Introduction to Java

Clinical Diagnostic System

By Group 3

Presentation

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Meet the Team

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Introduction

We were charged with developing a Clinical Diagnostic System for our final assignment

We approached this challenge by creating a program based on user input

This program contains a database for diseases

Each disease in the database has overlapping symptoms that the program accurately diagnoses

MYSQL DATABASE

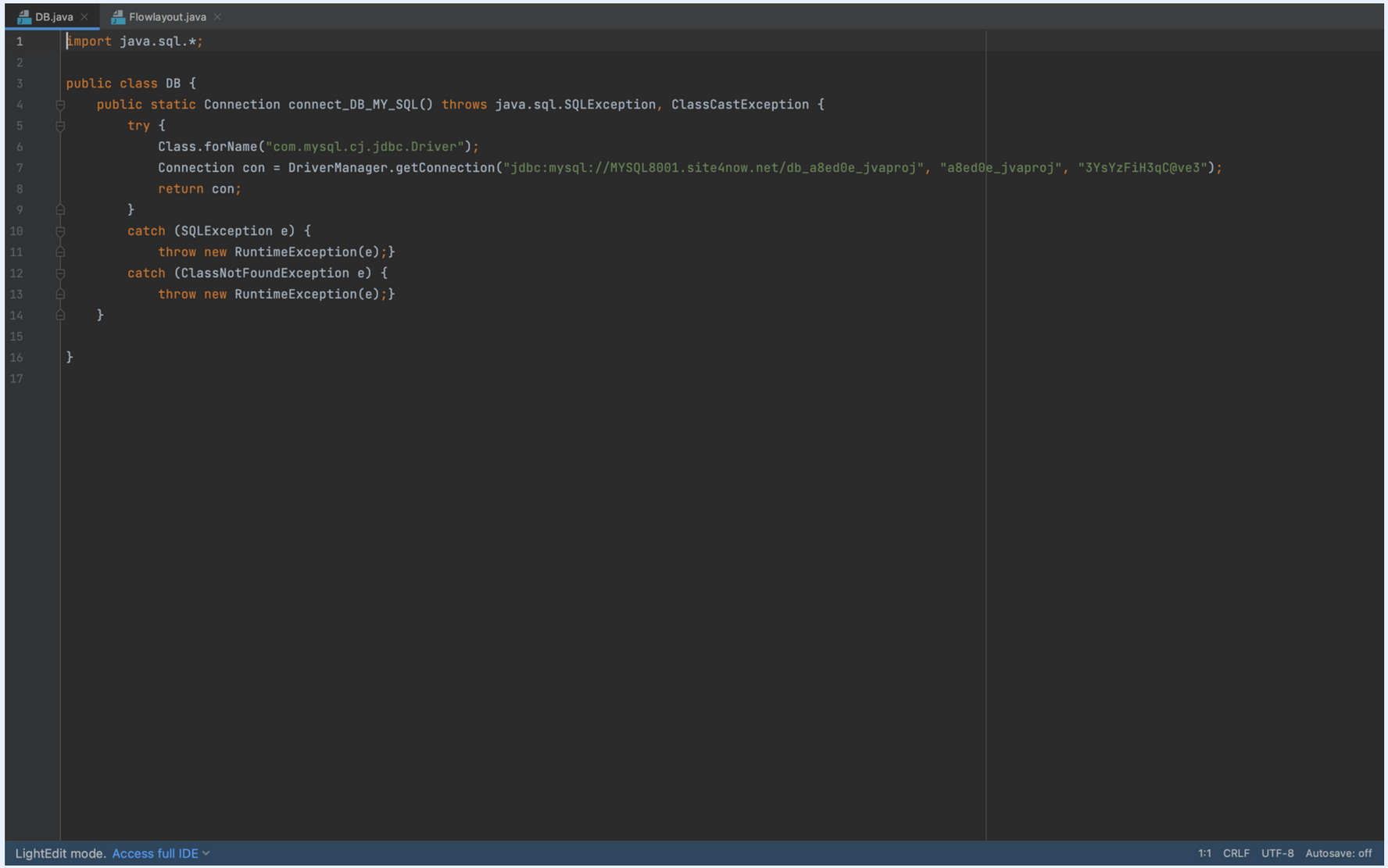
	DiseaseID	DiseaseName	DiseaseNotes
Edit Copy Delete	1	Cold	A common viral infection of the nose and throat.
Edit Copy Delete	2	Covid	an infectious disease caused by the SARS-CoV-2 vir...
Edit Copy Delete	3	Pneumonia	An infection that inflames the air sacs in one or ...
Edit Copy Delete	4	Food poisoning	Illness caused by food contaminated with bacteria,...
Edit Copy Delete	5	Stomach virus	An infection of your intestines that typically cau...

