

Chapter 3

Software Design

3.1 DFD (Data Flow Diagram): -

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into great detail, which can later be elaborated.

3.1.1 DFD LEVEL 0

This DFD is show the interaction of the user with the system and user get the acknowledgement from the system for the particular input.

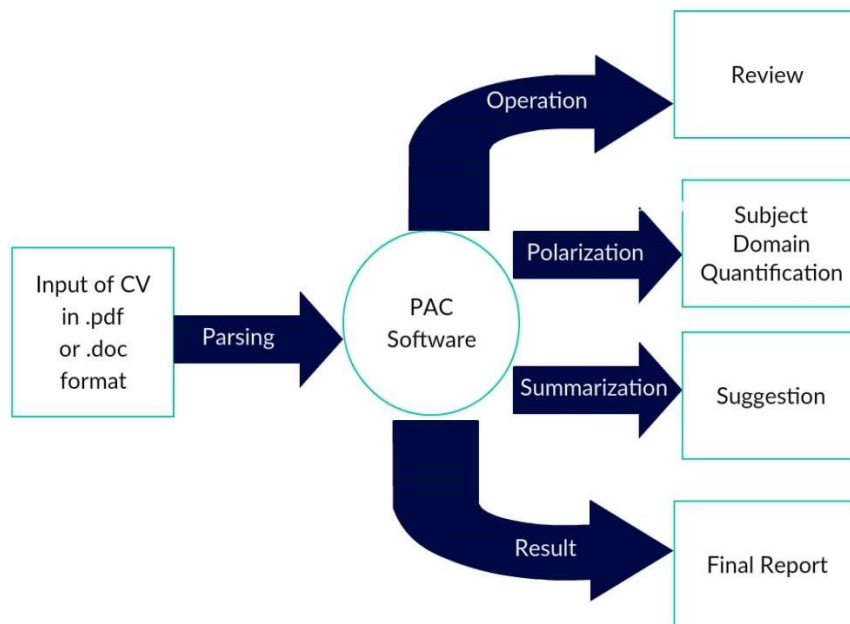


Figure 3.1: DFD level 0.

3.1.2 DFD LEVEL 1

This level of DFD show the extension of the DFD level 0 diagram. By this, CV we can see that the user can send the message and receive the message using the system. System sends the acknowledgement for send and acknowledge for the inbox in the form of messages

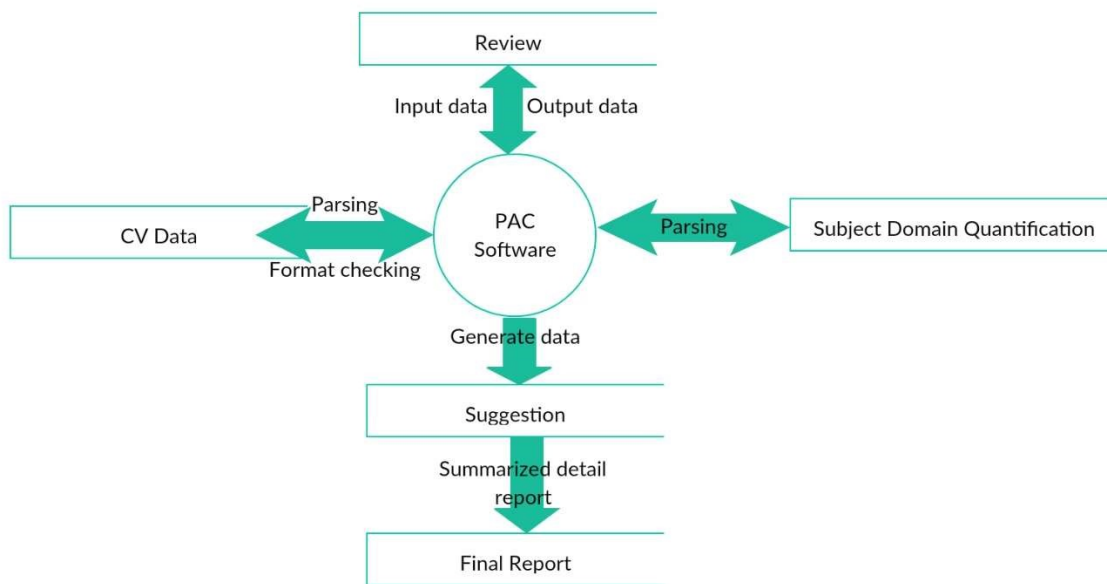


Figure 3.2: DFD level 1.

