

"COVID-19 INFORMATION APPLICATION"

Submitted by

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ABSTRACT

The objective of this covid-19 information application is to provide information about the current situation in the light of the second wave of covid-19. This application provides the current number of cases, deaths and recoveries world-wide and this information is updated everyday. The application also provides information about the symptoms of covid-19. This application utilizes the concepts of java.swing, java.awt, radio buttons, combo box, buttons, labels, password field, option panes, text fields, BufferedImage, interface, inheritance, functions, constructors, web scraping and database connection.

REQUIREMENT SPECIFICATION

The requirement specifications for the covid-19 information application includes:

- A Computer with a minimum of 4GB RAM.
- Java IDE with JDK 1.5 and above.
- JSoup library.
- Database software. (Here, we have used Postgresql)
- JDBC driver for the database software.

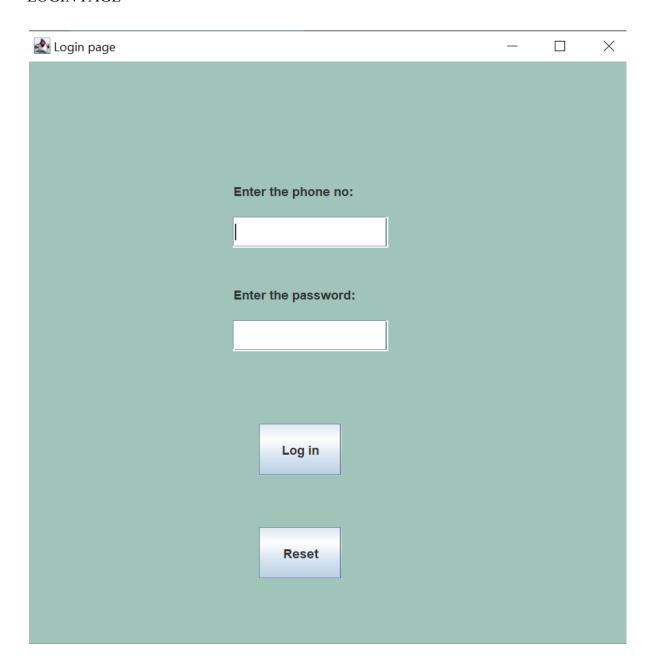
WORKING DESCRIPTION

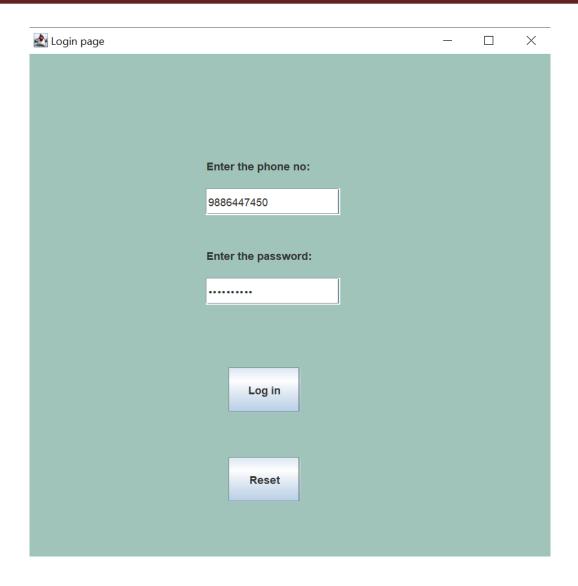
When the code is run, the first page appears which contains the heading 'COVID - 19 INFORMATION APPLICATION' along with a to log in named as 'Log in'. When the 'Log in' button is clicked we reach the 'Log in Page' where 'Phone no.' and 'Password' are asked to be entered in the text fields provided. If incorrect credentials are entered then a pop-up error appears on the screen indicating it. When the correct credentials are entered and 'Log in' is pressed we are taken to the 'Welcome' page where a drop down menu containing all the options that can be chosen is displayed. The options displayed are: 'No. of Covid-19 cases Today', 'Symptoms of Covid-19' and 'Trend graphs'. When 'No. of Covid-19 cases Today' option is selected, a window is displayed containing the live update of the number of Covid-19 cases, number of recovered cases and number of deaths. It also contains the date of the day on whichever day the application is run. The 'Symptoms of Covid-19' page contains the information about the symptoms that may show up in a person who is affected by Covid-19. The symptoms are of three categories viz., 'Most Common Symptoms', 'Least Common Symptoms' and 'Serious Symptoms'. Finally, the 'Trend graphs' option takes us to a page containing two options which are 'Linear' and 'Logarithmic'. If the 'Linear' radio button is clicked a linear graph showing the linear trend of the number of cases is displayed and if the 'Logarithmic' radio button is clicked the logarithmic trend of the number of cases is displayed. These graphs are downloaded images from a local directory. Whenever any of these windows are tried to be closed a warning message appears asking for the confirmation to close the window.

