



**BHARTIYA VIDYA BHAVANS**  
**SARDAR PATEL INSTITUTE OF TECHNOLOGY**  
**Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai**

## **Software Engineering Lab**

**Group Members:**

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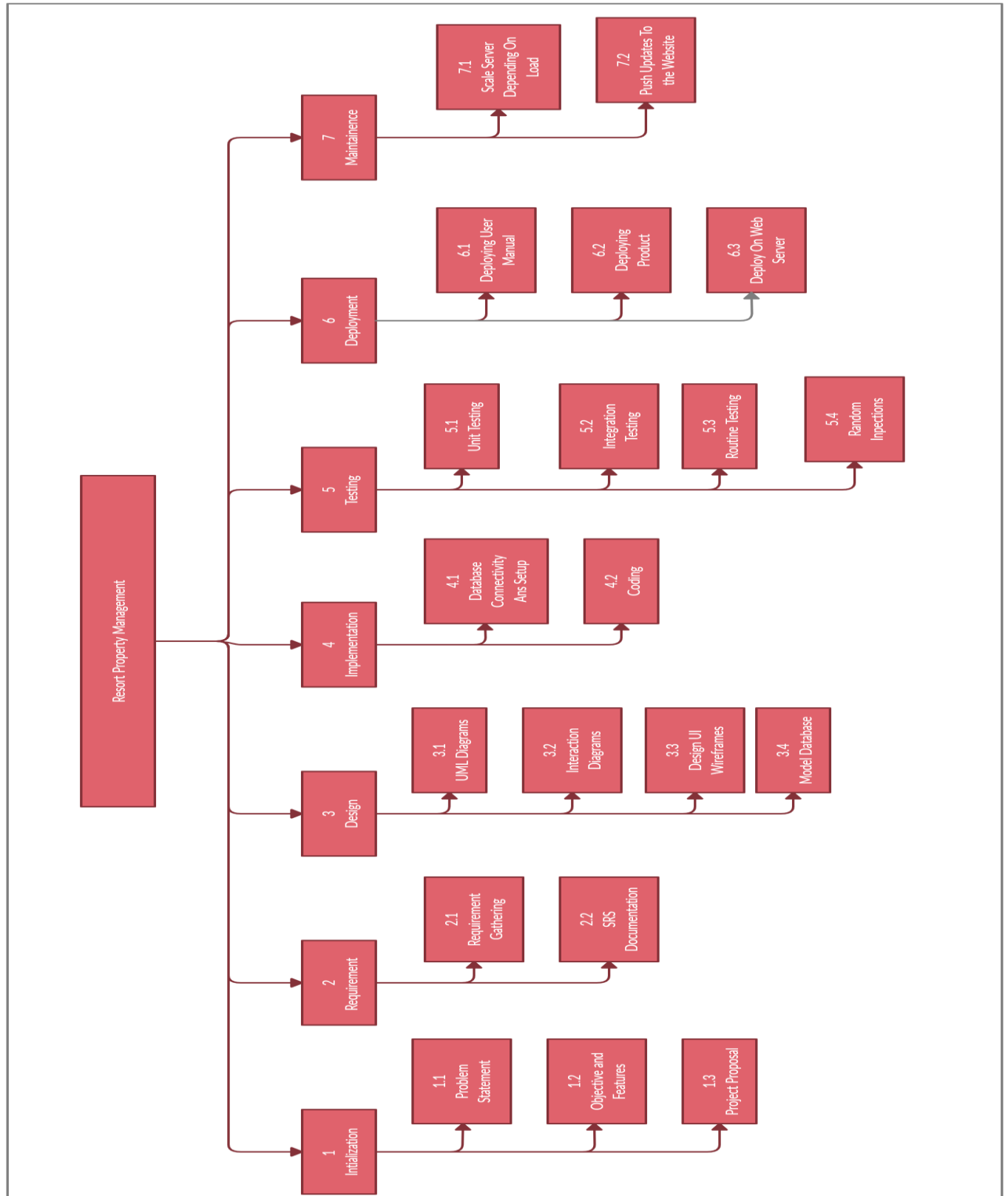
**Experiment: 5**

**Topic:** Resort Property Management System

**Aim :** Prepare WBS structure, Activity Network Diagram, Gantt chart. Also, find a critical path and slack time for the case study.

