Write a Java program to create an interface Searchable with a method search(String keyword) that searches for a given keyword in a text document. Create two classes Document and WebPage that implement the Searchable interface and provide their own implementations of the search() method.

Sample Solution:

Java Code:

```java
// Searchable.java

// Declare the Searchable interface
interface Searchable {
    // Declare the abstract method "search" that classes implementing this
    boolean search(String keyword);
}
```

```java
// Document.java

// Declare the Document class, which implements the Searchable interface
class Document implements Searchable {
    // Declare a private instance variable to store the content of the docu
    private String content;

    // Constructor for initializing the document's content
    public Document(String content) {
        this.content = content;
    }

    // Implement the "search" method required by the Searchable interface
    public boolean search(String keyword) {
        // Check if the content contains the specified keyword
        return content.contains(keyword);
    }
}
```

```java
// WebPage.java

// Declare the WebPage class, which implements the Searchable interface
```

```java
class WebPage implements Searchable {
    // Declare private instance variables to store the URL and HTML content
    private String url;
    private String htmlContent;

    // Constructor for initializing the URL and HTML content
    public WebPage(String url, String htmlContent) {
        this.url = url;
        this.htmlContent = htmlContent;
    }

    // Implement the "search" method required by the Searchable interface
    public boolean search(String keyword) {
        // Check if the HTML content contains the specified keyword
        return htmlContent.contains(keyword);
    }
}
```

```java
// Main.java

// Declare the Main class
public class Main {
    public static void main(String[] args) {
        // Create an instance of the Document class with a sample content
        Document document = new Document("This is a sample document.");

        // Search for a keyword in the document and store the result
        boolean documentContainsKeyword = document.search("sample");

        // Print whether the document contains the keyword
        System.out.println("Document contains keyword 'sample': " + documer

        // Create an instance of the WebPage class with a sample URL and HT
        WebPage webPage = new WebPage("https://www.w3resource.com", "This :

        // Search for a keyword in the webpage and store the result
        boolean webPageContainsKeyword = webPage.search("webpage");

        // Print whether the webpage contains the keyword
        System.out.println("Webpage contains keyword 'webpage': " + webPage
```

```
            }
        }
```

Sample Output:

Explanation: