

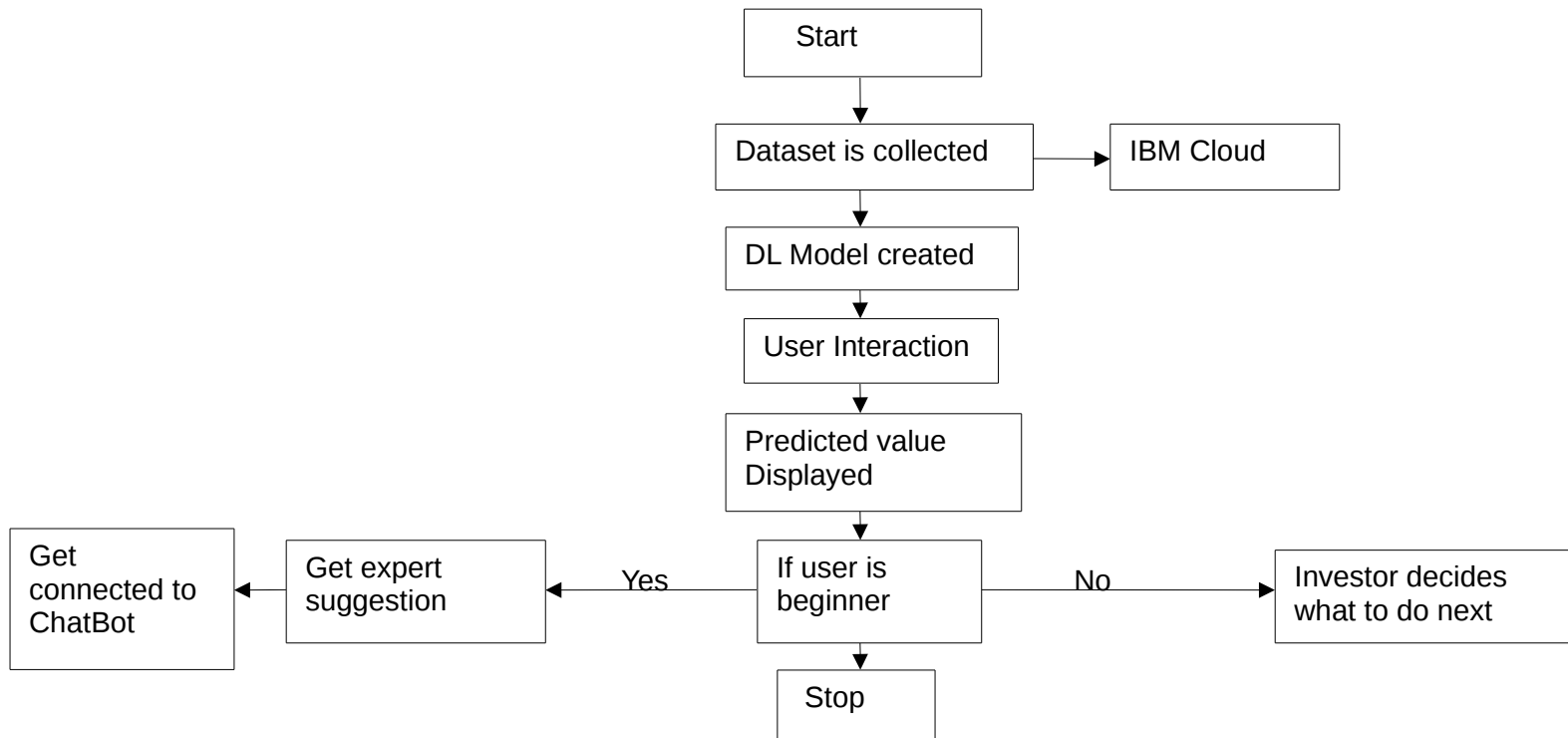
## Project Design Phase-II Technology Stack (Architecture & Stack)

|               |                            |
|---------------|----------------------------|
| Date          | 03 October 2022            |
| TeamID        | PNT2022TMID06168           |
| Project Name  | Crude Oil Price Prediction |
| Maximum marks | 4 Marks                    |

### Technical Architecture:

The Crude oil price prediction includes the architectural diagram as below and the information as per the table1 & table 2

### Example: Price prediction for investors



**Table-1 : Components & Technologies:**

| <b>S.NO</b> | <b>Component</b>    | <b>Description</b>   | <b>Technology</b>                                     |
|-------------|---------------------|--|---|
| <b>1.</b>   | User Interface      | How investor interacts with application e.g. Web UI, ChatBot | HTML, CSS, JavaScript / Angular Js / Python Flask etc |
| <b>2.</b>   | Application logic-1 | DL Model for price prediction                                | LSTM Model  |
| <b>3.</b>   | Dataset collect     | For predicting the prize of the crude oil need a dataset     | Free resources for data collection                    |
| <b>4.</b>   | User interact input | After train the model we give the input to the model         | Trained model by RNN                                  |
| <b>5.</b>   | Data storage        | The predicted values are used for display                    | IBM Cloud   |
| <b>6.</b>   | Display output      | Prize list for display to the investor                       | Python Flask  |
| <b>7.</b>   | Expert suggestion   | If the new investor visit the site give ideas                | ChatBot   |
| <b>8.</b>   | ChatBot             | Investor can interact and get knowledge for market shares    | Watson AI   |

**Table-2: Application Characteristics:**

| <b>S.NO</b> | <b>Characteristics</b> | <b>Description</b>   | <b>Technology</b>         |
|-------------|------------------------|--|---------------------------|
| <b>1.</b>   | Open source Data       | Data for price predicting technology   | Many open source websites |
| <b>2.</b>   | Availability           | The investor can get our service at anytime  | Reverse proxy             |
| <b>3.</b>   | Performance            | The user can get the data so quick even the users increases there won't be any loss of performance |                           |