

DEPARTMENT OF INFORMATION TECHNOLOGY

SECURE HOME AUTOMATION USING RASPBERRY PI BY TELEGRAM APP

PROJECT SUPERVISOR

Mr. G. Nageswara Rao
ASSOCIATE PROFESSOR/IT

BATCH NO:1923ITP001

G Harshitha (19K61A1215) N Akanksha(19K61A1240)
A Harika (19K61A1201)

MOTIVATION

The main objective of this project is to allow Authorized persons into home and capture Image of Unauthorized person and control home application by on and off commands sending through Telegram.

LIMITATIONS

Raspberry pi makes it more complex as detection of send notification of future delay occurs

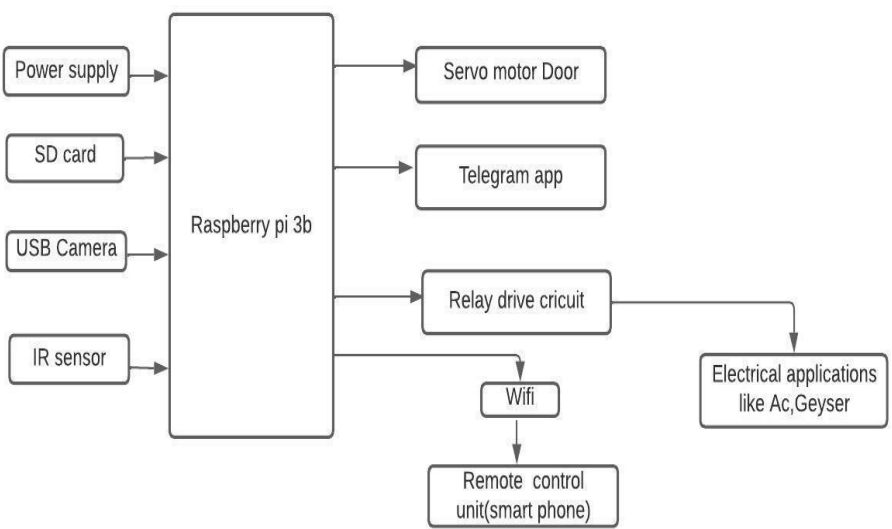
AIM

The aim of secure home automation using Raspberry Pi and Telegram app is to provide a secure and convenient way for users to control their home automation devices remotely.

OBJECTIVES

- This project goals at implementing the smart home security and automation system which can access remotely using telegram and control doors based on visitors
- The PIR sensor is used to control the household appliances by turning on the relays in response to commands sent via the Telegram app.

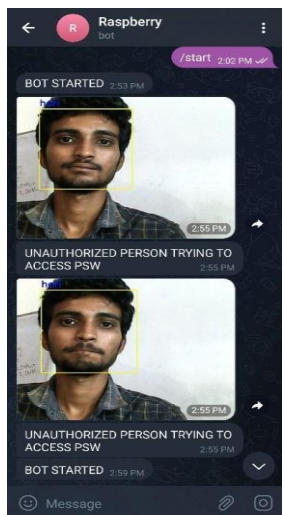
SYSTEM ARCHITECTURE



MODULES

- Motion detect
- Image capture
- Un authorized person door will not open
- Authorized person door open
- Relay connect applications like ac, geyser
- send message to telegram app

RESULTS



Unauthorized person trying to enter

PROJECT OUTCOMES (PROs)

PRO1: Identifying the problems by doing a thorough literature survey of the existing research related to secure home automation using raspberry pi by telegram app.

PRO2: Analyze, design and develop a solution for **SECURE HOME AUTOMATION USING RASPBERRY PI BY TELEGRAM APP** to meet societal needs and industry standards for project management and finance.

PRO3: Develop employability and the ability to work in a team following the best ethical practices with a spirit for life-long learning and sharpening communication and presentation skills for authorized person through webcam.

PRO4: Make use of appropriate tools or techniques for sustainable development of a solution.

PRO5: Create interest to research different sources to check authorized or unauthorized person information automatically and authorizing the unauthorized through Telegram Notification.

PRO6: Construct a platform that makes users to interact with proposed system.

PROGRAM SPECIFIC OUTCOMES(PSOs)

PSO1:Application Development:Develop risk free & secured innovative IT applications for social and industrial needs.

PSO2:Successful Career and Entrepreneurship:Explore technical knowledge in diverse areas of IT and experience an environment conducive in cultivating skills for successful career,entrepreneurship and higher studies.

Summary of Course Outcomes mapping to Program Outcomes Project Phase -1

PROs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
PRO1	3	3	3	2	3	0	2	0	2	3	0	1	2	2
PRO2	2	2	3	2	3	1	3	0	2	3	1	2	3	2
PRO3	2	2	2	1	3	2	1	3	0	2	1	1	3	2
Course	2	2	1	2	3	1	2	1	2	3	1	1	3	2

Summary of Course Outcomes mapping to Program Outcomes Project Phase -2

PROs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
PRO4	2	3	2	1	3	0	1	1	1	3	2	0	3	1
PRO5	2	3	2	2	2	1	1	1	3	2	1	1	3	1
PRO6	2	3	1	2	2	2	2	0	3	3	1	2	3	2
Course	2	3	2	2	2	1	2	1	2	3	1	1	3	2

