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An Implementation on Smart Reception System

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Abstract— A smart reception is a type of electronic caller operation system that uses technology to automate and streamline the process of shadowing and managing callers to an installation. Smart event systems generally use alcoves or other bias to allow callers to check in and out, and may also include features similar as emblem printing, appointment scheduling, and real- time caller shadowing. Smart event systems can be salutary in associations that admit a high volume of callers. Since they can help to ameliorate effectiveness & reduce the workload for event staff. Smart event also called caller operation system, which refers to the process of shadowing and managing the movement of callers. There are many different ways to manage visitors, depending on the needs of the organization. Some such parameters include department, person and purpose.

Keywords— Artificial Intelligence, Recognition, Robotics, Reception

I. INTRODUCTION

In moment's period nearly all tasks are digitalized. We've Smartphone in hands and it's nothing lower than having world at your cutlet tips. These days we are not indeed using fritters. We just speak of the task and it's done. There live systems where we can say Text Dad, "I 'll be late moment." And the textbook is transferred. That's the task of a Virtual "A study on designing of Smart Reception System" Article History Received on: 25 Dec 2020 Revised on: 28 Jan 2021 Accepted on: 02 Feb 2021 Keywords: Artificial Intelligence, Robotics, recognition, reception A smart reception is a type of electronic caller operation system that uses technology to automate and streamline the process of shadowing and managing callers to an installation. Smart event systems generally use alcoves or other bias to allow callers to check in and out, and may also include features similar as emblem printing, appointment scheduling, and real- time caller shadowing. Smart event systems can be salutary in associations that admit a high volume of callers. Since they can help to ameliorate and of the effectiveness & reduce the workload for event staff. Smart event also called caller operation system, which refers to the process of shadowing and managing the movement of callers. There are many different ways to manage visitors, depending on the needs of the organization. Some such parameters include department, person and purpose. It also supports technical task similar as reserving a flight, or chancing cheapest book online from colorful e commerce spots and also furnishing an interface to bespeak an order are helping automate hunt, discovery and online order operations. Virtual sidekicks are software programs that help you ease your day-to-day tasks, similar as showing rainfall report, creating monuments, making shopping lists etc. They can take commands via textbook (online converse bots) or by voice. Voice grounded intelligent sidekicks need an invoking word or wake word to spark the listener, followed by the command. For my design the wake word is JIA. We've so numerous virtual sidekicks, similar as Apple's Siri, Amazon's Alexa and Microsoft's Cortana. For this design, wake word was chosen JIA. This system is designed to be used efficiently on desktops. particular adjunct software improves stoner productivity by managing routine tasks of the stoner and by furnishing information from online sources to the stoner. JIA is royal to use. Call the wake word 'JIA' followed by the command. And within seconds, it gets executed. Voice quests have dominated over textbook hunt. Web quests conducted via mobile bias have only just overhauled those carried out using a computer and the judges are

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formerly prognosticating that 50 of quests will be via voice by 2020. Virtual sidekicks are turning out to be smarter than ever. Allow your intelligent adjunct to make dispatch work for you. descry intent, pick out important information, automate processes, and deliver substantiated responses. This design was started on the premise that there's sufficient quantum of openly available data and information on the web that can be employed to make a virtual adjunct that has access to making intelligent opinions for routine stoner conditioning.

The aim of the project is to develop a smart reception system to make manual work easy and feasible. To achieve the aim, following objectives are set:

i. To provide a more efficient and streamlined visitor check-in process.
ii. To enhance visitor's overall experience.
iii. To maintain efficiency, security, personalization and analytics.

II. Prospective Application

The aim of proposed system is to develop a smart reception system to make manual work easy and feasible. The proposed system can conquer all the boundaries of the device.

Authors	Dataset used	Feature Extraction Technique
Danh Ngoc Nguyen	Receptionist robot; two-wheel self-balancing robot; humanoid robot arm; PID; DFM	FEA (Finite Element Analysis) and DFM (Design for Manufacturability)
Jatu Naazeen Abdul Gaffar	Virtual assistant, voice assistant, Speech Recognition	Python, DBpedia, Quepy, Pyttsx, SQLite

III. Methodology

A. Architecture

Our system is made up of below factors, a servomotor, an ultrasonic detector and microprocessor (Arduino), Buzzer, TV Display. The system's purpose is to maintain track of distance and object exposure and display this information graphically. The ultrasonic detector is going to smell the handicap and determine the angle of incident and its distance from the radar, this distance is indicated with TV Display and Buzzer is on if handicap detected by ultrasonic detector. The servo motor is regularly revolving, therefore assemble the detector movable. The data acquire, is also decoded and given to the processing IDE which is used to represents it's on the panel. These complete tasks are done by Arduino micro-controller from the rotary stir of servo motor, collecting of the data from the detector; feed the data to encoder for moving it to the display. The main purpose to design this design is to find out the distance position and rate of the hedge positioned at several distance coming from the detector. Ultra-sonic detector transmits the ultra-sonic surge in the different directions by revolving by using the servo motors. These swells transmitted in air and gets return back posterior to striking several objects. This surge is again sense by the same detector and its norms are examine and affair is display in screen representing parameterize., distance and position of object. Arduino IDE is used to produce law and transfer rendering in Arduino and causes us to spot position or angle of servo motor and it's communicated throughout the periodical harbourage along with the covered distance of the nearest object in its way.