	SymptomID	SymptomName	SymptomDesc
Edit Copy Delete	1	Fever	Temporary increase in average body temperature
Edit Copy Delete	2	Fatigue	Feeling overtired, with low energy and a strong de...
Edit Copy Delete	3	Headache	Painful sensation in any part of the head
Edit Copy Delete	4	Dehydration	Dangerous loss of body fluid caused by illness, sw...
Edit Copy Delete	5	Chills	Feeling of being cold, though not necessarily in a...
Edit Copy Delete	6	Sneezing	Sudden blast of air or mucus expelled from the mou...
Edit Copy Delete	7	Sore throat	Pain or irritation in the throat
Edit Copy Delete	8	Cough	Sudden, forceful hacking sound to release air and ...
Edit Copy Delete	9	Nausea	Queasy sensation including an urge to vomit
Edit Copy Delete	10	Diarrhea	Loose, watery stools that occur more frequently th...
Edit Copy Delete	11	Runny nose	Excess drainage, ranging from a clear fluid to thi...
Edit Copy Delete	12	Abdominal pain	Pain from inside the abdomen or the outer muscle w...
Edit Copy Delete	13	Belching	Excess gas in the stomach or upper intestine relea...
Edit Copy Delete	14	Watery eyes	Too many tears draining from the eyes
Edit Copy Delete	15	Loss of appetite	Reduced desire to eat
Edit Copy Delete	16	Wheezing	High-pitched whistling sound made while breathing