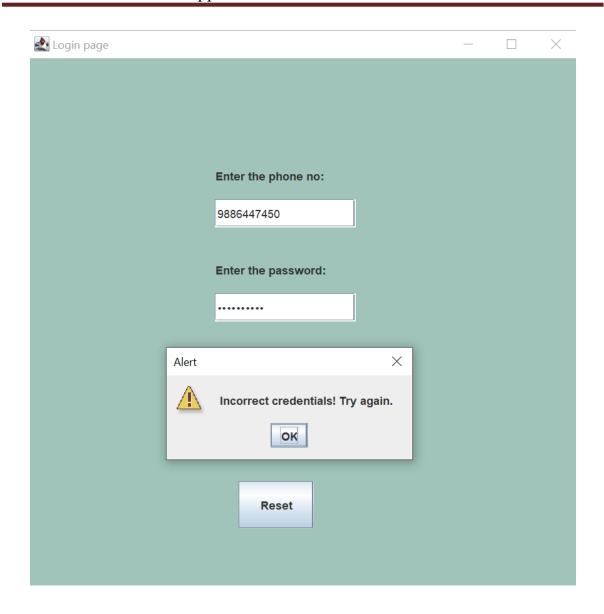
SNAPSHOTS

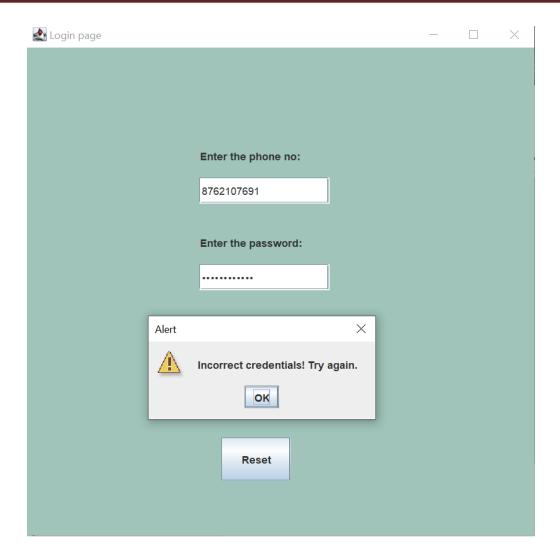


LOGIN PAGE

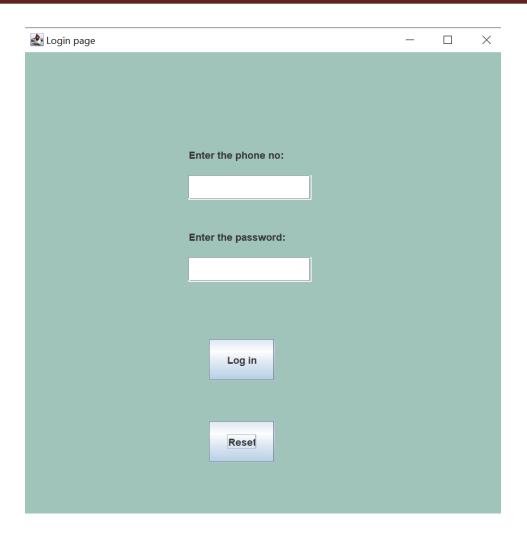




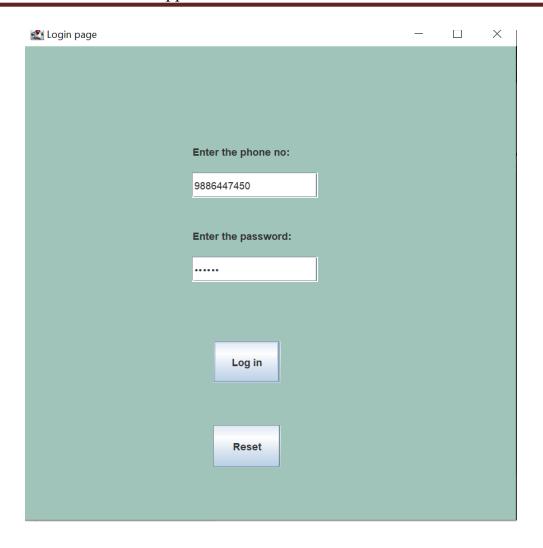




