изменения состояния светофора. Это показывает, что она может уменьшить заторы на дорогах и выигрывает время впустую на зеленый свет на пустой дороге. Кроме того, более последовательны в выявлении наличия транспортного средства, поскольку он использует реальные изображения трафика. Он отображает реальность так он работает гораздо лучше, чем те системы, которые полагаются на обнаружение металла транспортных средств. В целом, система хороша, но она по-прежнему нуждается в усовершенствовании для достижения точности сто процентов.

Bu çalışma, görüntü işleme trafik ışığı durum değişikliği kontrol etmek için daha iyi bir teknik olduğunu gösterdi. Onu trafik sıkışıklığını azaltmak olduğunu gösterir ve boş bir yolda yeşil bir ışık tarafından harcanan zamanı önler. Aynı zamanda gerçek trafik görüntüleri kullanır, çünkü aracın varlığını saptamada daha tutarlıdır. Bu araç, metal içeriği tespit dayanan bu sistemleri daha iyi çalışır böylece gerçeklik görselleştirir. Genel olarak, sistem iyi ama yine de yüzde yüz doğruluk elde etmek için iyileştirilmesi gerekmektedir.

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УДК 62-501

Mobile Alarm System

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Abstract

This paper is about the LCD Alarm Toy Car. The idea of the project came from necessities of daily life activities, which surely starts with awakening. According to statistics, only 40% of all world population is considered as “larks”, who feel gentle awakening. Other 60% of humankind has stressful mornings every day. The main function of the LCD Alarm Toy Car is to rouse the user actively. As the car starts to run away, after applying signal from Alarm, till user turns it off, it might guarantee immediate awakening. To turn off the alarm user must get up, catch the car and push the OFF button. The platform which is used for programming such device is ARDUINO.

1. Introduction

Arduino - is tool for designing electronic device (the electronic constructor) more tightly interacting with surrounding physical environment, than standard personal computers, which practically do not leave for frames vitality. This platform intended for physical computing with opened by program code, built on simple printed board with modern environment for writing software.

Arduino is used for making electronic device with possibility of the acceptance signal from different digital and analog sensor, which can be connected to him, and control different executive device. The

Projects device, founded on Arduino, can work by itself or interact with software on computer (e.g.: Flash, Processing, MaxMSP). The Board can be collected by user by itself or are bought in collection. The Environment of the development of the programs with opened by source text available to free download.

The Programming language Arduino is a realization Wiring, similar platform for physical computing, founded on multimedia environment of the programming Processing. [1]

2. Environment of the Arduino development

The Environment of the development Arduino, shown in Figure 1, consists of built-in text editor of the programmer code, area of the messages; window of the output of the text, panel's instrument with button often used commands and several menus. For boot the programs and relationship environment development is connected to hardware part Arduino.

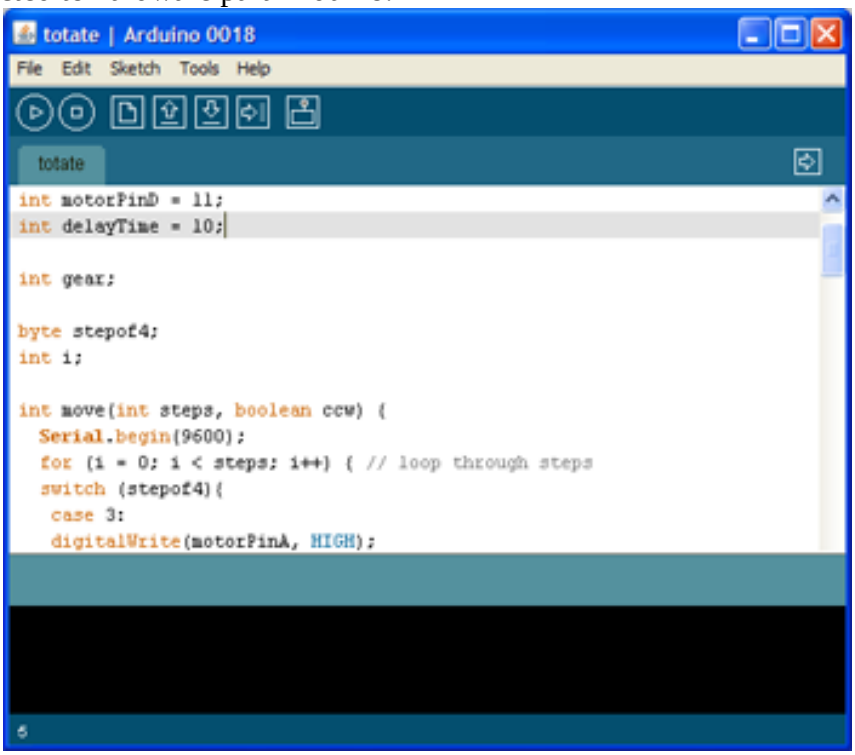


Figure 1 Arduino IDE

The Program written in environment Arduino, is identified the skit, allowing to write in text editor, having instruments of the tenderloin/insertions, searching for/change the text. During conservation and export of the project of the explanation appear in the field of messages, also can be displayed appeared errors. The Window of the output of the text shows the messages Arduino, including full reports about error and other information. The Buttons to panels' instrument allow checking and writing the program, create, open and save the skit. [2]

