**RESULTS**

Graphical user interface, text, application

Description automatically generatedThe results obtained from various models are presented in this section. The Fig. 1 shows the word cloud as the tweets are related to covid-19, we can see the words like help, case, test, death, report etc. along with live, update which shows the diversity of the tweets belong to various aspects. The Fig.2 show the confusion matrix for the Naïve bayes model. Similarly, Fig.3 and Fig.4 show the confusion matrix for Logistic regression and LSTM model respectively. Fig.5 shows the confusion matrix of attention model.

Fig.1 Word Cloud

Graphical user interface, application, Word

Description automatically generated

Fig.2 Confusion Matrix using Naïve Bayes

Graphical user interface, application, Word

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Fig.3 Confusion Matrix of Logistic Regression

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Fig.4 Confusion Matrix of LSTM Model

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Fig.5 Confusion Matrix of Attention model

Graphical user interface, text, application

Description automatically generated

Fig.6 Classification Report for Naïve Bayes

Graphical user interface, text, application

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Fig.7 Classification Report for Logistic Regression

Graphical user interface, text, application, email

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Graphical user interface, text, application

Description automatically generatedFig.8 Classification report for LSTM model

Fig.9 Classification Report for Attention model

We can see that according to the classification report the accuracy of

* Naïve Bayes is 0.83.
* Logistic Regression is 0.86 and
* LSTM model is 0.83
* Attention model is 0.83

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated Fig.10 Accuracy Score

Fig.11 F1 Score

The Fig.10 shows the accuracy score for the Naïve Bayes, Logistic Regression, LSTM model and the attention model and from the graph we can see that Logistic Regression has better accuracy than other models. Fig.11 shows the F1 score for different supervised models which we used and we can see that logistic regression has the highest f1 score than other models.

**Conclusion:**

In this project work we have used the twitter dataset to develop an experimental approach to analyze the reactions of people on Twitter considering the popular words either directly or indirectly based on this pandemic. Using the data various models like Naïve Bayes, Logistic Regression, LSTM and attention models were generated. All these models were validated with set of training data. The Logistic Regression model predicts the output with the highest accuracy of 0.83 among other models.

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