Fire Detection Use Case: UML Class Diagram

Forest Ranger
- rangerID: int
+ getRangerID(): int

Forest
- forestID: int
- forestName: string
+ getForestID (): int
+ getForestName(): string
+ setForestName(): void

User
- userID: int
- name: string
- phone: string
- department: string
- password: string
- loginStatus: bool
+ getUserID(): int
+ getName(): string
+ getPhone(): string
+ getDepartment(): string
+ getPassword(): string
+ verifyLogin(): bool
+ setName(): void
+ setPhone(): void
+ setDepartment(): void
+ setPassword(): void

Fire Marshall
- marshallID: int
+ getMarshallID(): int

Fire Station
- stationID: int
- stationName: string
+ getStationID (): int
+ getStationName(): string
+ setStationName(): void

Bluetooth
- bluetoothProtocol: float
+ getBluetoothProtocol(): float
+ setPosition(): void

Timer
- timerID: int
- duration: time
- durationRem: time
+ getDuration(): time
+ getDurationRem(): time
+ setDuration(): void

Raspberry Pi
- piID: int
- piType: string
- cpuType: string
- cpuArchitecture: string
- gpuType: string
+ getPiID(): int
+ getPiType(): string
+ getCPUType(): string
+ getCPUArchitecture(): string
+ getGPUType(): string

<<Network>>
- networkID: int
- networkName: string
- networkRange: int
- networkSpeed: int
- networkType: string
+ getNetworkID (): int
+ getNetworkName(): string
+ getNetworkRange(): int
+ getNetworkSpeed(): int
+ getNetworkType(): string
+ setNetworkName(): void
+ setNetworkSpeed(): void

USB
- USBSpecification: float
+ getUSBSpecification (): float
+ displayGraph(): float

EEPROM
- EEPROM_Address: string
+ getEEPROM_Address(): string
+ setEEPROM_Address(): void

<<Sensor>>
- sensorType: string
- sensorInterface: string
- sensorOutput: enum
- sensorMinVoltage: float
- sensorMaxVoltage: float
+ getSensorType(): string
- getSensorInterface(): string
+ getSensorOutput(): enum
+ getSensorMinVoltage(): float
+ getSensorMaxVoltage(): float
+ setSensorInterface(): string
+ setSensorOutput(): enum

DHT22 Sensor
- sensorID: int
- relativeHumidity: int
- temperature: int
+ getRelativeHumidity(): int
+ getTemperature(): int

<<Memory>>
- memoryType(): string
- memorySize(): float
- remMemory: float
- isVolatile: bool
+ getMemoryType(): string
+ getMemorySize(): int
+ getRemMemory(): float
+ getIsVolatile: bool

RAM
- RAM_Address: string
+ getRAM_Address(): string
+ setRAM_Address(): void

Alert
- alertID: int
- alertType: string
- message: string
+ getAlertID(): int
+ getAlertType(): string
+ getMessage(): string