**Voice enabled Video door Bell with access control System**

The Smart Receptionist with Smart Lock System is a project that combines various components, including the ESP32-CAM, APR33A3 module, servo motor, and a 5V USB power supply, to create a versatile and user-friendly solution. The objective of this project is to provide a smart gate/door management system that enables monitoring of individuals through a live video stream and allows gate operation via a web interface. Additionally, the system supports voice playback functionality, enabling the play of voice notes based on user input.

The system architecture revolves around the ESP32-CAM module, which captures and streams live video to a mobile web browser. This allows users to monitor and verify individuals at the gate or door in real-time. The APR33A3 module, equipped with a speaker and microphone, enables voice playback capabilities. By utilizing a web interface, users can trigger voice notes to be played, such as disallowing entry or delivering a welcome message.

The project implementation involves programming the ESP32-CAM, APR33A3, and servo motor using the Arduino IDE. The ESP32-CAM code facilitates video streaming, while the APR33A3 code enables voice playback functionality. The servo motor code controls the opening and closing of the gate, providing secure access management.

The system's user-friendly design and seamless integration of components make it easy to use and maintain. The ESP32-CAM, with its video streaming capabilities, ensures reliable monitoring of individuals. The APR33A3 module delivers clear and audible voice notes, enhancing the interaction and communication process. Overall, this project offers a practical and efficient solution for managing gate/door access with live video monitoring and voice playback capabilities.

The system is tested using a variety of different people. The system is able to successfully identify and allow authorized people to enter the premises. The system is also able to successfully identify and deny unauthorized people from entering the premises.

The system is a valuable addition to any home or office. It provides a secure and convenient way to control access to the premises.

Here are some of the benefits of using this system:

* Increased security: The system can help to prevent unauthorized access to the premises.
* Convenience: The system can be controlled from a mobile web browser, making it easy to use.
* Flexibility: The system can be customized to meet the specific needs of the user.

**Block Diagram:**

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