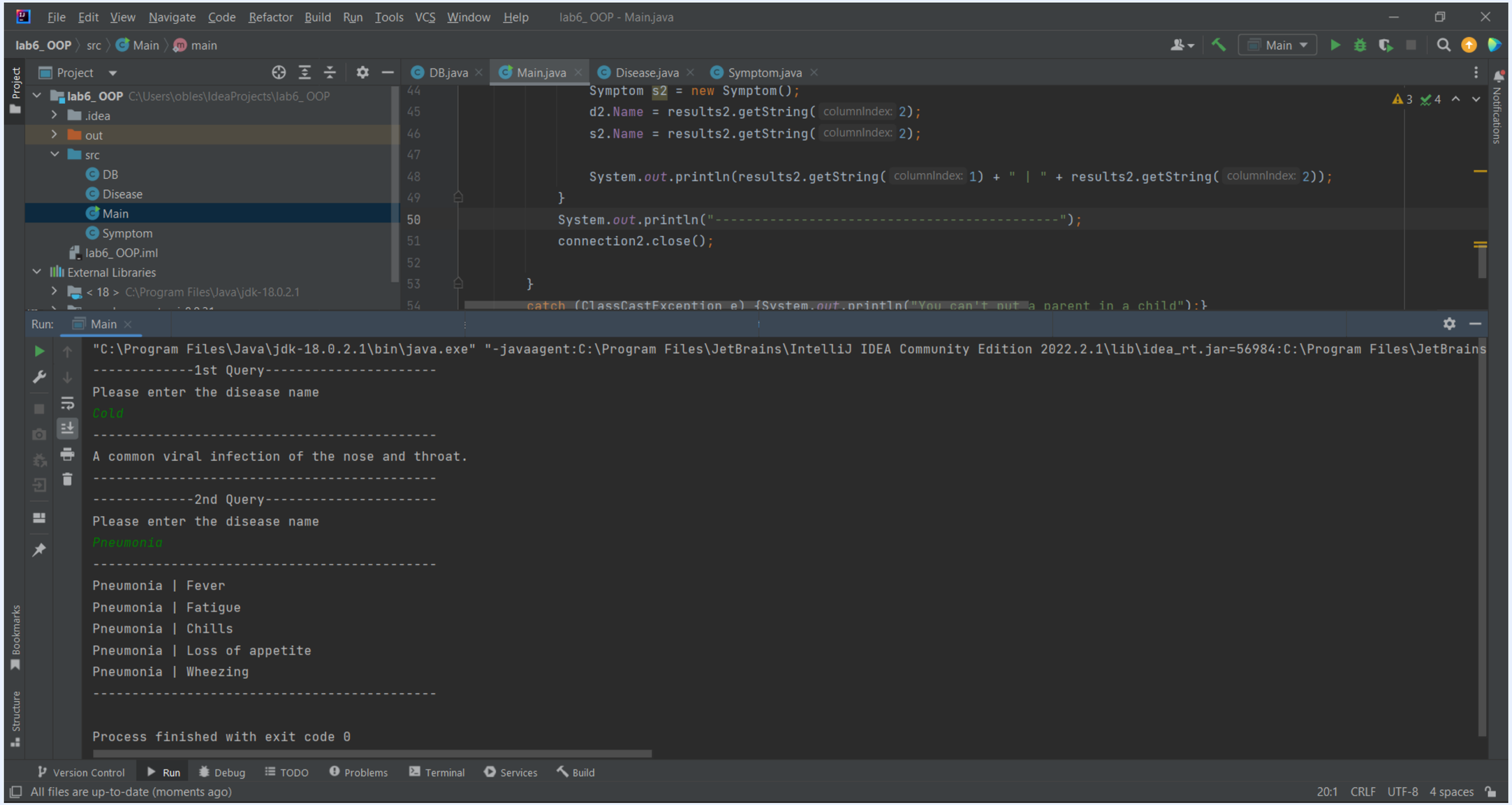
MYSQL DATABASE

	DiseaseID	SymptomID	DiseaseName	SymptomName
Edit Copy Delete	1	6	Cold	Sneezing
Edit Copy Delete	1	7	Cold	Sore throat
Edit Copy Delete	1	8	Cold	Cough
Edit Copy Delete	1	11	Cold	Runny nose
Edit Copy Delete	1	14	Cold	Watery eyes
Edit Copy Delete	2	1	Covid	Fever
Edit Copy Delete	2	2	Covid	Fatigue
Edit Copy Delete	2	3	Covid	Headache
Edit Copy Delete	2	7	Covid	Sore throat
Edit Copy Delete	2	8	Covid	Cough
Edit Copy Delete	3	1	Pneumonia	Fever
Edit Copy Delete	3	2	Pneumonia	Fatigue
Edit Copy Delete	3	5	Pneumonia	Chills
Edit Copy Delete	3	15	Pneumonia	Loss of appetite
Edit Copy Delete	3	16	Pneumonia	Wheezing
Edit Copy Delete	4	1	Food poisoning	Fever
Edit Copy Delete	4	4	Food poisoning	Dehydration
Edit Copy Delete	4	9	Food poisoning	Nausea
Edit Copy Delete	4	10	Food poisoning	Diarrhea
Edit Copy Delete	4	12	Food poisoning	Abdominal pain
Edit Copy Delete	5	1	Stomach virus	Fever
Edit Copy Delete	5	4	Stomach virus	Dehydration
Edit Copy Delete	5	9	Stomach virus	Nausea
Edit Copy Delete	5	10	Stomach virus	Diarrhea
Edit Copy Delete	5	13	Stomach virus	Belching

CONNECTED TO DATABASE



QUERIES


File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
lab6_ OOP - Main.java
lab6_ OOP › src › Main › main
Project
lab6_ OOP C:\Users\obles\IdeaProjects\lab6_ OOP
.idea
out
src
DB
Disease
Main
Symptom
lab6_ OOP.iml
External Libraries
< 18 > C:\Program Files\Java\jdk-18.0.2.1
DB.java
Main.java
Disease.java
Symptom.java
Symptom s2 = new Symptom();
d2.Name = results2.getString(columnIndex: 2);
s2.Name = results2.getString(columnIndex: 2);
System.out.println(results2.getString(columnIndex: 1) + " | " + results2.getString(columnIndex: 2));
}
System.out.println("---");
connection2.close();
}
catch (ClassCastException e) {System.out.println("You can't put a parent in a child");}
Run: Main
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.1\lib\idea_rt.jar=56984:C:\Program Files\JetBrains
------------1st Query---------------------
Please enter the disease name
Cold

