

# Fashion Forecast

RFID Enabled Weather 

Why can't weather data be more practical and applicable?

Currently, weather forecasts are presented as **abstract numbers** (degrees in Fahrenheit, percentage chance of precipitation, humidity, cloudy, etc.)

This information can seem **inaccessible** to most people. Someone not from the U.S. may not understand degrees Fahrenheit, and vice versa.

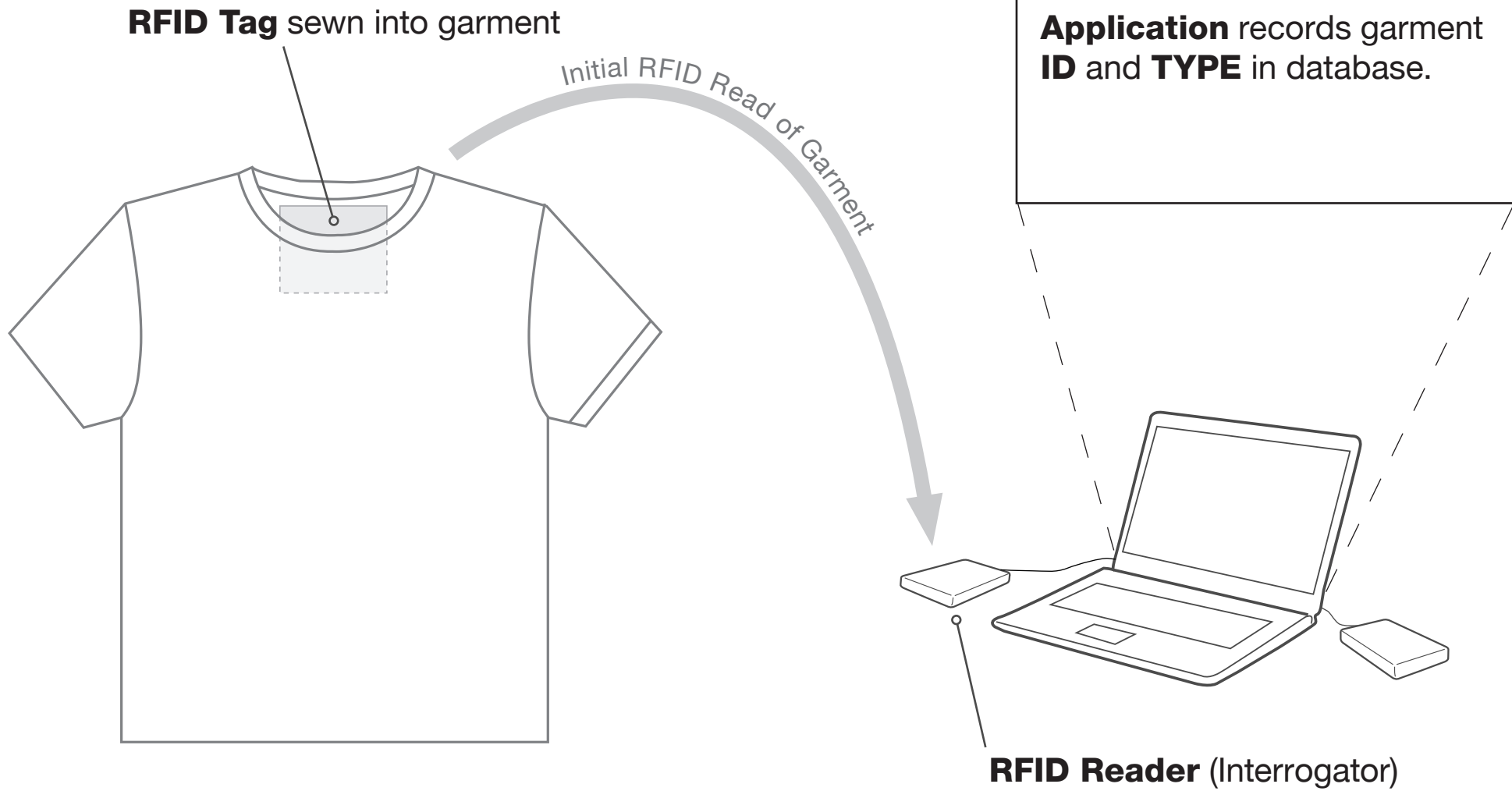
A major reason people check the weather is to know **how to dress appropriately** for the day.

