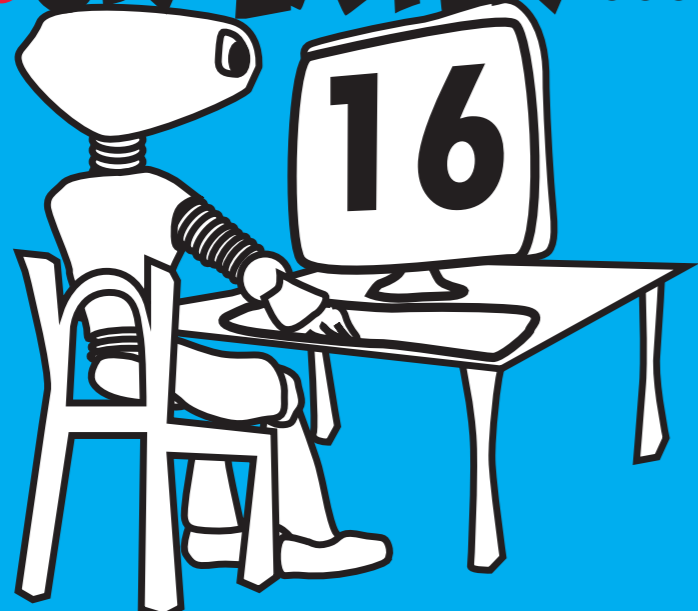


Making sense of Data

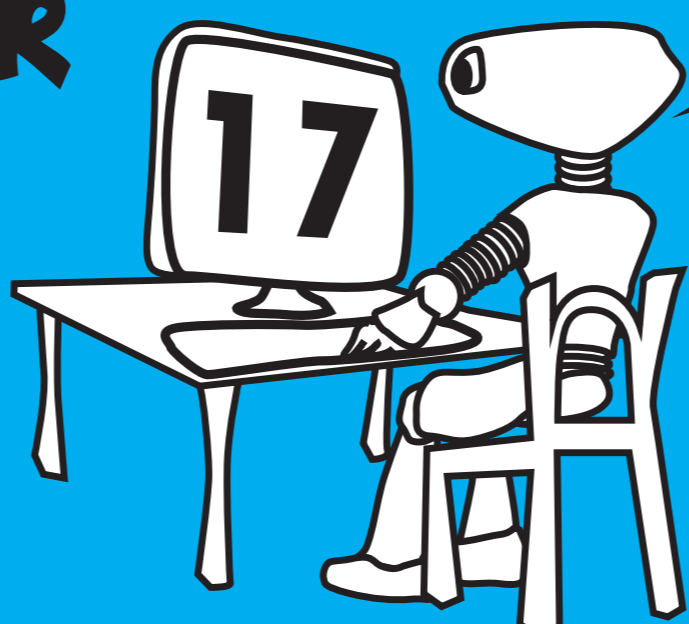
Prof Sharon Cox.
Faculty of Technology, Engineering and Environment

poster design by Cathryn Easthope

ONE HOUR LATER ...



ANOTHER HOUR LATER



DO YOU KNOW WHAT IS GOING ON HERE?

NO? NOR ME.

THE PROBLEM IS THAT THERE IS NO **CONTEXT** HERE.

DEY & ABOUW (2000) SUGGEST THAT THERE IS A PRIMARY CONTEXT AND A SECONDARY CONTEXT

PRIMARY CONTEXT- LOCATION, TIME, IDENTITY & ACTIVITY

HERE THE **PRIMARY CONTEXT**-
LOCATION: 138
TIME: 10:30
IDENTITY: TS 0158
ACTIVITY: DATA CAPTURE =17

THE **PRIMARY CONTEXT** IS USED TO DETERMINE ADDITIONAL INFORMATION- THE **SECONDARY CONTEXT**.

LOCATION: 138 IS FIRST FLOOR OFFICE
IDENTITY: TS 158 IS A TEMPERATURE SENSOR THAT MEASURES IN DEGREES CENTIGRADE.