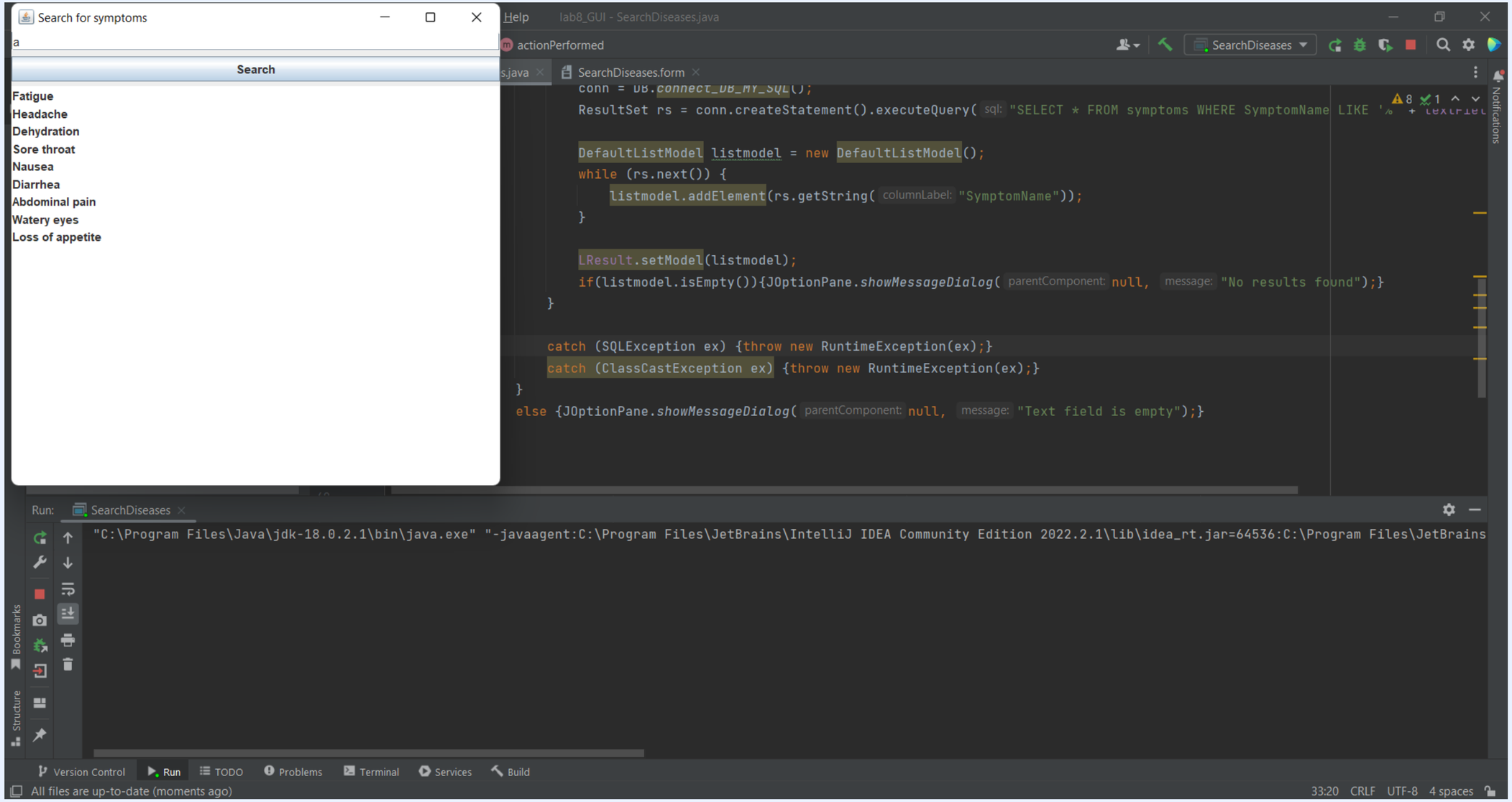
A common viral infection of the nose and throat.

------------2nd Query---------------------
Please enter the disease name
Pneumonia

