i-Mirror



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INTRODUCTION

In a world where technology is showcasing incessant development and advancements, people are trying to advance with it. People are getting smart, and devices are getting smarter. The need of the hour is Artificial Intelligence. Artificial Intelligence is demonstrated by machines, in contrast to the natural intelligence displayed by humans.

This new wave of connectivity is going beyond laptops and smartphones; it's going towards smart mirrors, smart homes, connected wearable's, smart cities and connected healthcare. So, in our project, we aim to connect and provide a further step in the advancement of computational technology using RaspberryPi.

OBJECTIVE

The aim of the project is to collect data from Internet and store that data on to the Pi from a hosted server(DarkSky.net, wit.ai). Also, the module allows to control the state of a device using voice control commands.

MATERIALS AND METHODS

Our Approach

Collecting data from DarkSky.Net and displaying it on the mirror, providing us with various functionalities using json files and Google APIs.

Data Used

Data from Wit.ai and DarkSky.net, Documentation, RaspberryPi Functioning

Implementation

- Collected data from json file and wit.ai
- Hosted data on RaspberryPi
- Interaction with the AI Component of MagicMirror
- Generated the display of appreciation of looks, news, maps(location), jokes (entertainment) etc.
- Applied using Google Speech Recognition APIs

System/Technologies Used

- Raspberry Pi 3
- Google Cloud Platform Services

- DarkSky.net and wit.ai
- Python

RESULT

The completion of the project resulted in Interactive communication between and the user and the smart mirror.

Also, we displayed the different views of maps, various types of questions asked by the user using knowledgebase for answering by recognising voice commands using speech recognition.

The Acrylic see through sheet act as an interface between the monitor and the user by playing the role of mirror and let the user groom themselves.

BENEFITS

- Intractability
- Authorized Connectivity
- Voice Assisted Commands
- State of the Art
- Ability to form a smart network

REFERENCES

RasberryPi Forum:

https://www.raspberrypi.org/ Python Guide Manual: https://www.python.org/

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