

## **Smart Tour Planner for Sri Lanka**

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Tourism industry is an asset to Sri Lankan economy. It contributes around 5% in national revenue. The development of tourism industry is significantly slow as compared to the other tourist countries because we are not using new technologies in this field. In recent years, several applications are developed for the tourism industry. However, those applications are only used to provide the information about the places. The most important thing when it comes to going for a tour is to manage the time. Moreover, managing time at an unknown place is very difficult. Climatic changes also affect the tourists to visit some places. To overcome these issues, we have proposed an Android based mobile application that can help tourists to plan their tour to Sri Lanka before arriving here. The application covers 5 major areas with the methodology. 1) Finding the shortest route using "Nearest Neighbor algorithm" that covers the as many as possible places to visit with respect to the tourist's budget, time and tour type. 2) An intelligent system that records the time spend at a place, then by using machine learning algorithms using Google's "TensorFlow" that can predict the time needed to visit that particular place for new tourists. 3) A schedule for tourists that they have to follow during their tour that helps to manage time. 4) Alerting the tourists for any emergency situations (flood, tsunami, Land sliding) using crowdsourcing. 5) Comment summarization and sentiment analysis that can give a brief idea about the places those tourists are planning to visit. At last, user gets a scheduled tour that he can follow up during visit to Sri Lanka. The evaluation of this application depends upon the time and money saved due to scheduling of the tour, and that saved time is use to visit some more places. This application helps the tourists to plan their tour easily that significantly increase the tourism in the country and will positively affects the country's economy.

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