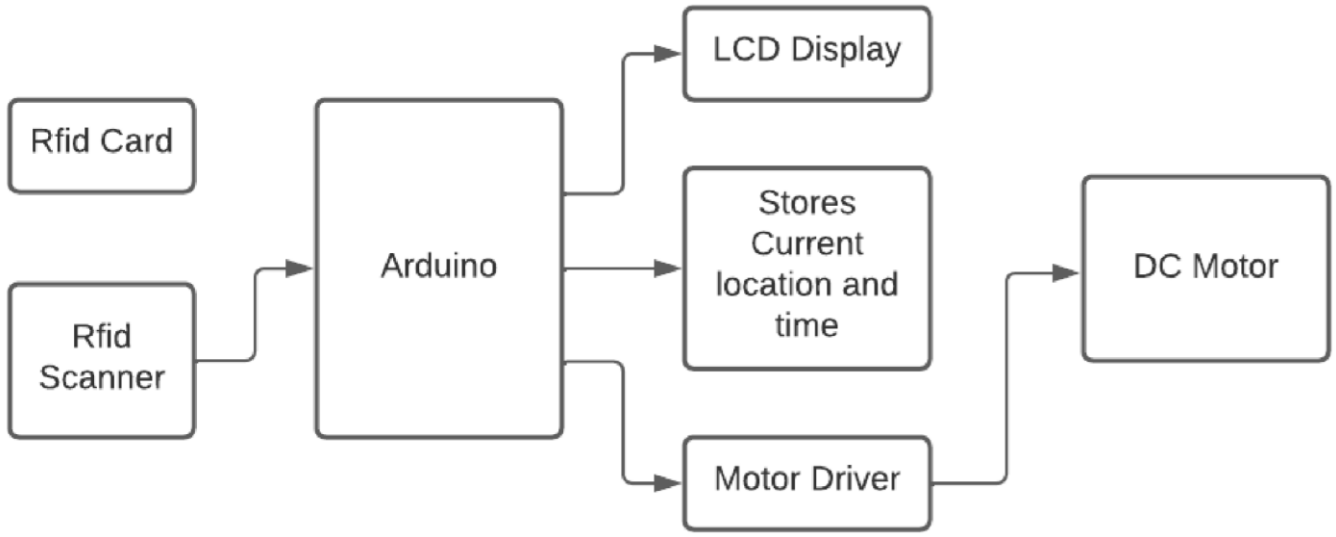
GOALS AND BENEFITS OF PROJECT:

Public transport system is one of the major sources of income in a developing country same goes for Bangladesh. Here, most of the people in our country us bus for their daily commute and having a RFID based ticking system can make their travel more pleasant without chaos. The public transportation system needs some change for satisfying the commuting needs of the general public [1]. The Radio-Frequency identification (RFID) is a wireless system comprised of two components mostly tags and readers. It works as a network-connected device that can be potable and the project which we are working is about bus scheduling and ticketing system by using the RFID system. It is therefore clear from literature available on the subject that there has been no work reported so far in dynamic scheduling of buses based on passenger demand by means of RFID usage [1]. Having a system to scheduling and ticketing system can save a lot of time and without the confusion of regarding fares passenger can have a pleasant time traveling from on place to another. Our project works to reduce any unwanted events that can be avoided as all the person carrying RFID tickets are monitored every time they travel [2]. The main goal of the technology is to benefit the people by helping to maintain time schedule and the possibilities of reducing traffic jams, chaos in the bus stoppages.

Within many benefits of our project, the most significant are:

1) This can decrease chaos and unwanted chaos.
2) Provide efficient ways travel and can be assessable by everyone. 3) Low cost.

EXPERIMENTAL BLOCK DIAGRAM:



PROJECT TIMELINE(GANTT CHART):

REFERENCES:

- Paul Hamilton and Suresh Sankaranarayanan, "Intelligent Agent Based RFID System for on Demand Bus Scheduling and Ticketing", International Journal of Future Computer and Communication, Vol. 2, pp.399-405 No. 5, October 2013.
- Sapna Yadav, Pratibha Jha, "RFID Technology: An Overview", International Journal of Trend in Scientific Research and Development (IJTSRD) Volume: 3, pp.1242-1244, Issue: 3, Mar-Apr 2019.
- Yordan Hasan[1], Abdurrahman[1], Yudi Wijanarko[1], Selamat Muslimin[1] and Renny Maulidda[1] *"The Automatic Door Lock to Enhance Security in RFID System"* Journal of Physics: Conference Series, Volume 1500, 3rd Forum in Research, Science, and Technology (FIRST 2019) International Conference 9-10 October 2019, South Sumatera, IndonesiaCitation Yordan Hasan *et al* 2020 *J. Phys.: Conf. Ser.* 1500 012132.
- 1DAVINDER PARKASH, 2TWINKLE KUNDU & 3 PREET KAUR "THE RFID TECHNOLOGY AND ITS APPLICATIONS: A REVIEW" 1Haryana College of Technology & Management, Ambala Road, Kaithal 136027, India 2Haryana College of Technology & Management, Ambala Road, Kaithal 136027, India 3YMCA University of Science And Technology, Sector-6,Faridabad, India.

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COMMENTS BY COURSE TEACHER:

COURSE TEACHER'S NAME **COURSE TEACHER'S SIGNATURE** **DATE**

GROUP MEMBERS

(Maximum 6 students are permitted to carry out a single Project. However, depending on the capability of the students, 4 students may be allowed but not less than that)

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