Speech Automated Alarm Clock

M.Nandini¹, V.Narendra Kumar², Mohammed Nashat Sadat³, M.Navadeep Reddy⁴, A.Sneha⁵, A.Navaneeth Rao⁶, Prof. Sabyasachi Chakraborty⁷

^{1,2,3,4,5,6}School of Engineering, MallaReddy University

⁷Guide, Assistant Professor, Department of AIML, School of Engineering, MallaReddy University

Abstract -Our project aims to create an alarm clock using libraries such as date time and tkinter, which provide a user-friendly graphical interface to set alarms in a 24- hour format. By utilizing the current date and time, the program accurately sets off alarms and can be customized to include various alarm types and sounds. The outcome of our work is a functional alarm clock program that demonstrates the practical application of Python programming and showcases its potential for creating everyday solutions. Python's libraries allow for easy customization and adaptation, making it a powerful tool for building useful programs. By implementing an alarm clock in Python, users can enjoy a reliable and customizable alarm system that suits their needs and preferences, this project offers a great opportunity for learning and practicing Python programming skills, such as working with date and time objects and GUI development using Tkinter. The Python alarm clock project is a useful addition to the portfolio of those interested in programming and software development. It showcases the practical application and customization options of Python, making everyday tasks more manageable. This project represents the capability of python programming in solving real life problems.

I. INTRODUCTION

A voice control alarm clock is a type of alarm clock that allows users to set and manage alarms using voice commands, rather than manually adjusting the clock's settings or pressing physical buttons. This type of alarm clock is designed to be hands-free and convenient, allowing users to set alarms without having to reach for their phone or clock.

Voice control alarm clocks typically use voice recognition technology to interpret and respond to user commands. This technology can be programmed to recognize a wide range of phrases and commands, allowing users to set alarms, adjust the volume, snooze the alarm, and more, all using their voice.

Overall, a voice control alarm clock can be a useful tool for anyone who wants a convenient and hands-free way to manage their alarms and start their day off on the right foot. With its advanced voice recognition technology and versatility, a voice control alarm clock can help users to wake up feeling refreshed and ready to tackle whatever the day brings.

II.LITERATURE REVIEW

There are many existing systems of alarm clocks available on the market today, ranging from simple, traditional mechanical clocks to sophisticated digital clocks with a wide range of features. Here are some of the key components that are typically included in an alarm clock system:

Clock display: Every alarm clock has a clock display, which shows the current time. This can be either an analog display with hands or a digital display with numbers.

Alarm setting: Most alarm clocks allow users to set one or more alarms at specific times of day. Users can typically choose the alarm sound or tone and the volume of the alarm.

Snooze button: Many alarm clocks include a snooze button, which allows users to temporarily turn off the alarm and snooze for a set period of time before the alarm sounds again.

Backup power: To prevent the alarm clock from losing its settings or time in the event of a power outage, many

© June 2023 | IJIRT | Volume 10 Issue 1 | ISSN: 2349-6002

alarm clocks include a backup power source, such as a battery.

Additional features: Many modern alarm clocks include additional features, such as a radio, Bluetooth connectivity, USB charging ports, and even the ability to simulate a sunrise to gradually wake the user up.

Overall, the design of an alarm clock system depends on the specific needs and preferences of the user, as well as the available technology and manufacturing capabilities.

A proposed system of an alarm clock could include several new features or improvements over existing alarm clock systems. Here are a few examples:

Voice control: The alarm clock could be equipped with a voice assistant such as Amazon Alexa or Google Assistant, allowing users to set alarms, ask for the time or weather, or play music hands-free.

Health tracking: The alarm clock could include sensors or software to track a user's sleep patterns and provide insights or recommendations for better sleep habits. It could also include features to track other health metrics such as heart rate, activity, or hydration levels.

Personalization: The alarm clock could be designed to personalize its features and settings based on a user's preferences or habits. For example, it could adjust the alarm volume or tone based on the user's sensitivity to noise, or suggest optimal wake-up times based on their sleep patterns. Overall, a proposed system of an alarm clock could incorporate a variety of new features and technologies to improve its functionality and usability, and help users wake up feeling refreshed and ready for the day ahead.

III.PROBLEM STATEMENT

Design an alarm clock that addresses the limitations and shortcomings of traditional alarm clocks, providing users with a more efficient and enjoyable wake-up experience.