B. Level of Description

How Smart Reception System is Implemented?

The implementation of the system is based on an Application Interface Architecture which is as follows:

- **User interface:** A visible part of the application that users interact with. It typically includes the touchscreen interface of the kiosk, which allows visitors to enter their information, select options, and print badges or visitor passes.
- **Application logic:** Application logic is responsible for processing user input and generating output based on the rules and logic of the system.

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- **Data access:** Retrieving and storing data used by the application. This may include information about visitors, employees, access control systems, and other relevant data.
- **Integration:** Responsible for connecting the kiosk-enabled reception system to other systems used by the office.

C. Screenshots

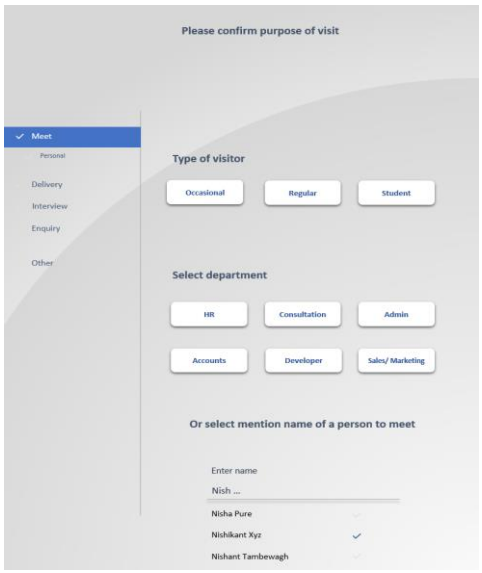

Figure 1: Purpose of the visitor

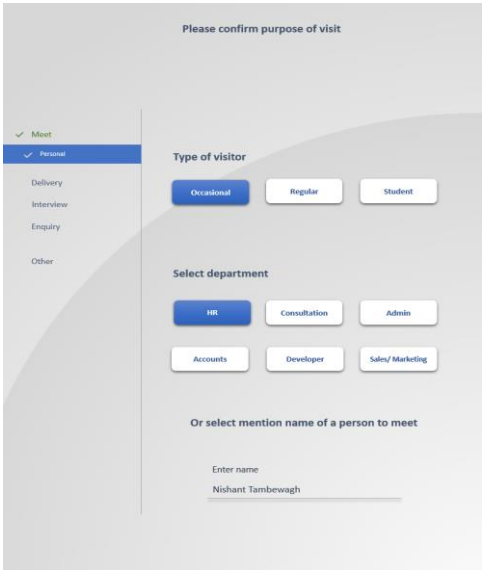

Figure 2: Type of the visitor

FUTURE SCOPE

The future scope of Smart Reception System is vast, as technology continues to advance and new innovations are developed. Here are some potential areas of growth and development for these systems in the future:

- **Artificial intelligence (AI):** AI technologies can be used to enhance the functionality of kiosk-enabled reception systems, providing more personalized experiences for visitors, automating tasks such as visitor identification and facial recognition, and providing insights into visitor behavior and preferences.
- **Augmented reality (AR):** AR technologies can be used to provide more immersive and interactive experiences for visitors, such as virtual tours of the office or customized welcome messages.
- **Internet of Things (IoT):** IoT technologies can be used to integrate kiosk-enabled reception systems with other smart office systems, such as smart lighting, temperature control, and security systems, providing a more integrated and seamless experience for visitors.

CONCLUSION

In conclusion, smart reception systems offer a range of benefits for organizations, including increased efficiency, enhanced security, and a better visitor experience. By automating the check-in process, these systems can reduce wait times, minimize errors, and provide valuable insights into visitor behavior and preferences. Looking to the future, there is significant potential for continued innovation and growth in this area, with technologies such as AI, AR, IoT, and voice recognition offering new ways to enhance the functionality and user experience of smart reception systems. Additionally, sustainability will likely become an increasingly important consideration in the design and implementation of these systems, as organizations seek to reduce their environmental impact and demonstrate their commitment to corporate social responsibility.

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