LOCATION: 138
IDENTITY: 8510 ST
ACTIVITY: Temperature Reading
TIME: 09:30

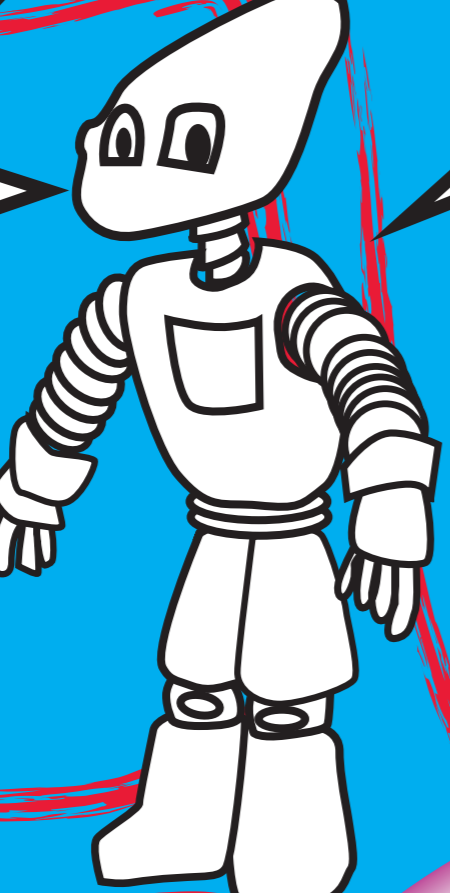
THIS MEANS THAT THE TEMPERATURE IN ROOM 138 WAS
18 DEGREES C AT 08:30
16 DEGREES C AT 09:30
17 DEGREES C AT 10:30

BUT I DON'T KNOW WHY THE TEMPERATURE CHANGED AT 09:30.

I FRAME THE **CONTEXT** BY CREATING A BOX

LOCATION: 138
IDENTITY: 8510 ST
ACTIVITY: Temperature Reading
TIME: 09:30

WE NEED TO LOOK OUTSIDE THE BOX TO UNDERSTAND WHAT ELSE WAS HAPPENING AT THE SAME TIME.

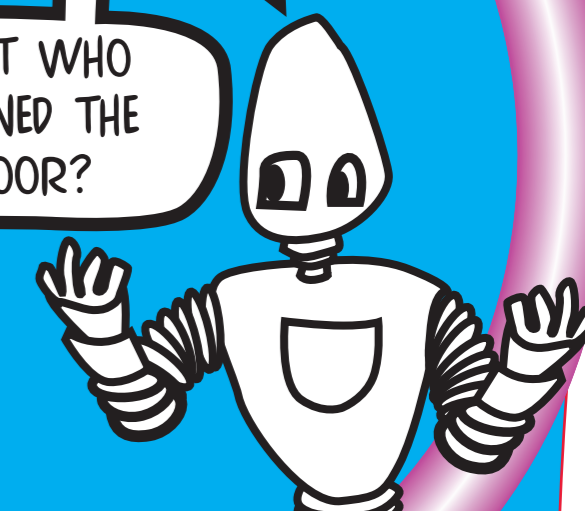


LOOKING UP INFORMATION ABOUT 138 REVEALS THERE ARE OTHER SENSORS IN THE ROOM.

LOCATION: 138 IDENTITY: DS 212 ACTIVITY: Door Status Monitor TIME 08:30 Closed	LOCATION: 138 IDENTITY: DS 212 ACTIVITY: Door Status Monitor TIME 09:15 Open
LOCATION: 138 IDENTITY: 8510 ST ACTIVITY: Temperature Reading TIME 08:30 18	LOCATION: 138 IDENTITY: 8510 ST ACTIVITY: Temperature Reading TIME 09:30 16

SO THE DOOR OPENED AND THE TEMPERATURE FELL.

BUT WHO OPENED THE DOOR?



LOCATION: 138
IDENTITY: TS 0158
ACTIVITY: Temperature Reading
TIME: 09:30
16

LOCATION: 138
IDENTITY: 8510 ST
ACTIVITY: Temperature Reading
TIME: 09:30
16

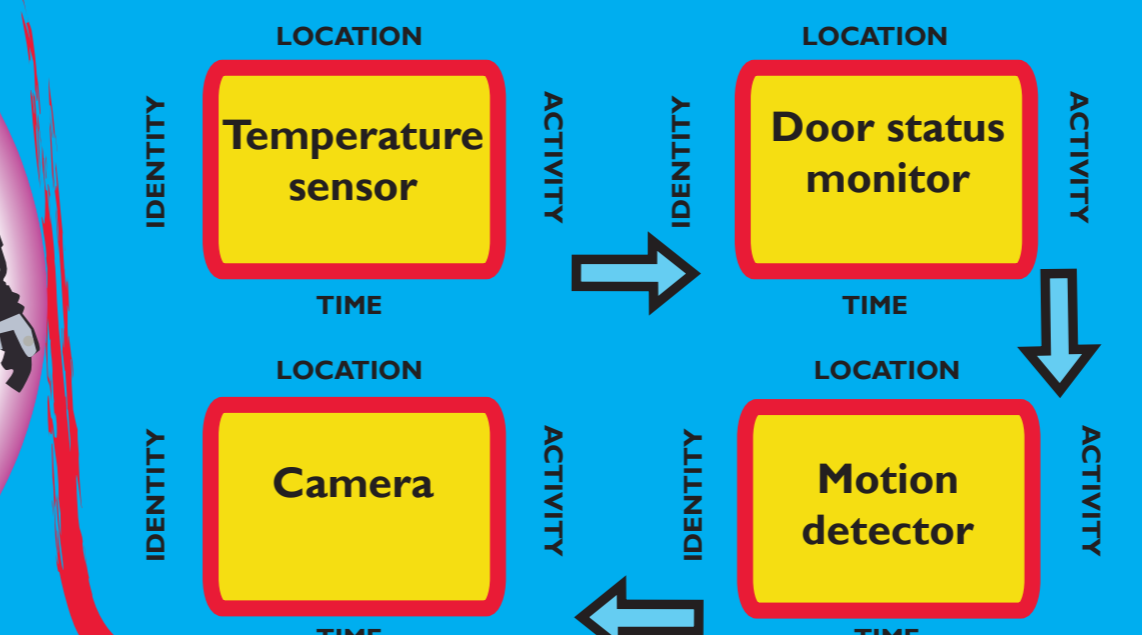
IT WAS ME. I OPENED THE DOOR AND LET THE WARM AIR OUT OF THE ROOM CAUSING THE TEMPERATURE TO CHANGE.

We can understand contents by constructing a series of boxes and identifying how they inter-relate.

LOCATION: 138
IDENTITY: MD 0015
ACTIVITY: Motion Detection
TIME 09:16
Motion Detected

LOCATION: 138
IDENTITY: IPC 1155487521
ACTIVITY: Recording
TIME 09:16
Recording

MOVEMENT IN THE ROOM TRIGGERED A CAMERA TO RECORD...



By defining the parameters of the edges and corners we can see how context emerges from the structure of the situation

LOCATION: 138
IDENTITY: 8510 ST
ACTIVITY: Temperature Reading
TIME 09:16
16

LOCATION: 138
IDENTITY: DS 212
ACTIVITY: Door Status Monitor
TIME 09:15
Open

LOCATION: 138
IDENTITY: IPC 1155487521
ACTIVITY: Recording
TIME 09:16
Recording

LOCATION: 138
IDENTITY: MD 0015
ACTIVITY: Motion detection
TIME 09:16
Motion detected

I NOW KNOW WHAT HAPPENED. IN ORDER TO PROVIDE CONTEXT-DEPENDENT INFORMATION I NEED TO EXPAND THE STRUCTURE OF THE CONTEXT.

rule location	rule goal	goal value	value location	location rule
Resources available for use.	Goals of the people in the situation.	Roles of the people in the situation.	Time	Location
action role	role actor	actor structure	structure structure	action
rule location	goal value	value location	location rule	rule location
Activity	goal value			

Fold all the flaps inwards and glue the other side