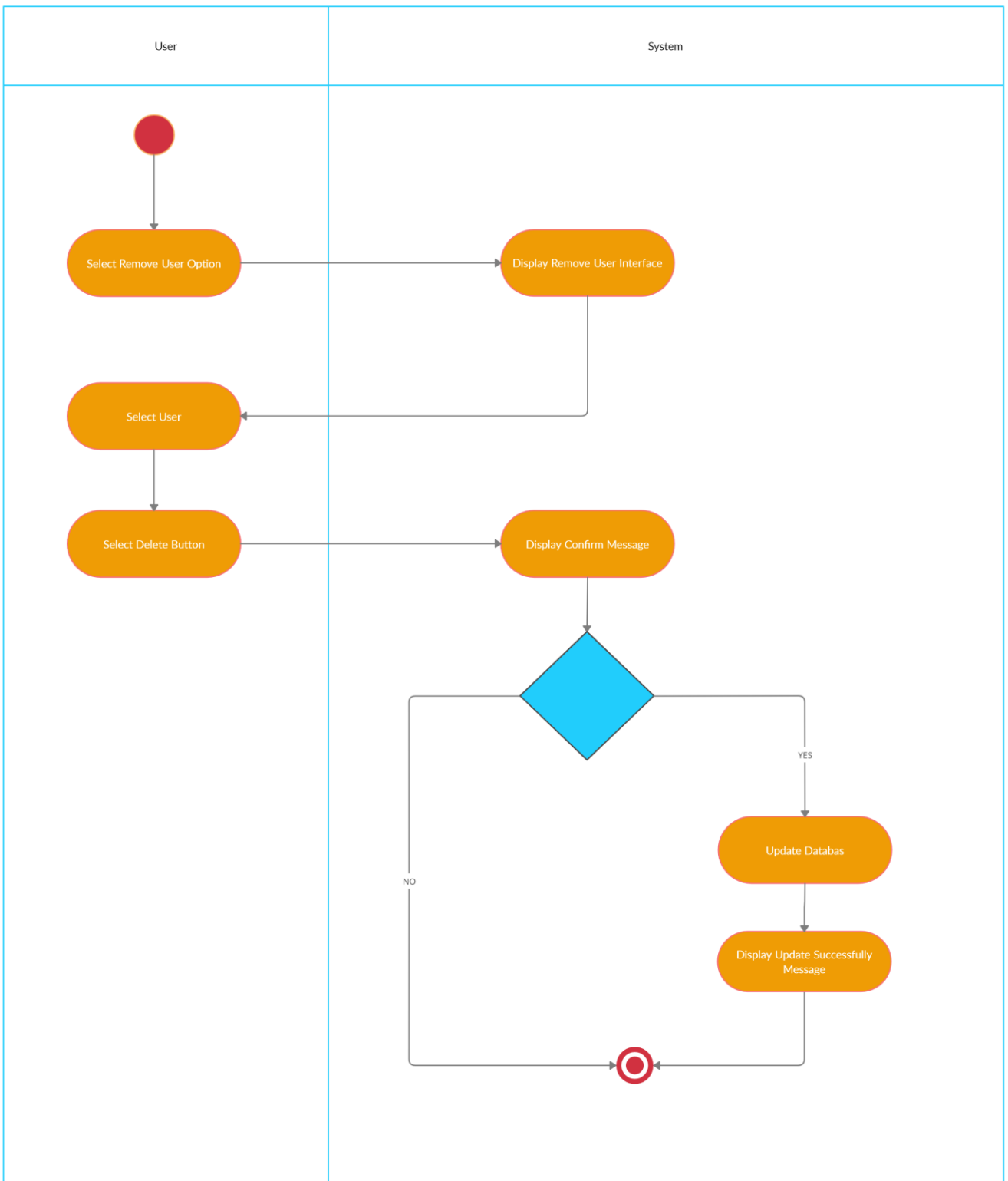
**Problem Statement :** The main objective of this project is to build a resort management system that consists of all the features and functions required for effectively managing a chain of resorts and to have an online presence that makes the reservation process easier and delivers outstanding customer service. The Resort Property Management System will permit employees to manage the daily administrative tasks of the resort and ensure smooth functioning of the resort. The system will be able to handle many services to take care of all customers in a quick manner. As a solution to the large amount of file handling happening at the resort, this software will be used to overcome those drawbacks.

