Hardware Requirement Details:

Serial	Hardware Name	Type	Required	Example Link
1	STM32F103C8T6 - Blue Pill	MCU	Must	https://store.roboticsbd.com/arduino-bangladesh/350-stm32f103c8t6-blue-pill-development-board-robotics-bangladesh.html
2	ST-LINK V2 in-circuit debugger/programmer	Programmer	Must	https://store.roboticsbd.com/programmer/1102-st-link-stlink-st-link-v2-mini-stm8-stm32-simulator-download-programmer-robotics-bangladesh.html
3	16x2 LCD Module with i2c header/ Or, 0.96 inch OLED I2C display	Display (Peripheral)	Must	https://store.roboticsbd.com/arduino-shield-module/1349-16x2-serial-lcd-module-display-for-arduino-assembled-robotics-bangladesh.html Or, https://store.roboticsbd.com/arduino-shield-module/1328-096-inch-i2c-oled-display-white-robotics-bangladesh.html
4	4x4 Keypad Matrix	Keypad (Peripheral)	Must	https://store.roboticsbd.com/arduino-shield-module/986-4x4-keypad-16-key-matrix-membrane-type-robotics-bangladesh.html
5	DHT11 Temperature & Relative Humidity Sensor	Sensors (Peripheral)	Must	https://store.roboticsbd.com/sensors/667-dht11-temperature-and-relative-humidity-sensor-module-for-arduino-robotics-bangladesh.html

7	Ultrasonic Sonar Sensor	Sensors (Peripheral)	Must	https://store.roboticsbd.com/sensors/22-ultrasonic-sonar-sensor-hc-sr04-robotics-bangladesh.html
8	Servo Motor	Actuators (Peripheral)	Must	https://store.roboticsbd.com/motor/2450-servo-motor-micro-sg90-360-degree-continuous-rotation-robotics-bangladesh.html
9	IR Sensor	Sensors (Peripheral)	Optional	https://store.roboticsbd.com/sensors/685-infrared-obstacle-avoidance-ir-sensor-module-robotics-bangladesh.html
10	Soil Moisture Sensor	Sensors (Peripheral)	Optional	https://store.roboticsbd.com/sensors/145-yl-69-soil-hygrometer-humidity-soil-moisture-detection-sensor-robotics-bangladesh.html
11	Any other sensors or modules	Sensors (Peripheral)	Optional	Example: GPS, accelerometer, GSM, voice detection, fire detection, pollution detection