



YCCE INNOVATION GALLERY

DEPARTMENT OF INFORMATION TECHNOLOGY



IoT Based Smart Wardrobe

Preamble

In recent years, the world has witnessed a significant transformation in the way we interact with technology. The Internet of Things(IoT) is one of the innovations that have greatly impacted our lives. This IOT project aims to create a smart wardrobe that uses an Arduino Uno, a DHT11 sensor, an odour sensor, and a load sensor to monitor and control the wardrobe. The DHT11 sensor will measure the temperature and humidity level inside the wardrobe, while the odour sensor will detect any unpleasant smells that may be present. Additionally, the load sensor will check the load for each shelf and determine which shelf is less used. The smart wardrobe will be able to provide users with real-time data on the condition of their clothes and the environment inside the wardrobe. The load sensor will allow the user to determine which shelf is less used, making it easier to organize the wardrobe and plan storage.

Snapshot



1. Wardrobe without clothes



2. Wardrobe with clothes

```
Temperature = 20°C | 68.00°F
Humidity = 80%

Odour = 200

Load Cell 1
1.86
Odour level is MEDIUM, please check for smell in clothes
Probably the wardrobe is wet
```

3. High humidity, low temperature, medium odour variance

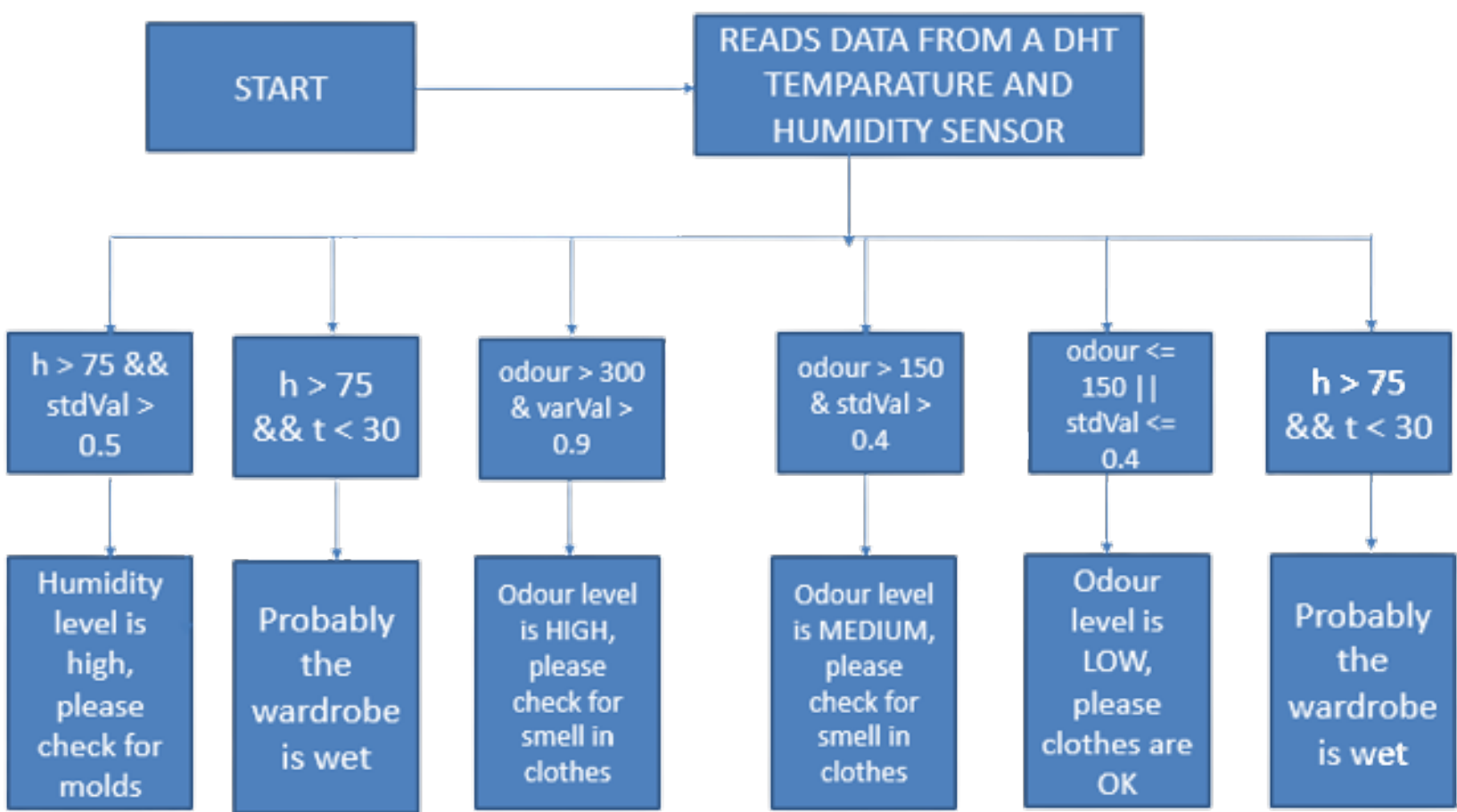
```
Temperature = 24°C | 75.20°F
Humidity = 60%

Odour = 100

Load Cell 1
2.11
Odour level is LOW, please clothes are OK
```

4. Normal humidity, normal temperature, low odour variance

Flowchart of our Project:



Conclusion

This has demonstrated the potential of using IoT in wardrobe systems to create a more efficient and convenient solution for maintaining a wardrobe. With the use of sensors and an Arduino Uno user can monitor and control their wardrobes remotely, making their lives easier and more convenient. As IoT continues to evolve, it is exciting to see the potential applications that it can bring to our daily lives, making our lives easier and more manageable.

Future scope

Future improvements to the smart wardrobe system could include the integration of machine learning algorithms to predict when clothes need washing or or dry cleaning based on their condition & usage.

Bibliography

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