CONTROL SYSTEMS

PROJECT TITLE: SMART HOUSE

Group members:

D VISHAL –

S20190020210

K LITHEESH KUMAR – \$20190020218

K SREENIVASULU REDDY –

S20190020217

COURSE INSTRUCTOR HRISHIKESH

KVSS PAVAN TEJA - S20190020216

VENKATARAMAN

MOTIVATION

- TO SAVE THE WATER
- TO SAVE THE ELECTRICITY
- TO MAKE THE HUMAN LIFESTYLE BETTER AND EASIER
- PEOPLE ARE MORE INTERESTED ON WIRELESS EMBEDDED SYSTEMS, TO MAKE THE FUTURE LIFESTYLE BETTER.

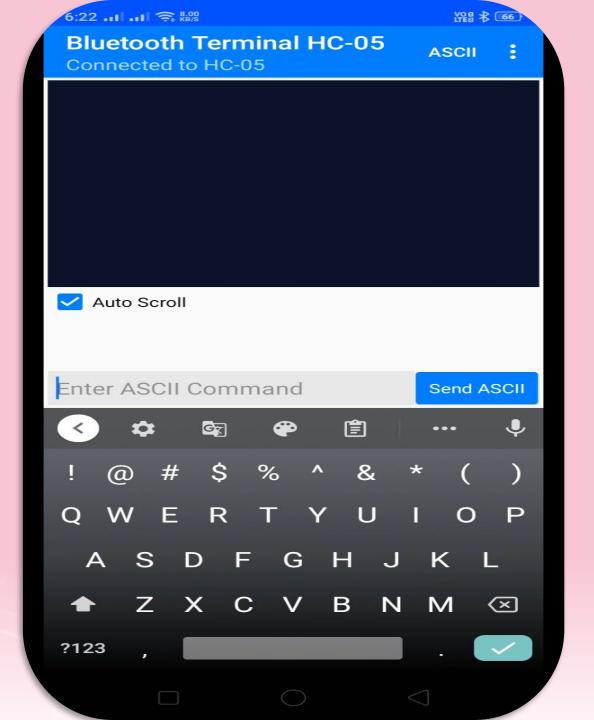
BLOCK DIAGRAM

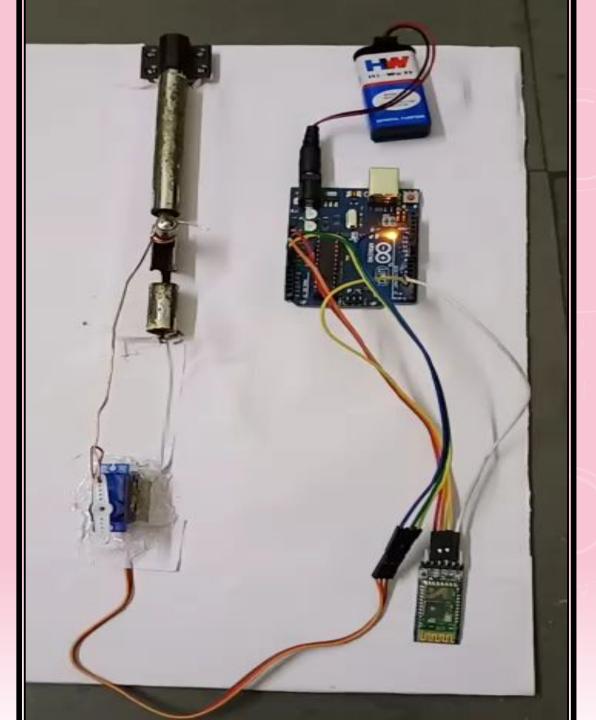
WATER TANK **CAR SHUTTER** BUZZER **DOOR ULTRASONIC SENSOR** LOCK **BLUETOOTH** LIGHT **ARDUINO** MODULE FAN

PUMP MOTOR

DOOR LOCK

- ☐ A BLUETOOTH BASED DOOR LOCK SYSTEM IS FIXED IN THE HOME
- BASED ON THE ENTRY OF INPUTS, LOCKING AND UNLOCKING OF THE DOOR HAPPENS
- ☐ IF THE ENTRY IS D DOOR WILL BE UNLOCKED
- ☐ IF THE ENTRY IS d DOOR WILL BE LOCKED