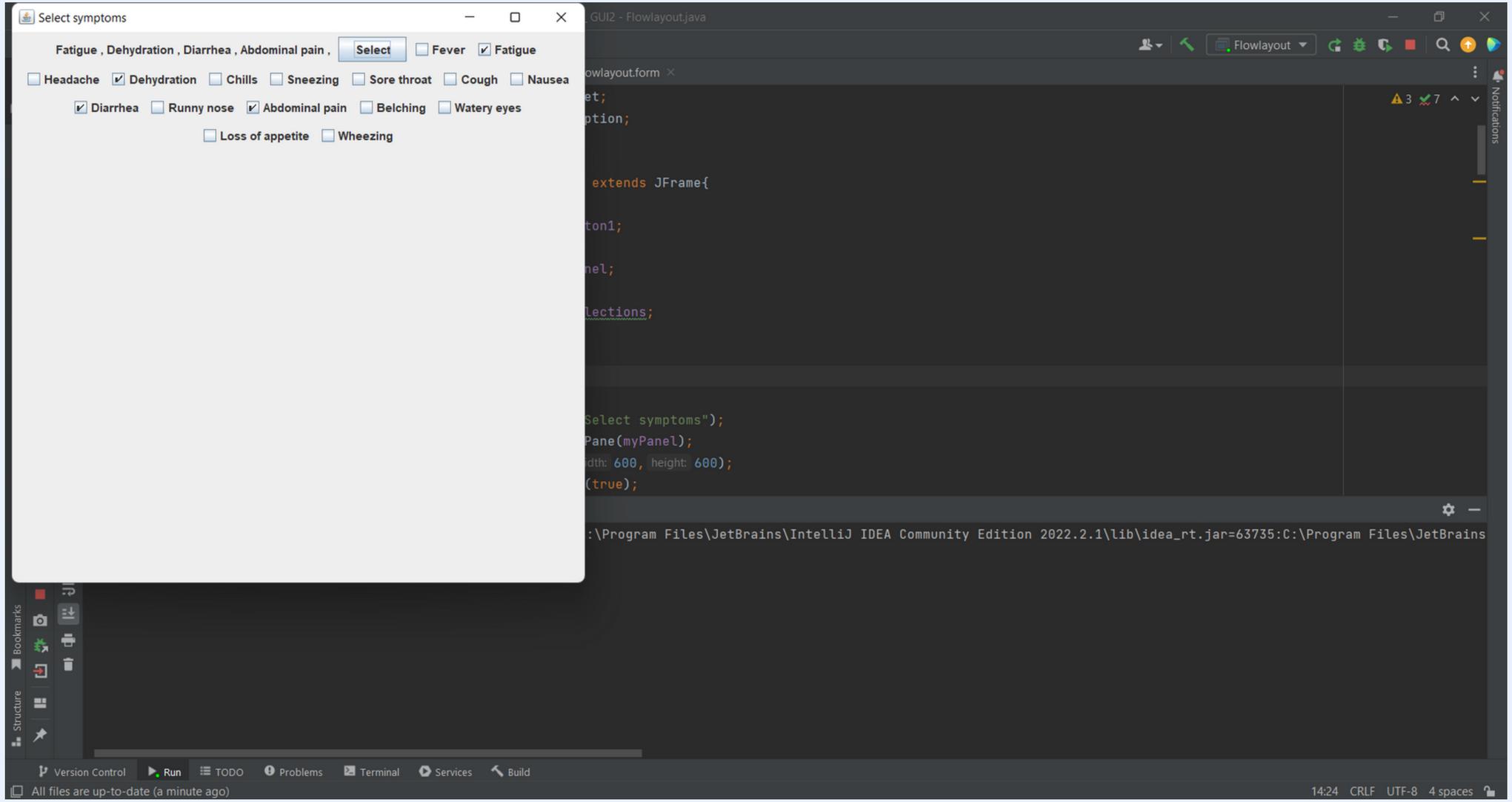
Pneumonia | Fever
Pneumonia | Fatigue
Pneumonia | Chills
Pneumonia | Loss of appetite
Pneumonia | Wheezing

