Indira College of Commerce and Science

Project Synopsis

On

“Efficient clustering algorithm to segregate tests based on execution behavior”

Academic Year:

**2018-19 Semester IV**

Front End/Back End/Technologies to be used:

**Python 3.0, anaconda**

**MYSQL**

Platform (Operating System):

**Windows**

Team Members:

Ganesh Londhe

(MCS-II, Roll No:23)

**Description:**

This project is developing to automate the sales department activities of an organization. This department is in action when an enquiry is made for some items and against which the sales order is given. This order have to be fulfilled and respective stock has to be managed. The order verification for the respective order have to be done.

**Efficient clustering algorithm to segregate tests based on execution behavior**

This project is based on unsupervised learning. clustering analysis is used to gain some valuable insights from our data by seeing what groups the data points fall into when we apply a clustering algorithm k-means.

The project is developed to separate the tests based on the behavior using clustering algorithms. The project will help to analyze the execution of the tests using statistics calculated by program. The project will help to analyze the regression test analysis.

**Scope of the system:**

*This project automates below listed activities. Following things can be achieved.*

* *User can apply this program to any tests in rtcdb by making slight/no change in code.*
* *Scope is limited to the rtcdb1.*

**Possible Outcomes of the System:**

* *find out the particular tests along with their duration2.*
* *Duration = regression test start and end timing*
* *stores them into a CSV file*
* *read those tests and perform statistical operations*
* *store those tests with statistical result*
* *reading, applying k-means*
* *plotting them on a line for user report*

**Advantages of the system:**

* *The system is built to automate the test segregation so that the process stores the entire information and .*
* *Many reports are generated which are there in current systems.*
* *Well suited for large scale business.*

**Limitations of the system:**

* *the project is limited to the RTCDB.*
* *Analysis of yearly report is not generated.*