Weather forecasts do a bad job of telling us how we should use them.

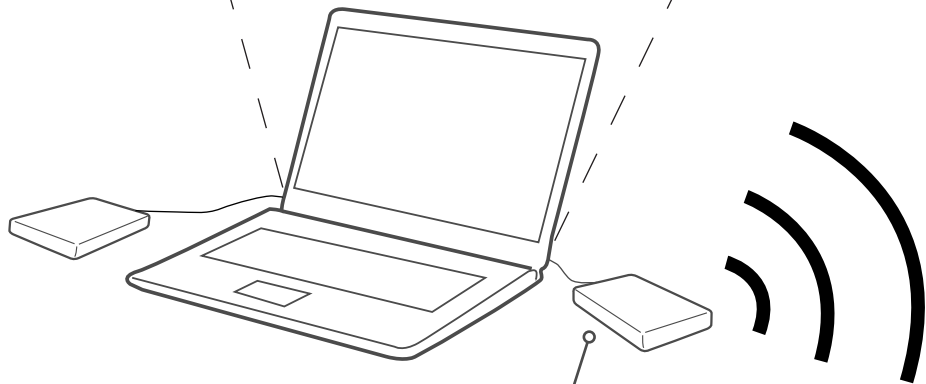
We propose a system that makes **clothing suggestions**, based on the day's weather forecast, to the user while they are getting dressed and ready to leave the house.

Furthermore, the system will **alert the user** if they leave the apartment with any important items they wish to tag.

The system's AI will gradually **learn the user's habits** and make better suggestions based on the user's observed behavior.



**Application** reads daily weather report and sends “light-up” signal to appropriate **hangers** via ZigBee Coordinator.