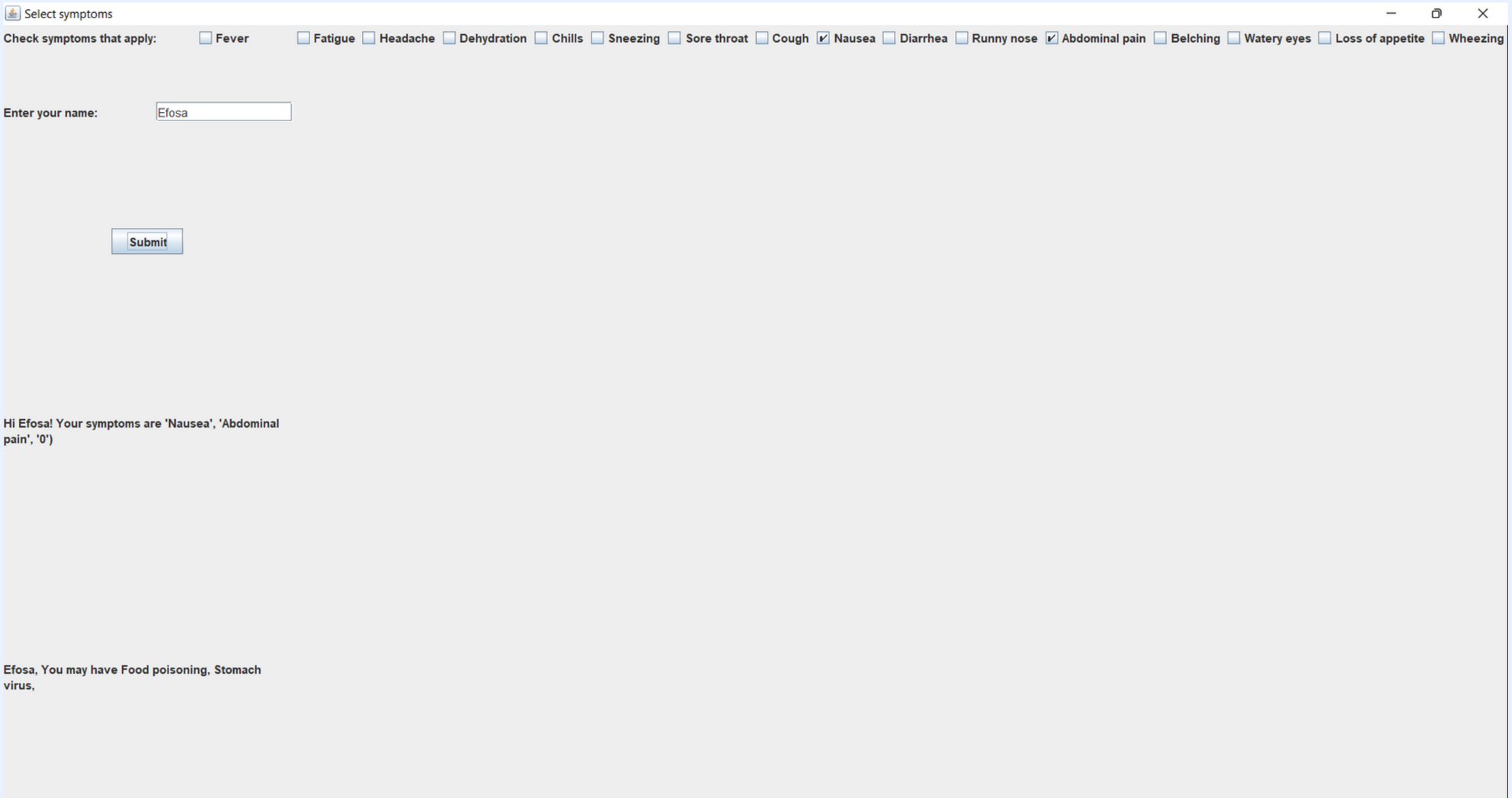
Process finished with exit code 0
Version Control
Run
Debug
TODO
Problems
Terminal
Services
Build
All files are up-to-date (moments ago)
20:1 CRLF UTF-8 4 spaces

SEARCH FORM


Search for symptoms
a
Search
Fatigue
Headache
Dehydration
Sore throat
Nausea
Diarrhea
Abdominal pain
Watery eyes
Loss of appetite
Help
lab8_GUI - SearchDiseases.java
actionPerformed
SearchDiseases
s.java
SearchDiseases.form
conn = DB.connect_DB_MY_SQL();
ResultSet rs = conn.createStatement().executeQuery(sql: "SELECT * FROM symptoms WHERE SymptomName LIKE '%
DefaultListModel listmodel = new DefaultListModel();
while (rs.next()) {
listmodel.addElement(rs.getString(columnLabel: "SymptomName"));
}
LResult.setModel(listmodel);
if(listmodel.isEmpty()){JOptionPane.showMessageDialog(parentComponent: null, message: "No results found");}
}
catch (SQLException ex) {throw new RuntimeException(ex);}
catch (ClassCastException ex) {throw new RuntimeException(ex);}
}
else {JOptionPane.showMessageDialog(parentComponent: null, message: "Text field is empty");}
Run:
SearchDiseases
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.1\lib\idea_rt.jar=64536:C:\Program Files\JetBrains
Version Control
Run
TODO
Problems
Terminal
Services
Build
All files are up-to-date (moments ago)
33:20
CRLF
UTF-8
4 spaces
Notifications
Bookmarks
Structure

SYMPTOM CHECKBOXES



FINAL DELIVERABLE

Our Clinical Diagnostic System provides diagnostic findings after capturing user input