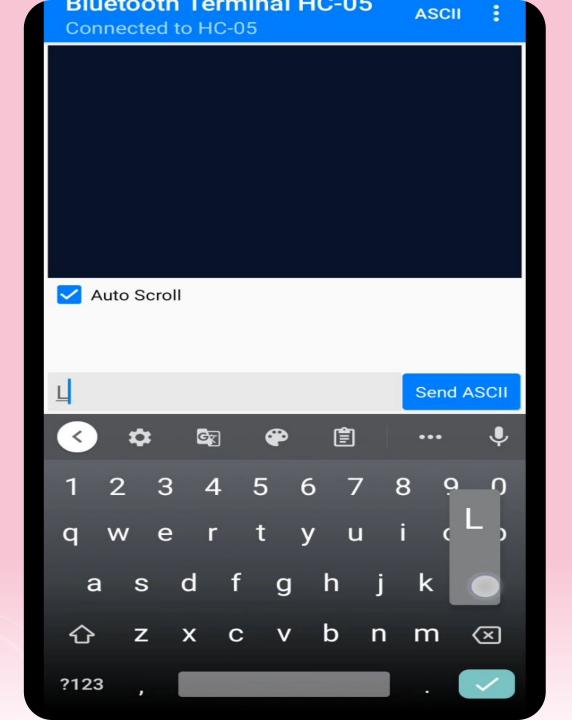




FAN AND LIGHT

- A BLUETOOTH BASED FAN AND LIGHT SYSTEM IS FIXED IN THE HOME
- BASED ON THE ENTRY OF INPUTS, TURNING ON AND OFF OF THE LIGHTS AND FAN HAPPENS
- ☐ IF THE ENTRY IS F FAN WILL BE TURNED ON
- ☐ IF THE ENTRY IS f FAN WILL BE TURNED OFF
- ☐ IF THE ENTRY IS L LIGHT WILL BE TURNED ON
- ☐ IF THE ENTRY IS I LIGHT WILL BE TURNED OFF

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CAR SHUTTER

- AN ULTRA SONIC SENSOR IS FIXED ON THE SHUTTER
- WHEN THE CAR IS ARRIVED, SENSOR READS THE DISTANCE BETWEEN CAR AND SHUTTER
- BASED ON THE DISTANCE THE SHUTTER WILL BE LIFTED UP accordingly



WATER TANK WITH PUMP MOTOR

- WE HAVE A MANUAL SWITCH BASED PUMP MOTOR
- ☐ WATER WILL BE PUMPED INTO THE WATER TANK WHEN THE SWITCH IS ON
- ☐ THE LEVEL OF WATER IS INDICATED ON A PANEL WHERE SOME LED'S ARE FIXED
- ☐ IF THE TANK IS GETTING FILLED, A NOTIFICATION TYPE BUZZER SOUND IS PRODUCED, SO THAT WE CAN TURN OFF THE SWITCH TO SAVE WATER



CHALLENGES ANTICIPATED

 FACED DIFFICULTY IN COMBINING THE SUB PARTS OF THE PROJECT

FACED DIFFICULTY IN FIXING THE DOOR LOCK

• FACED DIFICULTY IN CAR DOOR SHUTTER

EXPECTED RESULT IN FINAL VIDEO

- WE WILL HAVE A MANUAL PUMP MOTOR WHERE WE CAN TURN ON OR TURN OFF THE PUMP MOTOR BASED ON THE LEVEL OF WATER IN THE TANK
- WE WILL HAVE A BLUETOOTH BASED DOOR LOCK SYSTEM
- WE WILL HAVE A BLUETOOTH BASED FAN AND LIGHT WHERE SWITCHING ON AND OFF THE LIGHTS AND FANS ARE CONTROLLED THROUGH MOBILE
- WE WILL HAVE A ULTRA SONIC SENSOR BASED CAR SHUTTER, WHERE ULTRASONIC SENSOR SENSES THE DISTANCE BETWEEN THE CAR AND SHUTTER, BASED ON THE DISTANCE CAR SHUTTER WILL BE LIFTED

THANK YOU