**ZigBee Coordinator (ZC)**

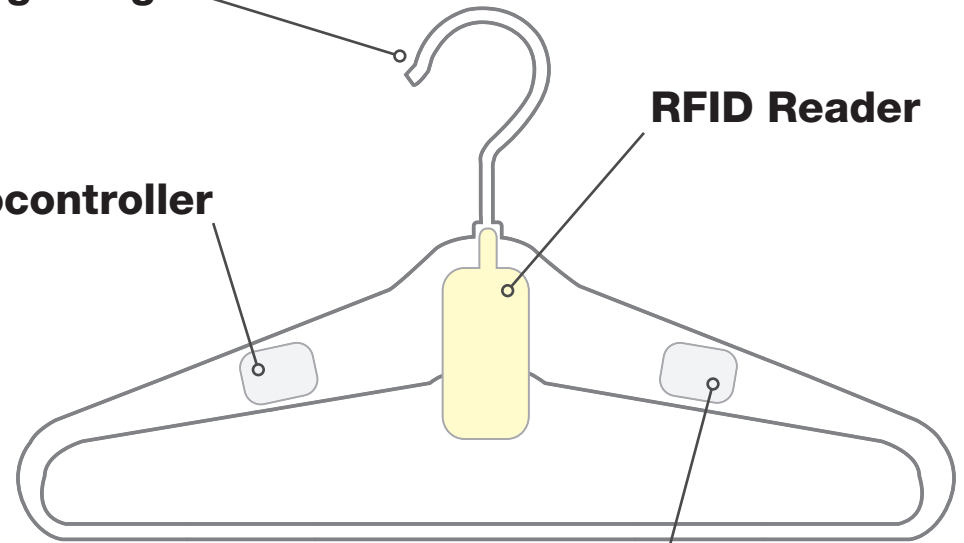
RFID enabled **hangers**



**Light Emitting Hanger**

**RFID Reader**

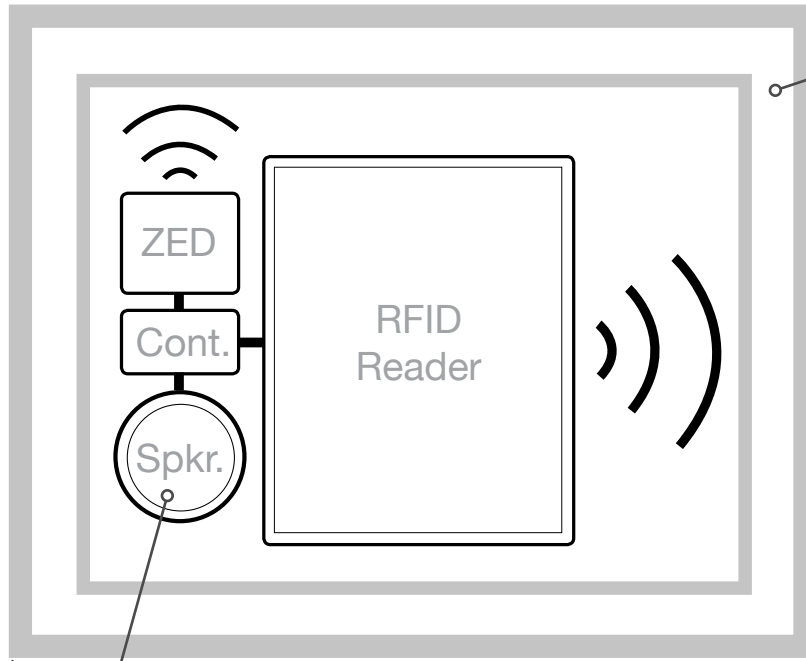
**Microcontroller**



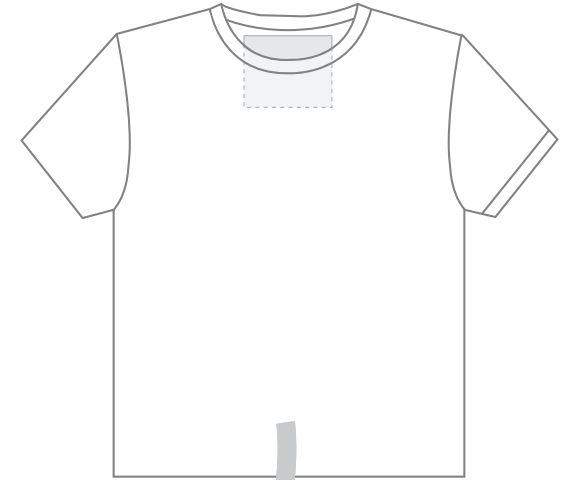
**ZigBee End Device (ZED)**



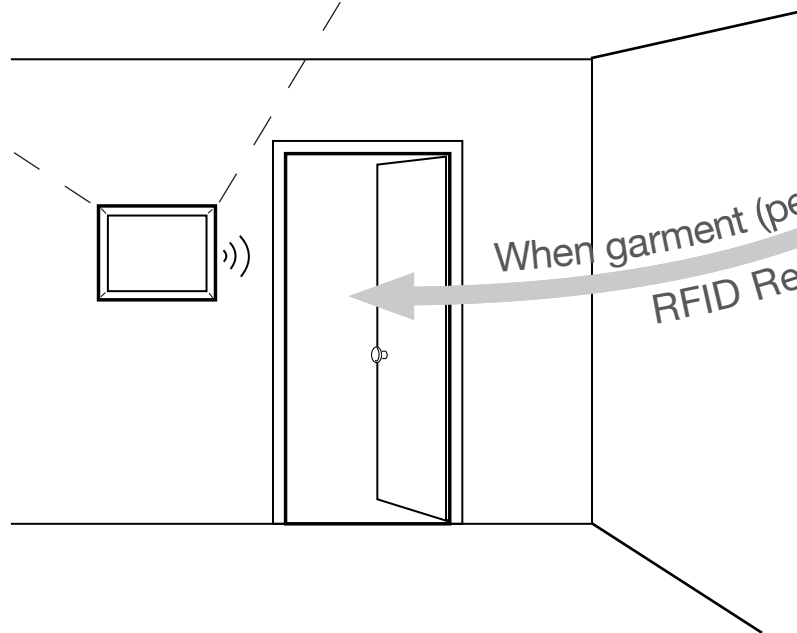
**Smart Hangers** know what is hanging on them and can talk to a server/computer via a **ZigBee End Device**.



