# CONCLUSION

An accident can change the lives of many people. It is up to each of us to bring down this increasing number. This can be made possible by adopting safe driving measures to an extent. Since all instances of accidents cannot be attributed to the same cause, proper precautionary measures will also need to be exercised by the road development authorities in designing the structure of roads as well as by the automobile industries in creating better fatality reducing vehicle models. One thing within our capability is to predict the possibility of an accident based on previous data and observations that can aid such authorities and industries. This project was successful in creating such an application that can help in efficient prediction of road accidents based on factors such as types of vehicles, age of the driver, age of the vehicle, weather condition and road structure, This model was implemented by making use of several data mining and machine learning algorithms applied over a dataset for Bangalore and has been successfully used to predict the ris probability of accidents over different areas with high accuracy.

The model can be further optimized in future to include several constraints that have been left out in the current study. These optimized models can be efficiently utilized by the government to reduce road accidents and to implement policies for road safety. Another scope of this work would be to develop a mobile app that will help the drivers in choosing a route for a ride. A call out to the driver through the maps service can also be implemented that would also announce the risk probability in a chosen route along with the directions. This can then be implemented by service provider companies such as Uber, Ola and so on in future. This will also be useful in having a better surveillance of accident prone areas and providing emergency services in the event of an accident. Better road safety instructions can also be installed along the highways taking into account the risks obtained from this model.