**Light Class Documentation**

The light class is a part of the Smart Home Hub system and extends the smart appliance class. It is designed to control home lighting and provides additional features, such as voice control and motion detection.

**Class Overview**

The light class represents a smart light device that can be controlled through code or external inputs like voice commands and motion detection. It inherits properties and methods from the base smart appliance class and adds specific functionality for lights.

**Class Constructor**

constructor(name = '', brightness = 100)

* **name** (string, optional): The name of the light.
* **brightness** (number, optional): The initial brightness level of the light (0 to 100, default is 100).

**Properties**

* **brightness** (number): Represents the brightness level of the light, ranging from 0 (off) to 100 (maximum brightness).
* **\_voiceControlEnabled** (boolean): Indicates whether voice control is enabled for the light.
* **\_motionDetectionEnabled** (boolean): Indicates whether motion detection is enabled for the light.

**Methods**

* **turnOn()**: Turns the light on and logs a message.
* **turnOff()**: Turns the light off and logs a message.
* **enableVoiceControl()**: Enables voice control for the light and logs a message.
* **disableVoiceControl()**: Disables voice control for the light and logs a message.
* **enableMotionDetection()**: Enables motion detection for the light and logs a message.
* **disableMotionDetection()**: Disables motion detection for the light and logs a message.
* **respondToVoiceCommand(command)**: Receives a voice command and logs the command when voice control is enabled. If voice control is disabled, it logs a message indicating that voice control is not enabled.
* **detectMotion()**: Detects motion and turns on the light when motion detection is enabled. It logs appropriate messages based on the detection status.

**Usage**

The light class can be used to create instances of smart lights and control them programmatically. You can change the brightness, turn lights on or off, enable/disable voice control, and enable/disable motion detection based on your requirements.