3. Hardware and Realizing

Figure 2 Traditional Alarm Clock

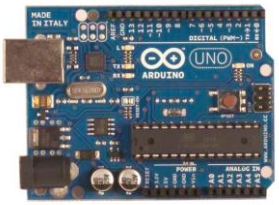


Figure 3 Arduino Uno

The idea was to construct the Alarm, which will ring until you awake finally. The basics are the traditional alarm clock, show in Figure 2, and the toy car shown in Figure 4. The Arduino instruments

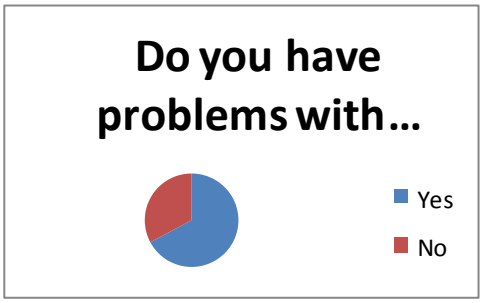
were used to join them together in one single part, like in Figure 3, 5.[3] To implement time on Arduino exist special library named *Time*, which have several functions, e.g.: *minute(), hour(), day(),week(), month(), year()* etc.[6] And the sound will be implemented by speaker. [5]

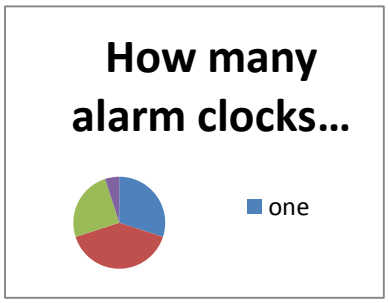
Figure 4 Simple Toy Car

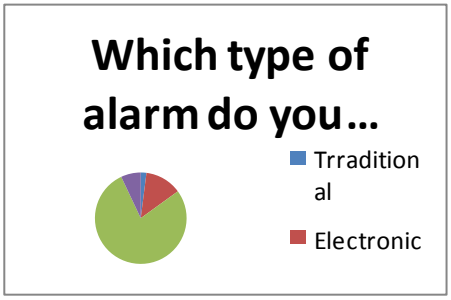
Figure 5 Arduino LCD Keypad [4]

4. Results of the questioning

50 persons were asked several questions and their answers are below:







5. Conclusion

Coming from questioning, the idea was confirmed by audience. It liked that device and was glad to test it. The goals were reached, main idea realized. According to answers device is useful and it was very interesting to implement. Also, there were some people, who didn't like it, because "На вкус и цвет товарищей нет!"

6. References

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УДК 62-503

Amanzhol Akhtan

Staff Attendance Monitoring System

Staff Attendance Monitoring System (SAMS) provides easy & simple realization of staff monitoring control, no matter where it's applied: in universities, even in schools. The idea of application is to supply every staff with an identical cards, whose have unique ID phrases, each of them. So that, every time staff comes or departures, SAMS application registers time-stamps.

Application procedure:

- SAMS reader part register staff income/outcome for whole working day, after then synchronizes data with server's database.
- HR manager executes SAMS application part once in months, to retrieve arrival report data.
- SAMS application part collects data, sorting them by staff's ID, which is been chosen by HR manager, lately finalizes report in .PDF format.
- HR manager prints and signs retrieved report for future documentation

Why SAMS's:

- Application is developed on JAVA language – that's multiplatform
- Every data to be stored in database, to prevent information lose
- In case of any problems with SAMS or server, report – data are saved in text file, which are ready to be executed to database
- Application's procedures are scheduled, so that it doesn't need hard implementation to deploy

Problem - Solution:

- **Weak data reliability** - Accurate monthly report of staff attendance
- **Manual report verification** - No paperwork for HR department, less problem
- **Editable(accessible) report** - Reports to be saved in secured .PDF format

Hardware specification:

- Pentium 4 – 2 Ghz , 1 Gb RAMM, 100 Gb HDD, Windows 7 SP1
- StrongLink SL040, YHY638A Mifare Reader/Writer
- Optello Contactless D16 R4 Mifare cards

УДК 62-503

ЭЛЕКТР ЭНЕРГИЯСЫН ӨНДІРУДІҢ ТИІМДІ ТӘСІЛДЕРІ

Саржан Мағжан

Зерттеу бөлімі

Қазіргі энергетикаға көз жүгіртейік. Қазіргі уақытта есепсіз пайдаланып жатқан энергия көздері мұнай, газ, көмір. Осы қорды бей-берекет пайдаланудың арқасында оның нәтижесі біліне бастады. Ол бітіп таусылып қалмай тұрғанда жаңа энергия көзін тауып оны меңгеруді қолға алмасақ энергиялық тапшылыққа әкеліп соғуы мүмкін. Қазіргі уақытта жаңа энергия көздері қорғасыннан уранға дейінгі ауыр элементтер сутегі, гелий, бор сияқты жеңіл элементтердің ядроларын өзара қосудың, яғни синтездеудің арқасында энергия алуға болатыны белгілі. Қазіргі энергетикалық құрылғыларды толық алмастыру оңай емес екені белгілі. Сондықтан қуаты орасан көп энергия көздері керек.

АЭС-тің жұмысы уранның балқу температурасы өте жоғары металдан жасалған және түтікшелермен оралған. Түтікшелер ішіне су жіберіледі. Бұл уран реакцияға түскен кезде бөлініп шығатын энергияны бойына сіңірудің нәтижесінде өзі буға айналып бу камерасына жиналады.