

## EXPERIMENT NO.: 11

**Date of Performance:**

**Date of Submission:**

### **Aim: Activity Diagram for Product Price Comparison**

**THEORY:** An activity diagram shows the flow from activity to activity .An activity is an ongoing non atomic execution within a state machine .Activities ultimately results in some action, which is made up of executable atomic computations. We can use these diagrams to model the dynamic aspects of a system. Activity diagram is basically a flow chart to represent the flow form one activity to another . The activity can be described as an operation of the system. So the control flow is drawn from one operation to another. This flow can be sequential, branched or concurrent. Activity diagrams deals with all type of flow by using elements like fork, join etc.

#### **Fork**

A fork represents the splitting of a single flow of control into two or more concurrent Flow of control. A fork may have one incoming transition and two or more outgoing transitions, each of which represents an independent flow of control. Below fork the activities associated with each of these path continues in parallel.

#### **Join**

A join represents the synchronization of two or more concurrent flows of control. A join may have two or more incoming transition and one outgoing transition. Above the join the activities associated with each of these paths continues in parallel.

#### **Branching**

A branch specifies alternate paths takes based on some Boolean expression Branch is represented by diamond Branch may have one incoming transition and two or more outgoing one on each outgoing transition, you place a Boolean expression shouldn't overlap but they should cover all possibilities.

#### **Swim lane:**

Swim lanes are useful when we model workflows of business processes to partition the activity states on an activity diagram into groups. Each group representing the business organization responsible for those activities, these groups are called Swim lanes .

#### **Procedure:-**

Step1: First initial state is created.

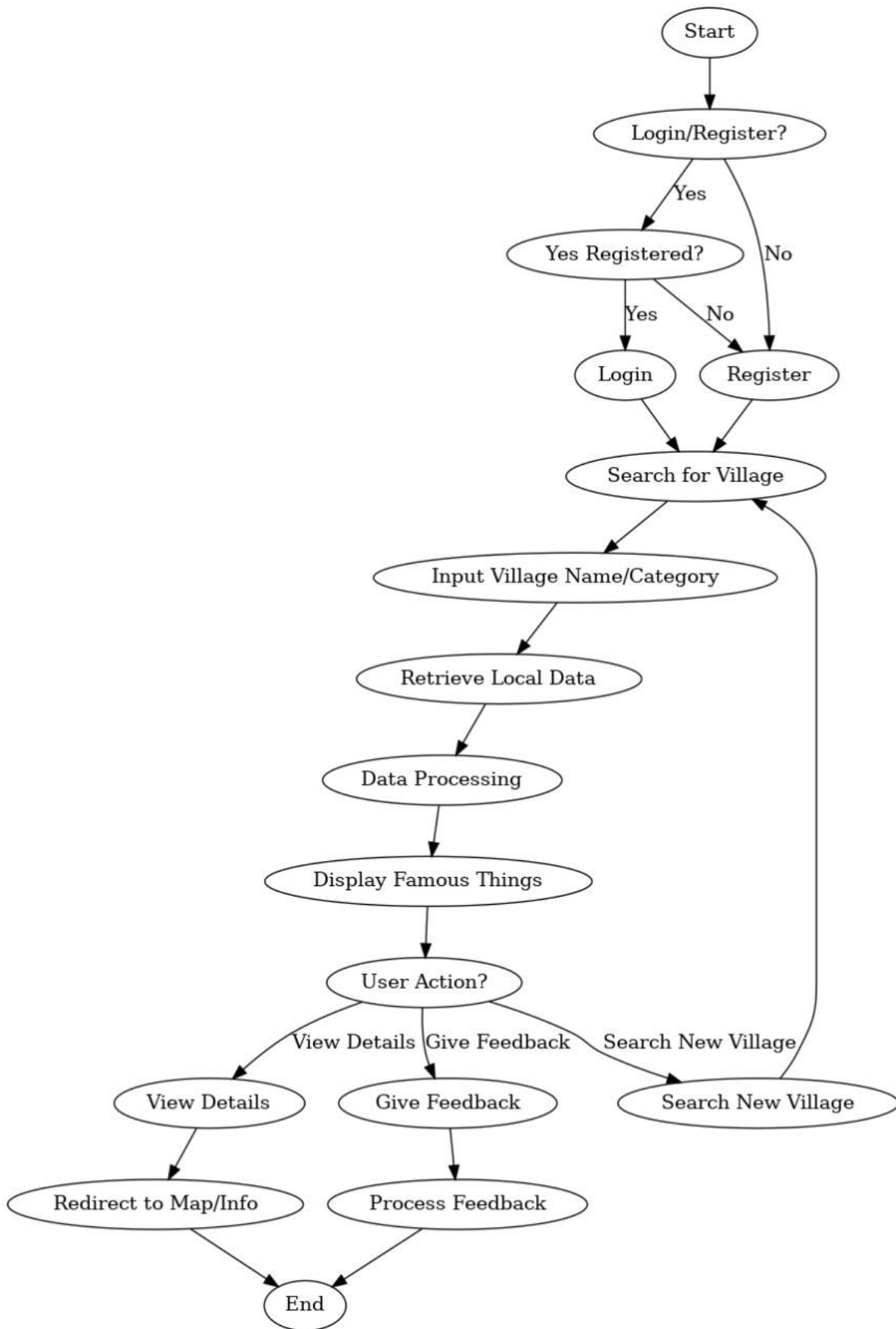
Step2: After that it goes to the action state insert card.

Step3: Next it undergoes transition to the state enter pin

Step4: In this way it undergoes transitions to the various states.

Step5: Use forking and joining wherever necessary.

#### **Diagram:**



**Conclusion:** Thus we have drawn Activity Diagram for Product Price Comparison.

**Sign and Remark:**

R1	R2	R3	Total Marks	Signature
(5)	(5)	(5)	(15)	