EXPERIMENT NO.:11

Date of Performance:

Date of Submission:

Aim: Activity Diagram for Automated Ironing Services

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:

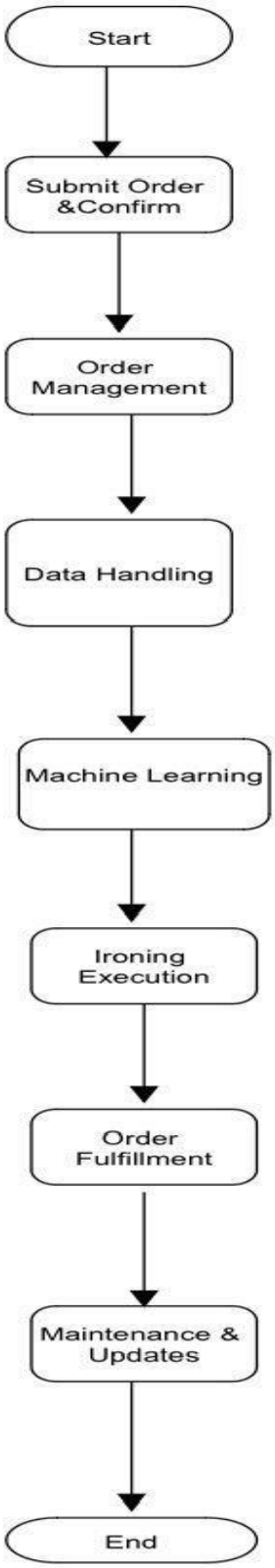
Swim lanes are useful when we model workflows of business processes to partition the activity states on an activity diagram into groups. Each group representing the business organization responsible for those activities, these groups are called Swim lanes .

Procedure:-

1. Start: The process begins.
2. Submit Order & Confirm: Customers place and confirm their orders.
3. Order Management: Orders are organized and scheduled.
4. Data Handling: Information about the garments is collected and processed.
5. Machine Learning: Algorithms optimize ironing instructions based on the data.
6. Ironing Execution: Automated machines iron the garments.

7. Order Fulfillment: Ironed garments are prepared for delivery or pickup.
8. Maintenance & Updates: The system is maintained and updated for efficiency.
9. End: The process concludes, ready for the next order.

DIAGRAM:



Conclusion:

We have analyzed the process of an automated ironing service, mapping out the complete customer journey, from scheduling a service to receiving freshly ironed clothes. This detailed walkthrough captures each step in the service flow, ensuring a smooth and efficient user experience.

Sign and Remark:

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