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## Smart mirror

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### ABSTRACT

*This paper portrays the structure and improvement of a modern brilliant mirror that speaks to a subtle interface for the encompassing home condition. The mirror gives a characteristic method for association through which the occupants can control the family unit savvy apparatuses and get to customized administrations. Accentuation is likewise given to guarantee comfort in getting to these administrations with a base measure of client intercession. For instance, face acknowledgment-based verification is utilized to naturally distinguish the client confronting the mirror and give gadget-based interface to get to information takes care of and different administrations. A help situated engineering has been embraced to create and convey the different administrations, where the mirror interface, the apparatuses, and the news and information channels all utilization Web administration correspondence components. The savvy reflects functionalities have been exhibited by building up an effectively extendable home robotization framework that encourages the combination of family unit apparatuses and different tweaked data administrations.*

**Keywords**— *Interface, Customized, Client, Administration*

### 1. INTRODUCTION

A smart mirror is a two-path reflect with an electronic presentation behind the glass. The showcase can show the watcher various types of data as gadgets, for example, climate, time, date, and news refreshes. This item would be valuable for occupied people that need to perform multiple tasks and remain educated while in a hurry. Rather than continually pulling out a gadget, one could get educated while completing day by day prepping undertakings. I planned and manufactured my own model and dug into the universe of do-it-without anyone else's help brilliant mirrors.

A smart mirror is fundamentally a mirror with a screen behind it. That screen can be an Android tablet or a PC screen. Normally, a screen will make for a bigger mirror. It's additionally an incredible method to repurpose an old LCD screen. In any case, you can't pack a full PC in there, except if you utilize a Raspberry Pi.

A smart mirror can show your schedule, climate, and news like something out of a science fiction film. Fuelled by a Raspberry Pi, you can construct your own with some straightforward apparatuses and equipment.

### 2. OBJECTIVE OF OUR WORK

Each morning our day starts by watching ourselves in any event once in reflect before leaving our homes. We associate with it mentally to discover what we look like and how our clothing is. Smart Mirror or Enchantment Mirror is one of the utilizations of Raspberry Pie. A PC screen implanted in reflect looks exceptionally modern. The Raspberry Pie remains at back scenes and controls the information showed on reflect. While taking a gander at reflect you can take a gander at different warnings from social locales too news, climate gauge and more things. Such mirrors can be customized to fill in as man-made intelligence and control home apparatuses by voice info or contact screen. The Raspberry Pie is associated with screen by means of HDMI just as it likewise has inbuilt Wi-Fi and Bluetooth interfaces so we can simply swipe music and recordings to reflect. Its main objective is

to keep the person up to date about current news, weather and reminder of our work, etc. Proposed work will be carried out in various steps:

- (a) Design
- (b) Modules
- (c) Software requirement
- (d) Hardware requirement
- (e) Programming language used
- (f) Configuration
- (g) Conclusion

### 3. DESIGN

#### Level 1: Requirement

**Table 1: Requirements**

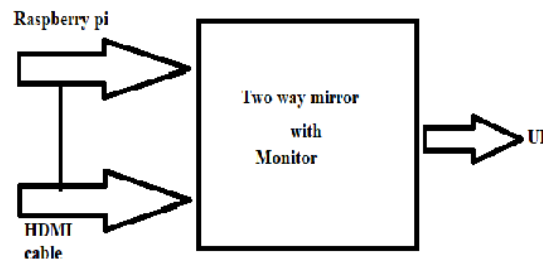
Raspberry pi	Works as CPU
Two-way glass mirror	Used for transparency and reflection
Monitor	Used to show all the data on the mirror from background
Wooden box	It provides the structure
HDMI Cable	Used to connect the monitor with raspberry pi

#### Level 2: Structure

In this Structure:

Input devices: Raspberry pi, HDMI cable

Output device: Monitor



#### 3.1 Modules

- (a) Current Weather
- (b) Calendar
- (c) Clock
- (d) News feed
- (e) Weather update
- (f) Compliments
- (g) Alerts

#### 3.2 Software Requirement

- (a) Remote desktop application or VNC viewer
- (b) Advanced IP scanner
- (c) Putty
- (d) API (Application programming interface) for fetching weather update
- (e) Use of RSS (Rich Site Summary) for news feed

#### 3.3 Hardware requirement

- (a) Wooden frame
- (b) Monitor
- (c) HDMI cable
- (d) Sockets
- (e) Electric tape

#### 3.4 Programming language

HTML: HTML is used for designing front end HTML

CSS: CSS is used for styling of HTML content

JAVASCRIPT: It has been used for providing dynamic content

HTML, CSS + JAVASCRIPT

#### 3.5 Configuration

Configuration feature has been also added so that any person can customise the smart mirror according to their need. Configuration feature allows you to change API, RSS, DATE, TIME. User can even change the positions without even doing programming.

#### **4. CONCLUSION**

This item has incredible potential for the most part in extravagance showcases because of current significant expenses. Starting today, do-it-without anyone else's help electronic specialists produce most brilliant mirrors, beside a couple of little organizations. From a little overview, I inferred that it is very fascinating to individuals and that they would be keen on buying one for their own home. Brilliant mirrors can be delivered effectively relying upon how complex one needs to make it. This has given me extraordinary inspiration to keep building savvy mirrors for loved ones and conceivably attempt to pick up work at Look Mirror or a comparative organization. Smart mirror fetches accurate data of news and weather and it helps the user to keep up to date.

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