The assignment requires the creation of a new Java class titled UseFans, which will manage a collection of Fan instances. The class should include methods for displaying the fans' properties without utilizing the toString() method. Additionally, the Fan class should consistently use this reference where applicable. Finally, a test code should be provided to demonstrate the functionality of the Fan instances.

To fulfill the requirements, we will create two Java files: one for the Fan class and another for the UseFans class.

***Fan.java***

This file contains the Fan class, which has been slightly modified to ensure the use of ***this*** reference where appropriate.

* The Fan class defines the properties and behaviors of a fan, including speed, state (on/off), radius, and color.
* The displayFanDetails() method is introduced to print the fan's details without using the toString() method.

A screen shot of a computer program

AI-generated content may be incorrect.

***UseFans.java***

This file contains the UseFans class, which manages a collection of Fan instances and provides methods to display their details.

A screenshot of a computer program

AI-generated content may be incorrect.

* The UseFans class manages a list of Fan instances using an ArrayList.
* It provides methods to add fans to the collection and display their details.
* The main method serves as a test harness, creating instances of Fan, adding them to the collection, and demonstrating the display functionality.