3.2 Flow Chart: -

A flowchart is a type of diagram that represents an algorithm, workflow or process. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem.

Flowcharts typically use standard symbols to represent different stages or actions within the chart. For example, each step is shown within a rectangle, while each decision is displayed in a diamond. Arrows are placed between the different symbols to show the direction the process is flowing.

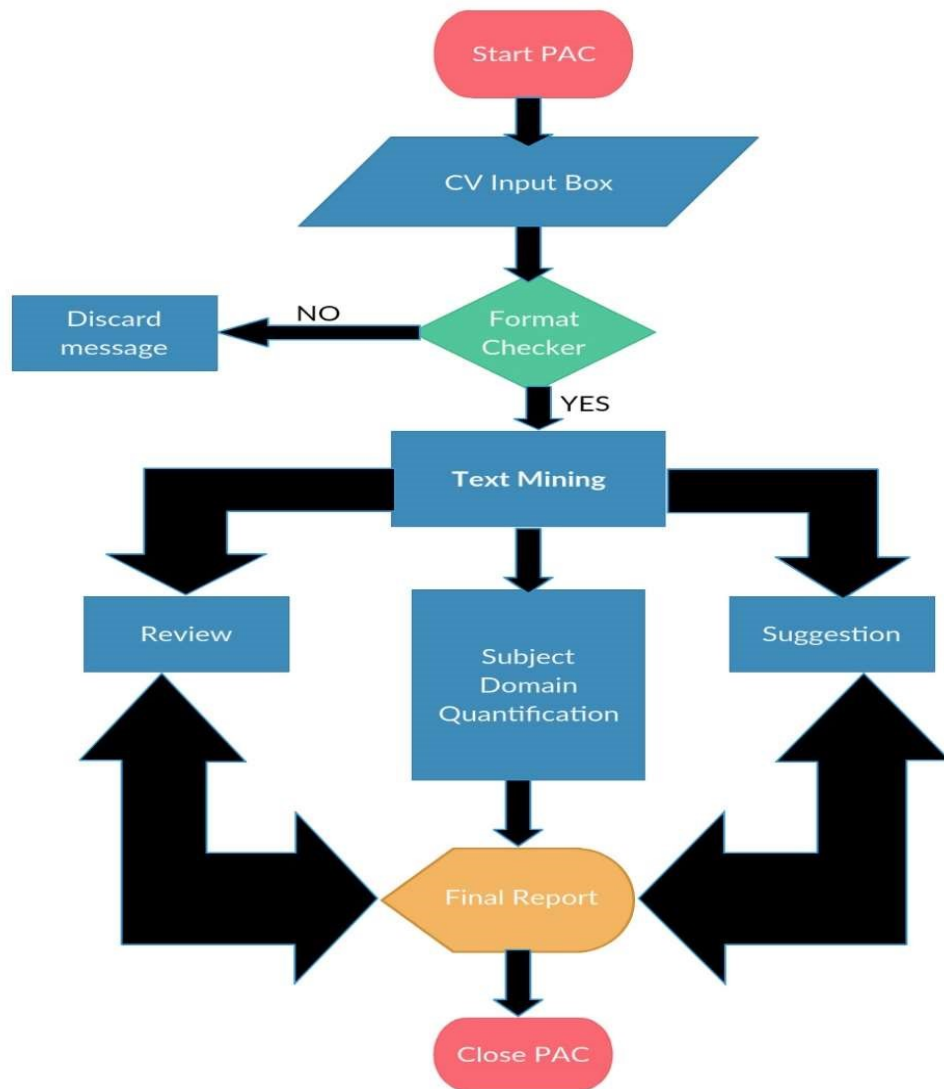


Figure 3.3: Flowchart

3.3 Gantt Chart:-

A Gantt chart is a type of bar chart that illustrates a project schedule, named after its inventor, Henry Gantt (1861–1919), who designed such a chart around the years 1910–1915.^{[1][2]} Modern Gantt charts also show the dependency relationships between activities and current schedule status.

