

Certainly! Below is a simplified Java code snippet to get you started on the link shortener project. Note that this is a console-based application, and you might want to enhance it further based on your preferences and requirements.

```
```java

import java.util.HashMap;
import java.util.Map;
import java.util.Scanner;

public class LinkShortener {

 private static Map<String, String> urlMappings = new
HashMap<>();

 public static void main(String[] args) {

 Scanner scanner = new Scanner(System.in);

 while (true) {

 System.out.println("1. Shorten a URL");
 System.out.println("2. Exit");
 System.out.print("Choose an option: ");
 int choice = scanner.nextInt();
 scanner.nextLine(); // Consume newline

 switch (choice) {

 case 1:

 shortenUrl(scanner);

 break;

 case 2:

 System.out.println("Exiting...");
 System.exit(0);

 default:

 System.out.println("Invalid option. Please try
again.");

 }

 }

 }

 private static void shortenUrl(Scanner scanner) {

 System.out.print("Enter the long URL: ");
 String longUrl = scanner.nextLine();

 // Generate a short link (you can replace this with
your shortening algorithm)

 String shortLink = generateShortLink(longUrl);

 // Store the mapping
 urlMappings.put(shortLink, longUrl);

 System.out.println("Shortened URL: " + shortLink);

 }

 private static String generateShortLink(String longUrl)
{

 // Replace this with your shortening algorithm (e.g.,
base conversion or hashing)

 // For simplicity, using a basic hash of the long URL
in this example

 return String.valueOf(longUrl.hashCode());

 }

}

```
```

This is a basic console application. You can expand it by adding error handling, improving the shortening algorithm, implementing persistent storage, and creating a more user-friendly interface if you plan to deploy it outside of the console environment.