

PROGRAMMING IN JAVA (CSE-310) PROJECT REPORT

Submitted by

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Code:
```

```
import java.io.BufferedReader;
import java.io. File Writer;
import java.io.IOException;
import java.io.InputStreamReader;
public class EmergencyCallingSystem {
  public static void createFile(String name, String address, String problem, String
service) throws IOException {
    // Creating a new file for the user
    String filename = name + ".txt";
    FileWriter file = new FileWriter(filename);
    file.write("Name: " + name + "\n");
    file.write("Address: " + address + "\n");
    file.write("Problem: " + problem + "\n");
    file.write("Service: " + service + "\n");
    file.close();
    System.out.println("File created successfully!");
 }
 public static String getService(String problem) {
    // finding the appropriate service for the problem using keywords
    if (problem.toLowerCase().contains("fire") ||
problem.toLowerCase().contains("short circuit") ||
problem.toLowerCase().contains("burning")) {
      return "fire";
    } else if (problem.toLowerCase().contains("police") || ||
problem.toLowerCase().contains("stole")||problem.toLowerCase().contains("thief")||
problem.toLowerCase().contains("riots") ||
problem.toLowerCase().contains("misbehave")) {
      return "police";
```

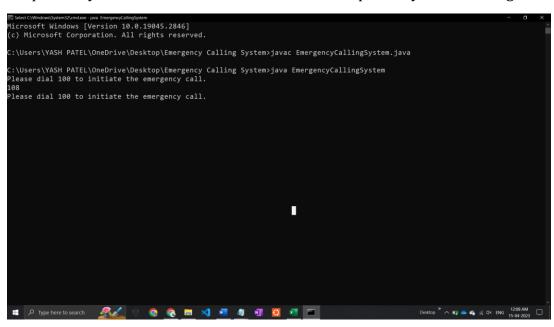
```
} else if (problem.toLowerCase().contains("ambulance") ||
problem.toLowerCase().contains("accident") ||
problem.toLowerCase().contains("bleeding")) {
      return "ambulance";
   } else {
     return "unknown";
   }
 }
 public static void emergencyCall() {
    // user input
    BufferedReader reader = new BufferedReader(new
InputStreamReader(System.in));
    String name = "";
    String address = "";
    String problem = "";
    String service = "";
   try {
      System.out.println("Enter your name:");
      name = reader.readLine();
      System.out.println("Enter your address:");
      address = reader.readLine();
      while (true) {
        System.out.println("Enter the problem:");
        problem = reader.readLine();
        // Mapping the problem to the appropriate service
        service = getService(problem);
```

```
if (!service.equals("unknown")) {
          break;
        }
        System.out.println("Sorry, we were unable to determine the appropriate
service for your problem.");
        System.out.println("Please try again with a more detailed problem
description.");
      }
      // Creating a file for the user
      createFile(name, address, problem, service);
      // details about the dispatched service
      System.out.println("Your emergency call has been logged. Service dispatched: " +
service);
      System.out.println("Please remain calm and follow any instructions given by the "
+ service.toUpperCase() + " personnel.");
      System.out.println("Help is on the way!");
    } catch (IOException e) {
      System.out.println("An error occurred while reading input: " + e.getMessage());
      throw new RuntimeException("Failed to read user input", e);
   }
 }
  public static void main(String[] args) {
    // dial 100 to initiate the emergency call
    System.out.println("Please dial 100 to initiate the emergency call.");
    BufferedReader reader = new BufferedReader(new
InputStreamReader(System.in));
    String input = "";
```

```
try {
    while (true) {
        input = reader.readLine();
        if (input.equals("100")) {
            break;
        }
        System.out.println("Please dial 100 to initiate the emergency call.");
    }
} catch (IOException e) {
    System.out.println("An error occurred while reading input: " + e.getMessage());
        throw new RuntimeException("Failed to read user input", e);
}

