**Project Report**

**Project Title:** Create an “Integrated Market Intelligence Platform” to keep the prices of daily essential commodities stable.

**Team:** ViperX

**Description:**

In Bangladesh, Increasing price of daily needs products is one of the biggest national problem. Our country is developing. High inflation rate left majority people of Bangladesh in hard situation. Inflation rate could go high with no time. This situation left people under pressure. Like, in recent price of onion increased suddenly very high. Country is still suffering in this situation. High inflation rate also left Government in hard situation. High inflation puts pressure on a government to increase the value of the state pension and unemployment benefits and other welfare payments as the cost of living climbs higher**.** Inflation rate should be bounded with limit. To control inflation rate, there is a need of integrated market intelligence platform. Through this integrated market intelligence platform , district administration could predict upcoming inflation rate and could take necessary steps before inflation rate go beyond our reach.

**Solving Methodology:**

In order to develop an integrated market intelligence platform we used a dataset from kaggle[1].The Dataset includes information on various country, market, price of good in local currency, quantity of good, and month recorded for several goods(like:Rice, Wheat ). Then the datset were feed into into weka(a tried and tested open source machine learning software that can be accessed through a graphical user interface(GUI))to apply various machine learning algorithms on the dataset in order to check which algorithm gives more accuracy.Among those Convolutional Neural Network (CNN) gave the most accuracy for this particular dataset.Then a machine learning model was developed using CNN to predict about the future prices of the goods. So that necessary steps can be taken before inflation takes place as well as the supply chain can be maintained properly so that there will be a certainty of supply of daily necessary goods. Taking into account the current local and international prices of each individual goods. And **Numpy ,Pandas** and **Matplotlib** Libraries of python were also used to plot the important data in order to show the correlations between various factors for price determination (like:rate of increase in price,international market values,import and export quantity) also .This helped to draw some meaningful insights form the data.

Project will also take input amount of goods needed in specific month for Bangladesh and amount of that goods produced in specific month in Bangladesh. By analyzing these data, our model will give result to Government Administration how amount of goods need to import in specific month.