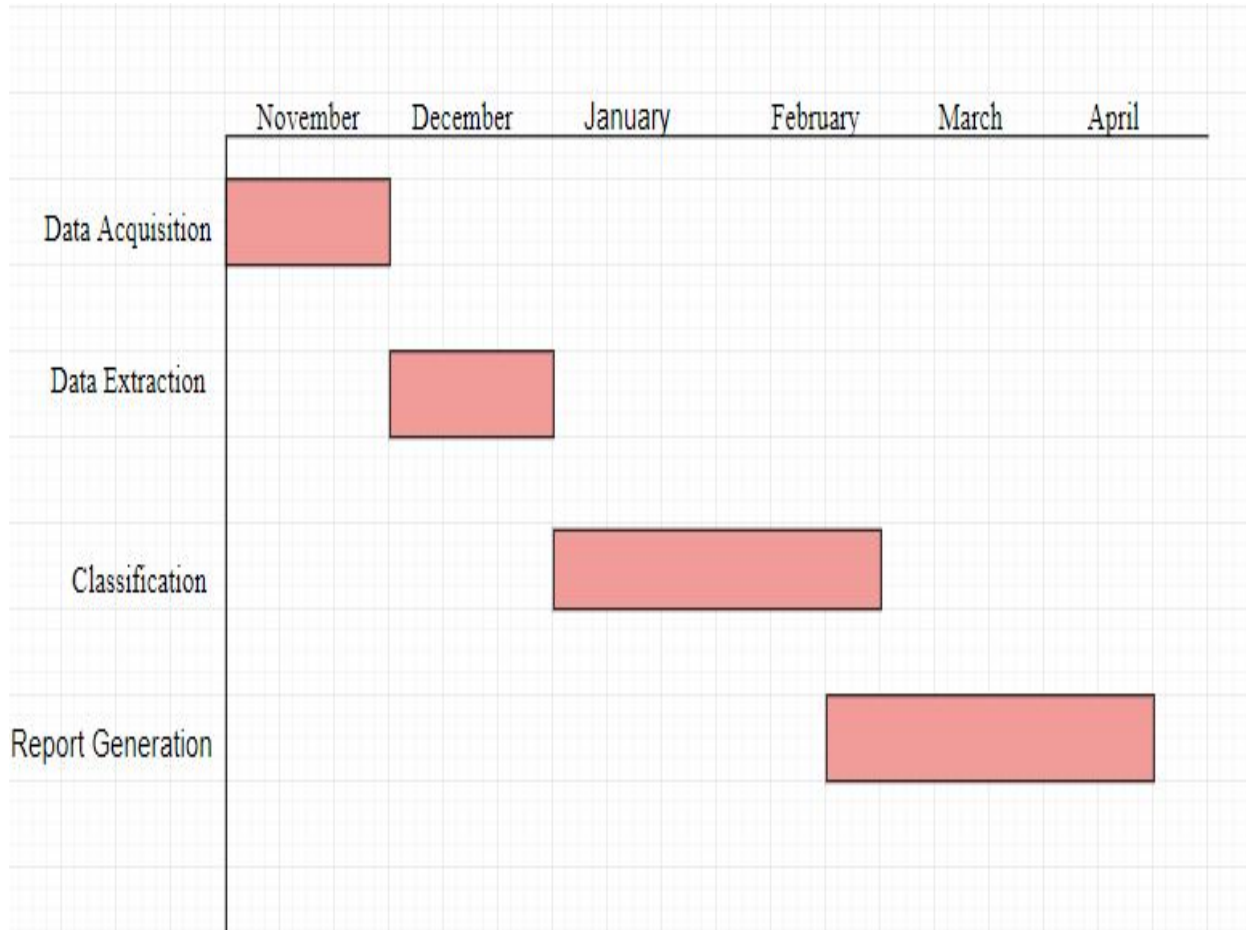


Figure 3.4: Gantt chart