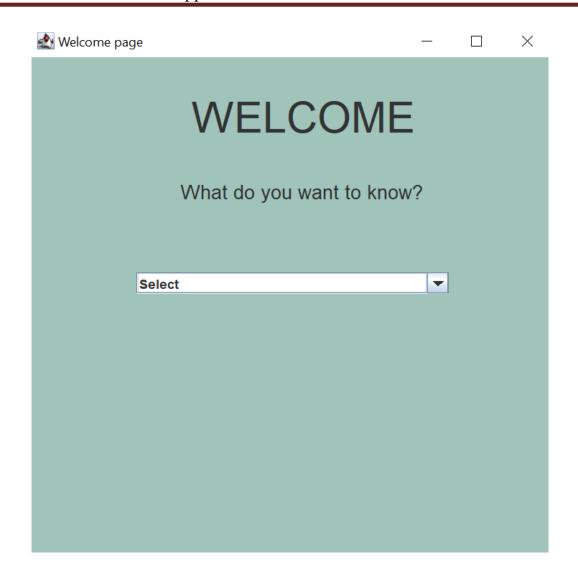
Pressing reset:

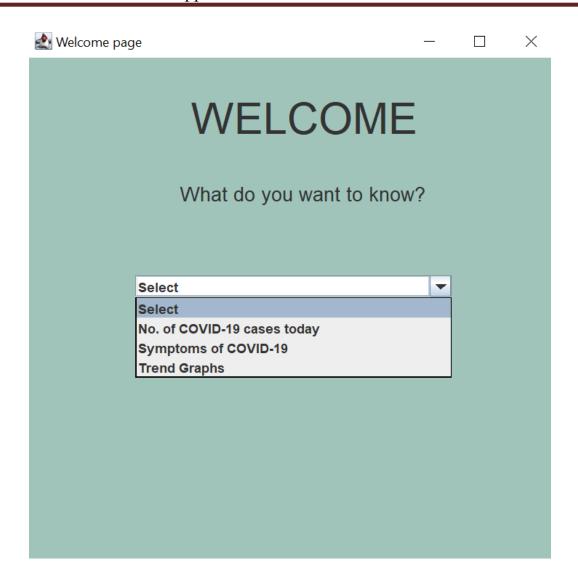


Correct credentials:



Entering the correct credentials will directly take you to the welcome page:

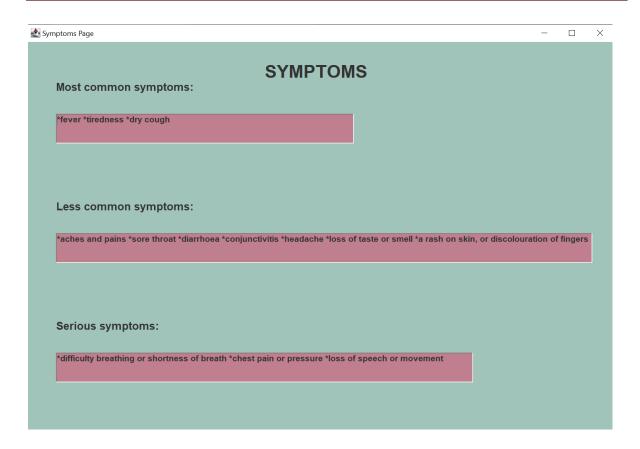




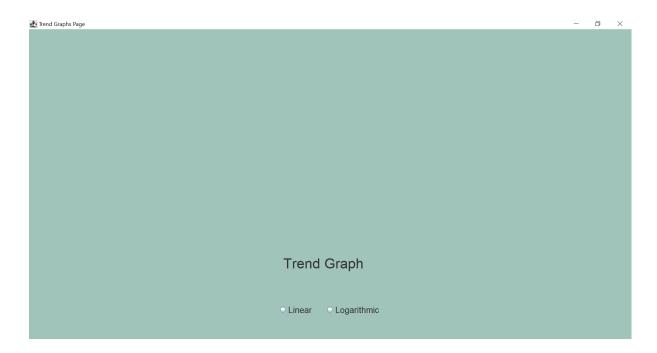
If No. of covid cases option is selected (live update - values change everyday):



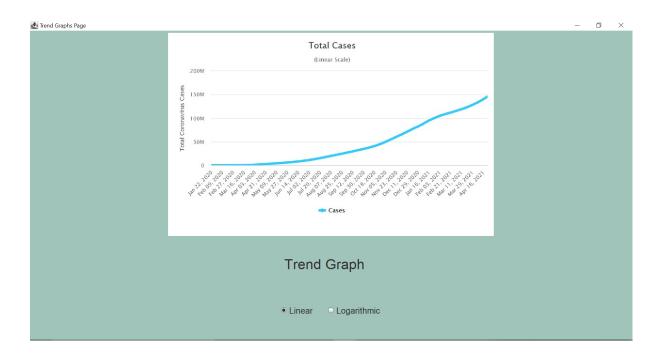
If Symptoms of Covid-19 option is selected:



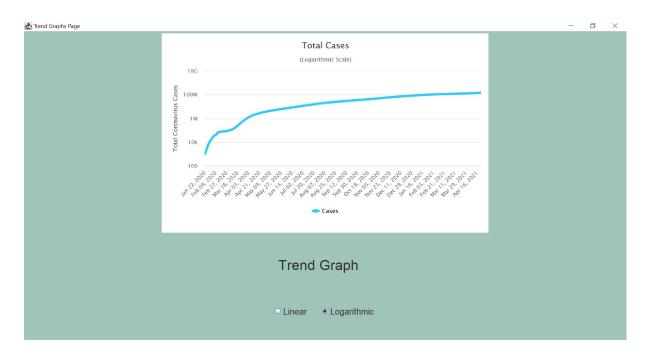
If Trend Graphs option is selected (before selection of either radio buttons):



After selecting Linear radio button:



After selecting Logarithmic radio button:



Whenever any of the pages are trying to be closed the following warning appears.



Database and tables used:

(Name of Database used: covid)

For login page (table used):

Table name: users

For symptoms (tables used):

Table names: symptoms1, symptoms2, symptoms3

```
SQL Shell (psql)
covid=# select * from symptoms1;
   mcs
 *fever
*tiredness
*dry cough
(3 rows)
covid=# select * from symptoms2;
 *aches and pains
 *sore throat
 *diarrhoea
*conjunctivitis
 *headache
*loss of taste or smell
*a rash on skin, or discolouration of fingers or toes+
(7 rows)
covid=# select * from symptoms3;
*difficulty breathing or shortness of breath
*chest pain or pressure
*loss of speech or movement
(3 rows)
```

CONCLUSION

In these unprecedented times and the rising second wave of coronavirus, the covid-19 information application keeps you updated on the number of cases, deaths and recoveries worldwide. It enlightens the user about the symptoms of Coronavirus. The application also gives the trend graphs in linear and logarithmic form. This app provides us the opportunity to retrieve all this information within a nick of time.

REFERENCES

- 1. https://www.worldometers.info/coronavirus/?utm_campaign=homeAdvegas1?
- 2. https://www.worldometers.info/coronavirus/coronavirus-cases/
- 3. https://www.javatpoint.com/java-joptionpane#:~:text=The%20JOptionPane%20class%20inherits%20JComponent%20class.