## Work Breakdown Structure :

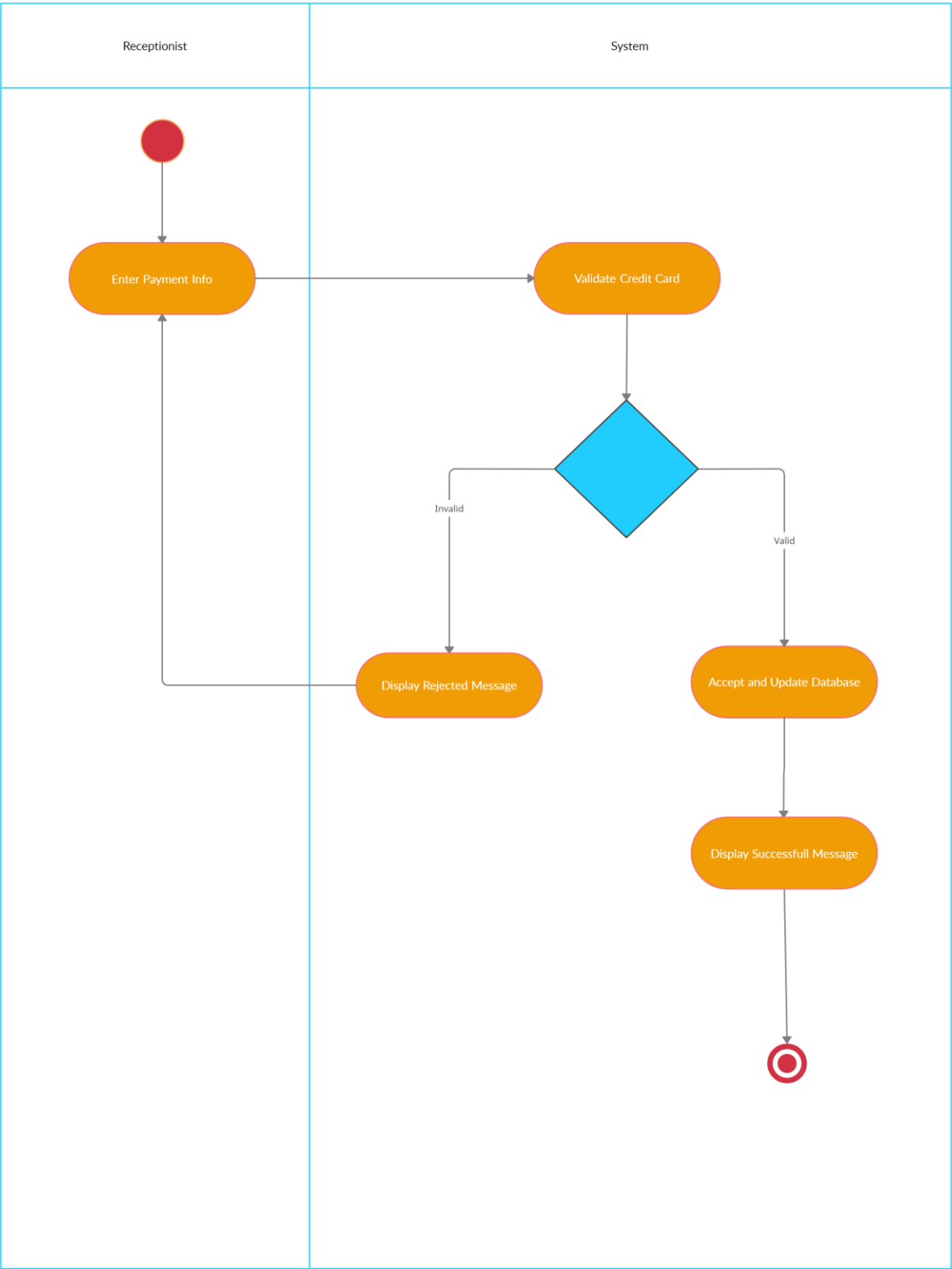


## Activity Diagrams :

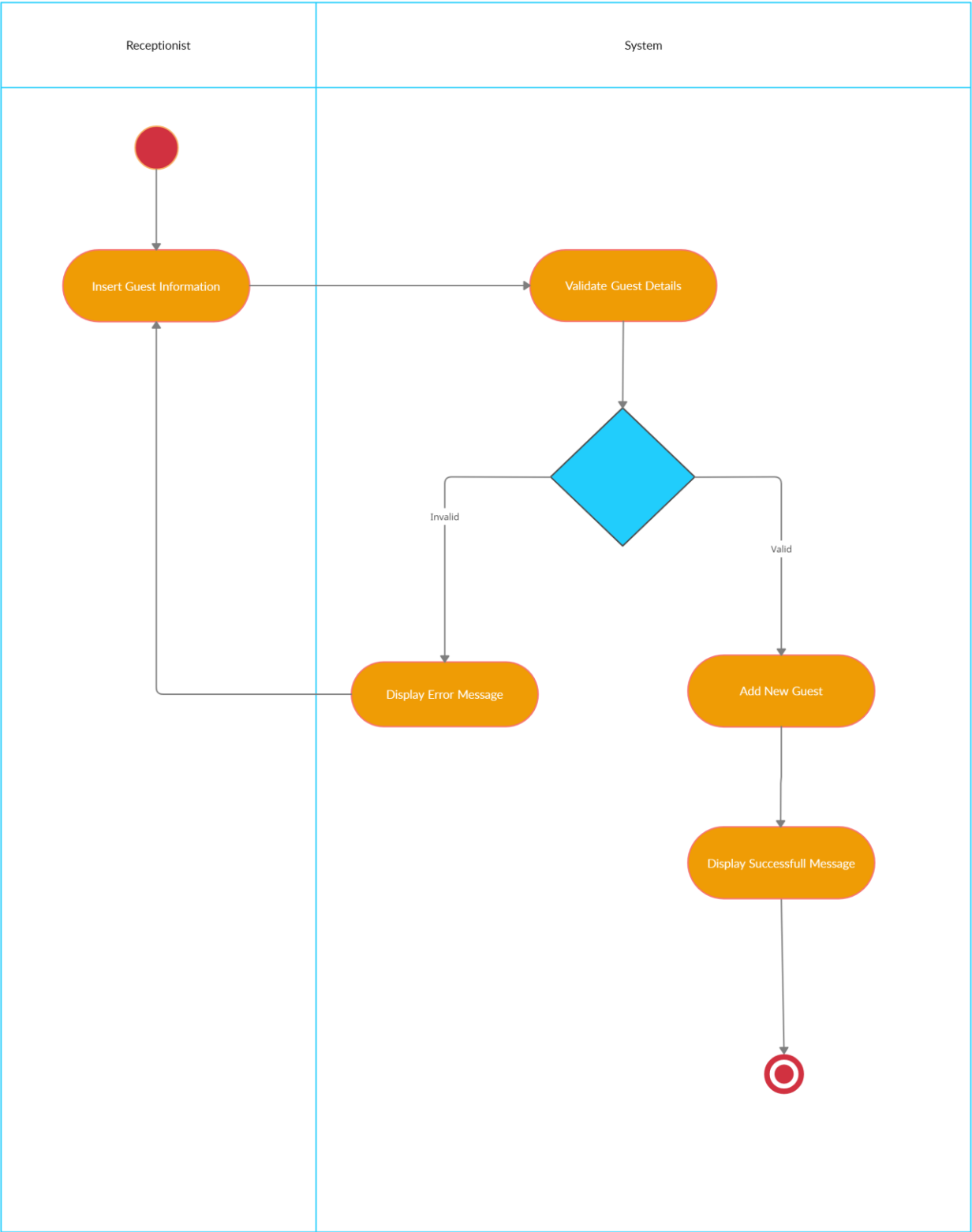