emergencyCall();
}
```

Output 1: If you dial no other than 100 it won't accept until you dial the right number.

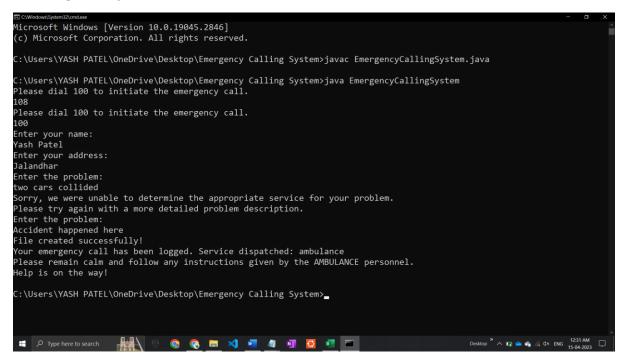


Output 2:

After entering the correct no, you will now enter your name, address, and problem details. There are keywords mentioned in the code we can add more. for example, here is one scenario in which two cars collided.it has same meaning of accident. we need help. if you won't use clear words code will not recognize what you are asking for. It will ask again and again until you say clearly.

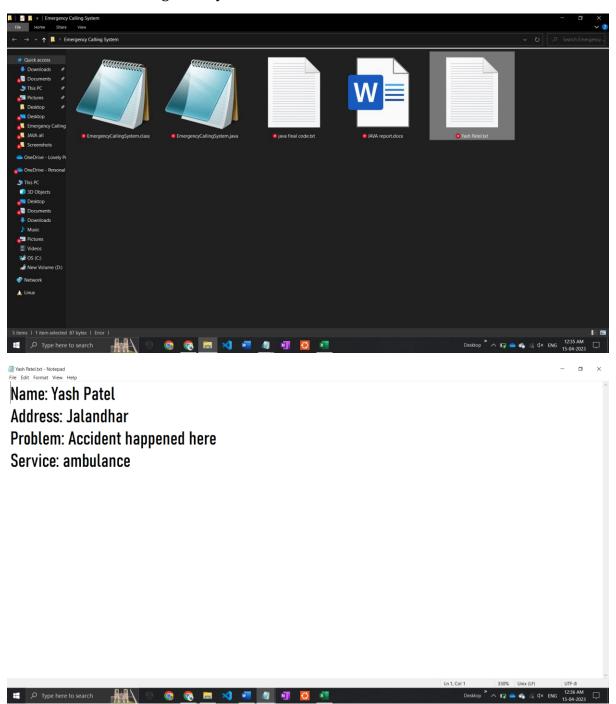
```
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.
:\Users\YASH PATEL\OneDrive\Desktop\Emergency Calling System>javac EmergencyCallingSystem.java
::\Users\YASH PATEL\OneDrive\Desktop\Emergency Calling System>java EmergencyCallingSystem
Please dial 100 to initiate the emergency call.
108
Please dial 100 to initiate the emergency call.
Yash Patel
Enter your address:
Jalandhar
Enter the problem:
wo cars collided
Sorry, we were unable to determine the appropriate service for your problem.
Please try again with a more detailed problem description.
Enter the problem:
Desktop <sup>3</sup> ∧ 📭 • ♠ 🦟 ₫× ENG 12-29 AM 15-04-2023
```

Entering the keyword accident



One file will create by your name and it contain your information, problem

And which service assigned to you.



Another eg:

Case of theft.

```
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.

C:\Users\YASH PATEL\OneDrive\Desktop\Emergency Calling System>javac EmergencyCallingSystem.java

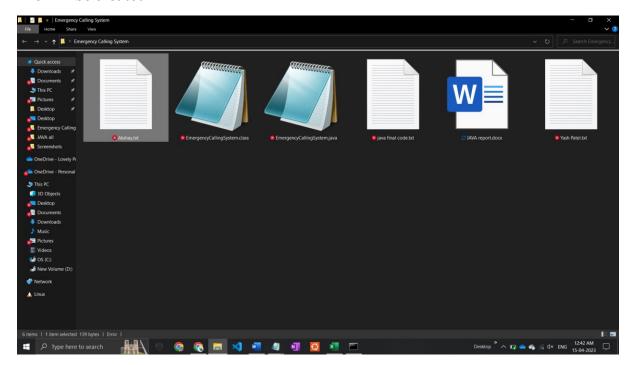
C:\Users\YASH PATEL\OneDrive\Desktop\Emergency Calling System>java EmergencyCallingSystem
Please dial 100 to initiate the emergency call.

100
Enter your name:
Akshay
Enter your address:
Phagwara
Enter the problem:
when I woke up today I saw someone broke my lokar and stole my money and documents
file created successfully!
Your emergency call has been logged. Service dispatched: police
Please remain calm and follow any instructions given by the POLICE personnel.
Help is on the way!

C:\Users\YASH PATEL\OneDrive\Desktop\Emergency Calling System>_

Desktop * A State Des DEALAM Desktop\Emergency Desktop\Emerge
```

File will be created:



Content of the file:

