

SPRINT 3

Date	07 November 2022
Team ID	PNT2022TMID27462
Project Name	Project - Hazardous Area Monitoring for Industrial Plant powered by IoT

Sprint 3 adds employee safety focused functionality.

User Interface

Employees can use this device to check the safety of their surroundings.

18:56

Screen2

Site 1 Temp:	39	Exit: F-01
Site 2 Temp:	41	Exit: F-21
Site 3 Temp:	37	Exit: C-23
Site 4 Temp:	40	Exit: A-27
Site 5 Temp:	42	Exit: C-25
Site 6 Temp:	27	Exit: D-15
Site 7 Temp:	30	Exit: E-13

1.

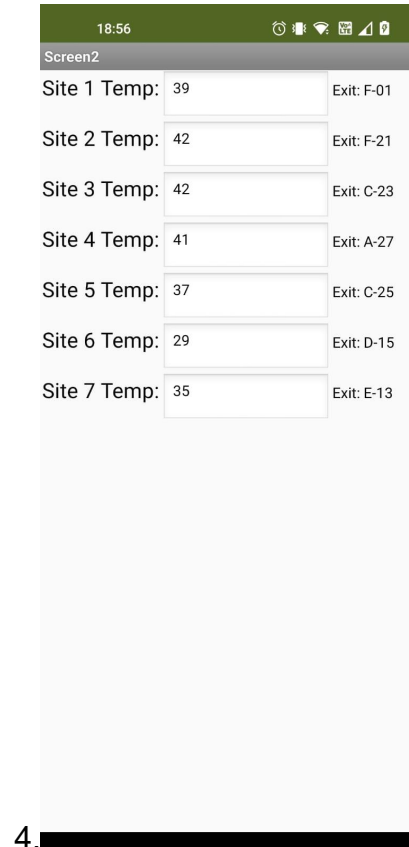
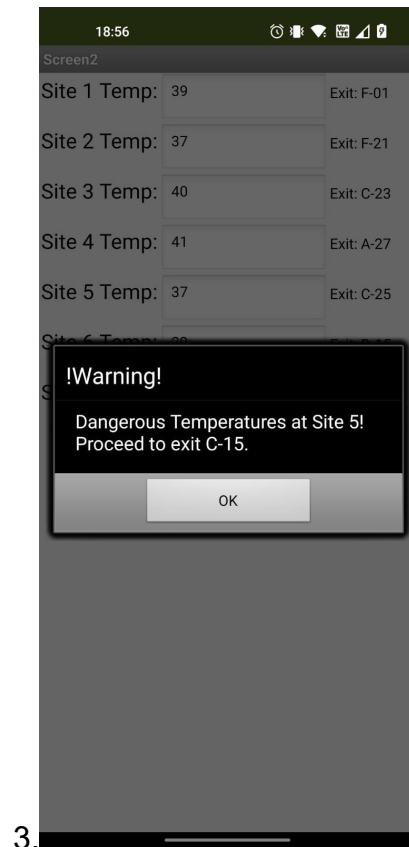
18:56

Screen2

Site 1 Temp:	39	Exit: F-01
Site 2 Temp:	44	Exit: F-21
Site 3 Temp:	43	Exit: C-23
Site 4 Temp:	39	Exit: A-27
Site 5 Temp:	39	Exit: C-25
Site 6 Temp:	29	Exit: D-15
Site 7 Temp:	35	Exit: E-13

2.

User can view site temperature, which updates periodically as new data is obtained from the cloud.

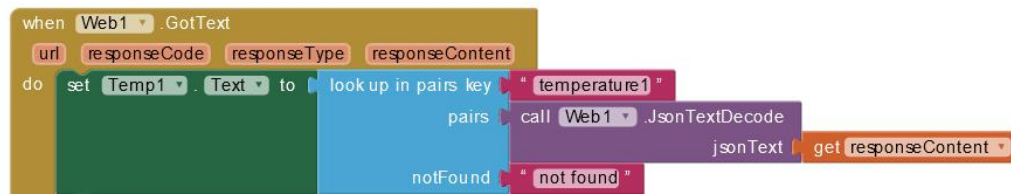


When a temperature anomaly is detected, the app sends an alert to the user and indicates to them the nearest exit.

App Inventor



The above code periodically refreshes and gets data from the specified URL. The URL is generated by the HTTP needs in Node-RED.



On receiving data, the appropriate temperature data for the site is extracted from the JSON and displayed on the app UI.



The notification block - notification is sent if temperature rises above 65 degrees celsius.