**Picture Frame** holds system components.

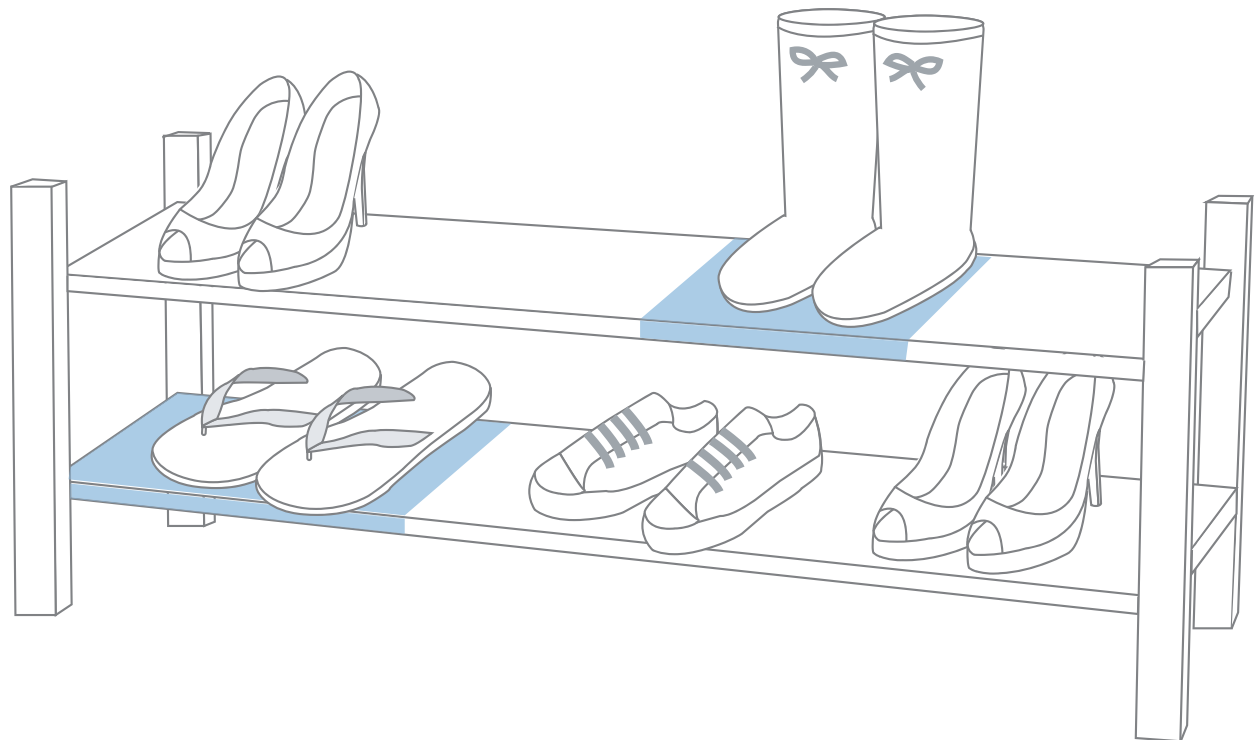


**Speaker** sounds when owner forgets important item (umbrella, coat, etc.)



When garment (person) leaves the house  
RFID Reader reads tags

Fashion Forecast is **Extendable**  
to include shoes, keys, cell  
phone, etc: by adding rules to  
application.



Target users? **Anyone** who wants to dress appropriately for the weather. Forgetful people. People who live in places with erratic weather, such as the American Midwest.

Fashion Forecast is an easy to use, non-distracting and modular, so user can utilize the system as **extensively or minimally** as they wish.

Take for instance, **Sally who is a 24** year old design student living in Chicago. She often stays up late working on assignments and going out with friends; and thus, often runs late in the morning, forgetting her keys or cellphone at home—but not any more.

With Fashion Forecast, Sally has tagged her important outerwear items, umbrella, rain boots, etc. and entered them into the system using her laptop.

She wakes up slightly late one Tuesday morning for a meeting with her other classmates. While getting dressed, the Fashion Forecast's lights activate on the hangers of a sweater, hat and umbrella. She is glad she uses this system because otherwise she wouldn't have known that it would rain later that day.

Leaving the apartment, a mild tone lets her know she has forgotten an important item. Back in her apartment, Sally grabs her forgotten keys and leaves to meet her classmates. Saved by Fashion Forecast.

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