

Step4: if $op1 = W(a)$, $op2 = W(b)$, two operations come from different users, and $W(a)$ is on the route from $W(b)$ to

$R(b)$ then

A causal edge is added from $op1$ to $op2$

Step5: Check whether the graph is a DAG by topological sorting

3.5 Data flow diagram

Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs. Data flow diagrams can be used to provide a clear representation of any business function. The technique starts with an overall picture of the business and continues by analyzing each of the functional areas of interest. This analysis can be carried out in precisely the level of detail required. The technique exploits a method called top-down expansion to conduct the analysis in a targeted way. As the name suggests, Data Flow Diagram (DFD) is an illustration that explicates the passage of information in a process. A DFD can be easily drawn using simple symbols. Additionally, complicated processes can be easily automated by creating DFDs using easy-to-use, free downloadable diagramming tools. A DFD is a model for

constructing and analyzing information processes. DFD illustrates the flow of information in a process depending upon the inputs and outputs. A DFD can also be referred to as a Process Model. A DFD demonstrates business or technical process with the support of the outside data saved, plus the data flowing from the process to another and the end results.

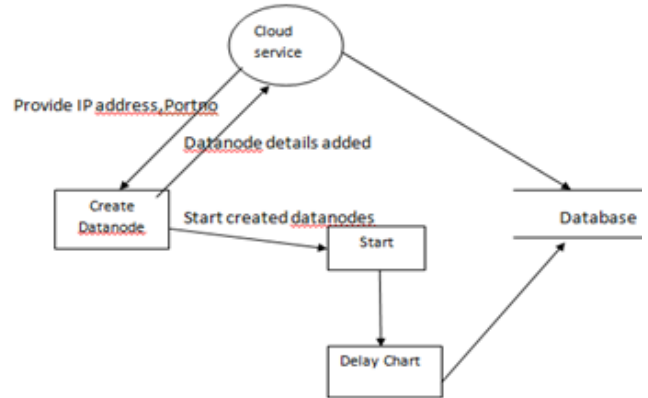


Figure 3: Data Flow Diagram: For CSP

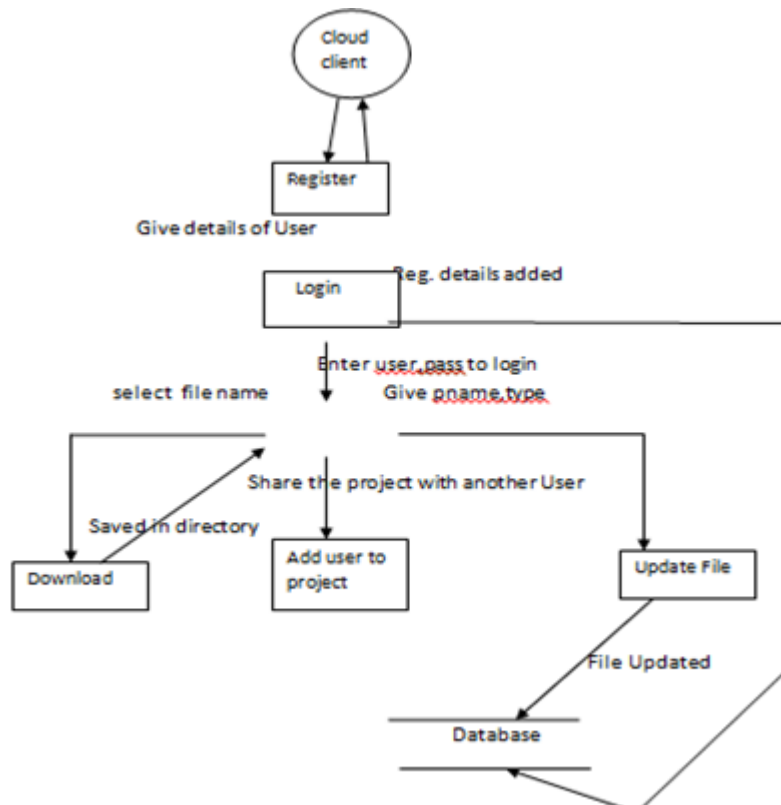


Figure 4: For cloud users

4. Results

Step1: Click on create data node to create a new data node