IV .ARCHITECTURE

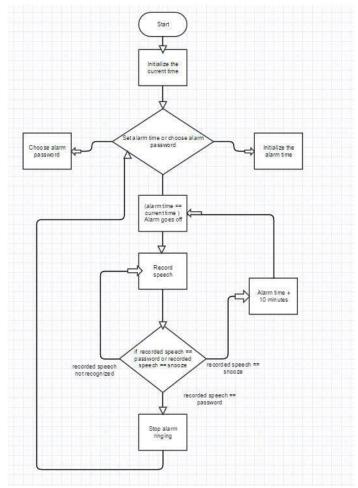


Fig 1: SPEECH AUTOMATED ALARM CLOCK Architecture

V.QUALITATIVE RESULTS

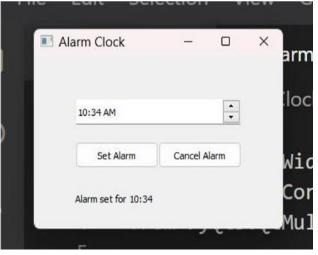


Fig 2:Result

CONCLUSION

A speech automated alarm clock can be a useful and innovative tool for individuals who prefer a more natural and personalized wake-up experience. This type of alarm clock uses voice recognition technology to respond to verbal commands and can be customized to play music or other audio content, as well as providing weather and news updates. However, the effectiveness of speech automated alarm clocks can be impacted by factors such as background noise and the accuracy of the voice recognition software. Additionally, some individuals may prefer the simplicity and reliability of a traditional alarm clock. Ultimately, the decision to use a speech automated alarm clock depends on personal preference and needs. It is important to consider the potential benefits and drawbacks before making a decision.

REFERENCE

- [1] SINTEF. (2012, June 26). The Internet of things: Smart houses, smart traffic, smart health. ScienceDaily. Retrieved August 20, 2017 from www.sciencedaily.com/releases/2012/06/12062606 5009.htm
- [2] Scott, G., & Chin, J. (2013). A DIY approach to pervasive computing for the Internet of Things: A smart alarm clock. In 2013 5th Computer Science and Electronic Engineering Conference (CEEC) pp. 57–60. S
- [3] Yoo, S. (2002). Efficient traffic prediction scheme for real-time VBR MPEG video transmission over high-speed networks. IEEE Transactions on Broadcasting, 48(1), 10-18. doi:10.1109/11.992849
- [4] Wardrop, J. G. (1952). Road Paper. Some Theoretical Aspects of Road Traffic Research. Proceedings of the Institution of Civil Engineers, 1(3), 325-362. doi:10.1680/ ipeds.1952.1125
- [5] Quek, C., Pasquier, M., & Lim, B. (2006). POP-TRAFFIC: A Novel Fuzzy Neural Approach to Road Traffic Analysis and Prediction. IEEE Transactions on Intelligent Transportation Systems, 7(2), 133-146. doi:10.1109/tits.2006.874712
- [6] Milkovits, M., Huang, E., Antoniou, C., Ben-Akiva, M., & Lopes, J. A. (2010). DynaMIT 2.0: The Next Generation Real-Time Dynamic Traffic

- Assignment System. 2010 Second International Conference on Advances in System Simulation. doi:10.1109/simul.2010.28
- [7] Chiang, J. K., & Lin, Y. H. (2014). A Simulation and Prediction Model for Internet Traffic and QoS Based on 1-Step Markov-Chain. 2014 UKSim-AMSS 16th International Conference on Computer Modelling and Simulation. doi:10.1109/uksim.2014.99
- [8] Morato, D., Aracil, J., Diez, L., Izal, M., & Magana, E. (n.d.). On linear prediction of Internet traffic for packet and burst switching networks. Proceedings Tenth International Conference on Computer Communications and Networks (Cat. No.01EX495). doi:10.1109/icccn.2001.956231
- [9] Doulamis, A., Doulamis, N., & Kollias, S. (2003). An adaptable neural-network model for recursive nonlinear traffic prediction and modeling of MPEG video sources. IEEE Transactions on Neural Networks, 14(1), 150-166. doi:10.1109/tnn.2002.806645
- [10] Zhang, L., & Leung, H. (n.d.). Smart alarm clock a networked home appliance with bluetooth connection. IEEE International Symposium on Consumer Electronics, 2004. doi:10.1109 /isce. 2004.1376010