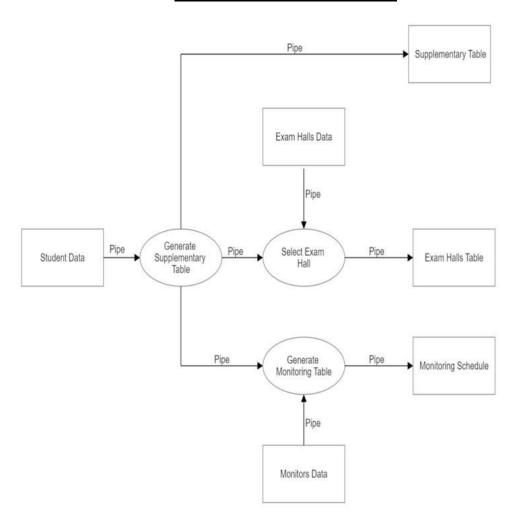
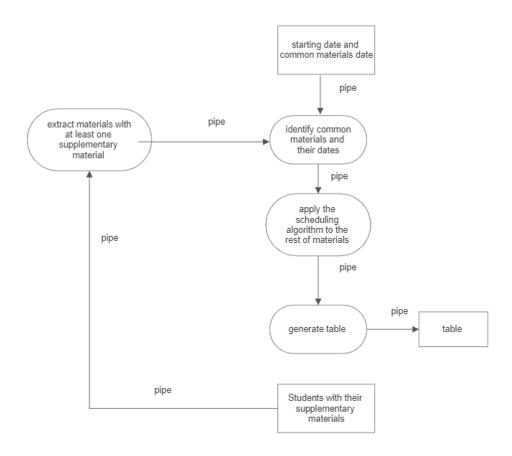
## **Architectural design**



## Fig (1): Architectural design of the system

Figure (1) depicts a pipe and filter architecture, which is a method of data processing in which the output of one filter can serve as the input for another.

The supplementary table filter will provide the relevant supplementary table, which will then be used as an input to exam halls and monitoring table filters, respectively. The monitoring table filter has another input, monitor's data, to provide a monitor schedule, and the exam halls filter has another input, examination halls data, to provide the appropriate halls table.



## Fig (2): main module architecture

In figure (2), students will move through a pipe with their supplementary materials to a filter that extracts materials with at least one supplementary material; the output of this filter will act as an input with the starting date and common materials dates to another filter that identifies common materials and their dates, placing them in the proper place in the table; the remaining supplementary materials will move to another filter that applies the scheduling algorithm.