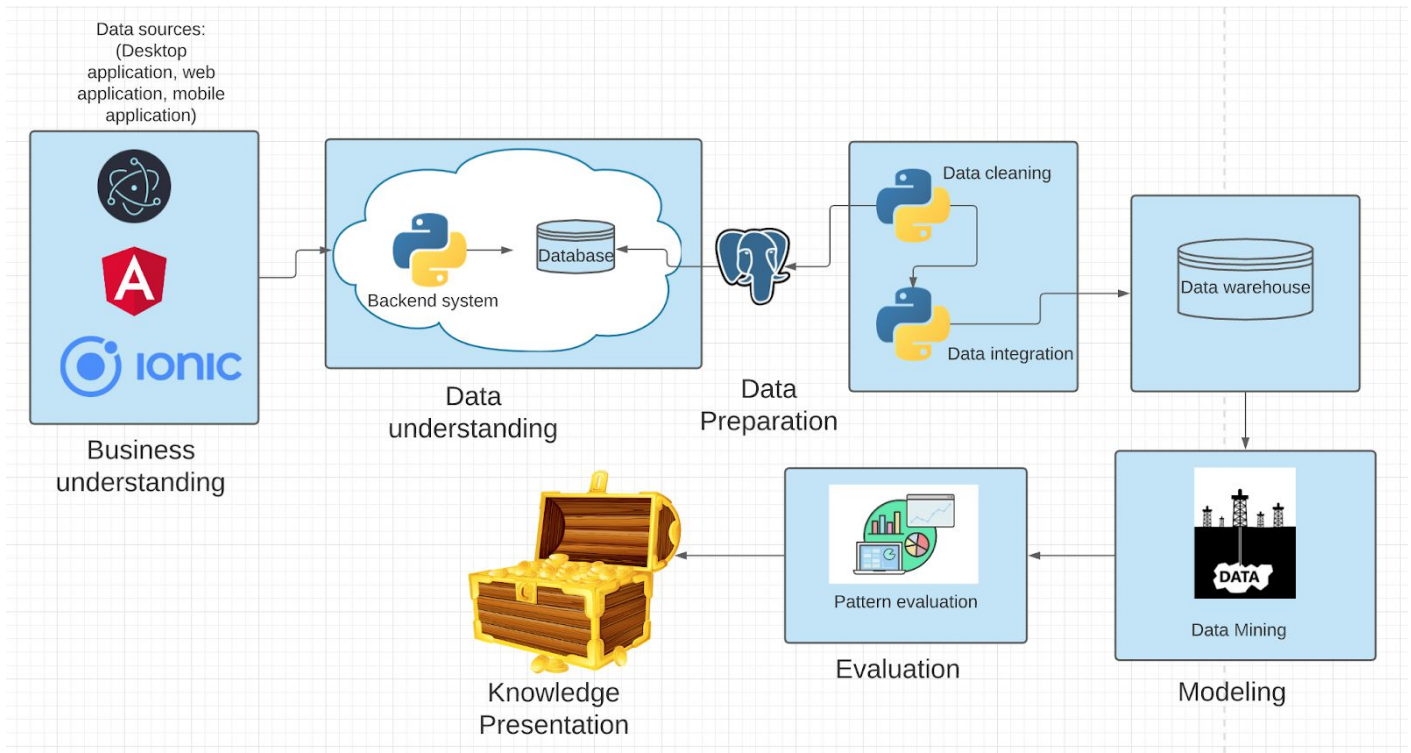Name: John Royce C. Punay   Course: PSMDSSC-101 - Data Mining
Student no: 2013048

1) Create a data mining pipeline by interrelating the different stages of the data
   mining process models.

Data mining pipeline with KDD(Knowledge discovery database) and CRISP-DM(
Cross-industry process for data mining) models applied in systems.

One of the main important parts of the system is the ***monitoring tool***. It helps the
company to understand what is going on from the ***end-to-end*** integration perspective.
First is the measurement of user interaction in the app then how does the system
respond from that action. The main objective is to monitor and capture user events and
then from the data collected, create intelligent methods that would discover any useful
pattern for later usage.
Here is the classification of measurements that needs to observe.

1) User detailed information (name, location, version, platform, etc)
2) User application snapshot (current user view)
3) Client application logs either warning, useful, errors (including API
   responses and request payloads)
4) User rage clicks (user frustration)
5) Segment health (events per session, session length, active time)

6) Loading time (where is the slowest page)

Having these measurement guidelines, the system is easy to ***debug,*** create an ***improvement*** that will yield the greatest benefits, track, and measure outcomes. It will deliver an exceptional experience to the user furthermore to avoid the loss of revenue.

Let's begin, now the first is about ***Business Understanding*** the applications underneath are up and running then divided into three platforms a desktop application, web application, and mobile application. In this example, the application is online shopping where every week is on sale. Let's assume a lot of people will buy and use the application, now the measurements I listed above will serve as the input to the available source which is the backend system. Those data will be examined and verify if it is accurate and complete because this is for in preparation for ***Data Understanding***. Then ***Data Preparation*** is being processed by another backend system that removes noise and outliers of the input, before storing it in data warehouse it should comply with a valid structure and unified schema. Next is ***Modeling*** which is an essential process for creating intelligent methods and pattern extraction. To identify if the pattern is truly interesting it is time to evaluate knowledge base on interestingness measures. ***Evaluation*** results will be assessed by decision-makers if the outcome would have an impact on the business. The final phase is ***Knowledge or Data Presentation*** the knowledge will be presented to the supervisor or senior management in the form of charts, tables, and matrices. The next step is to decide what will be the best for the business.