### Delete a User



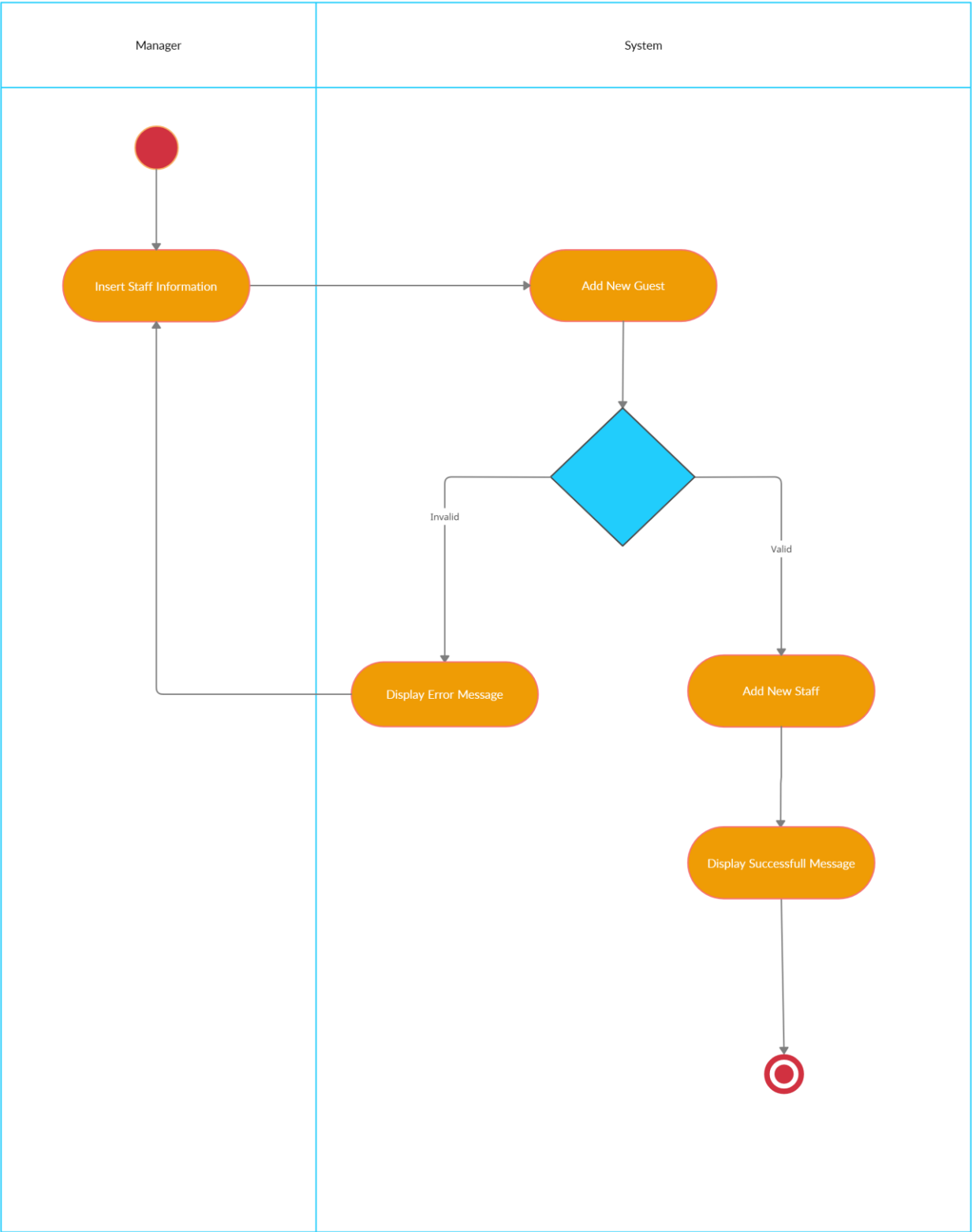
# Add Payment



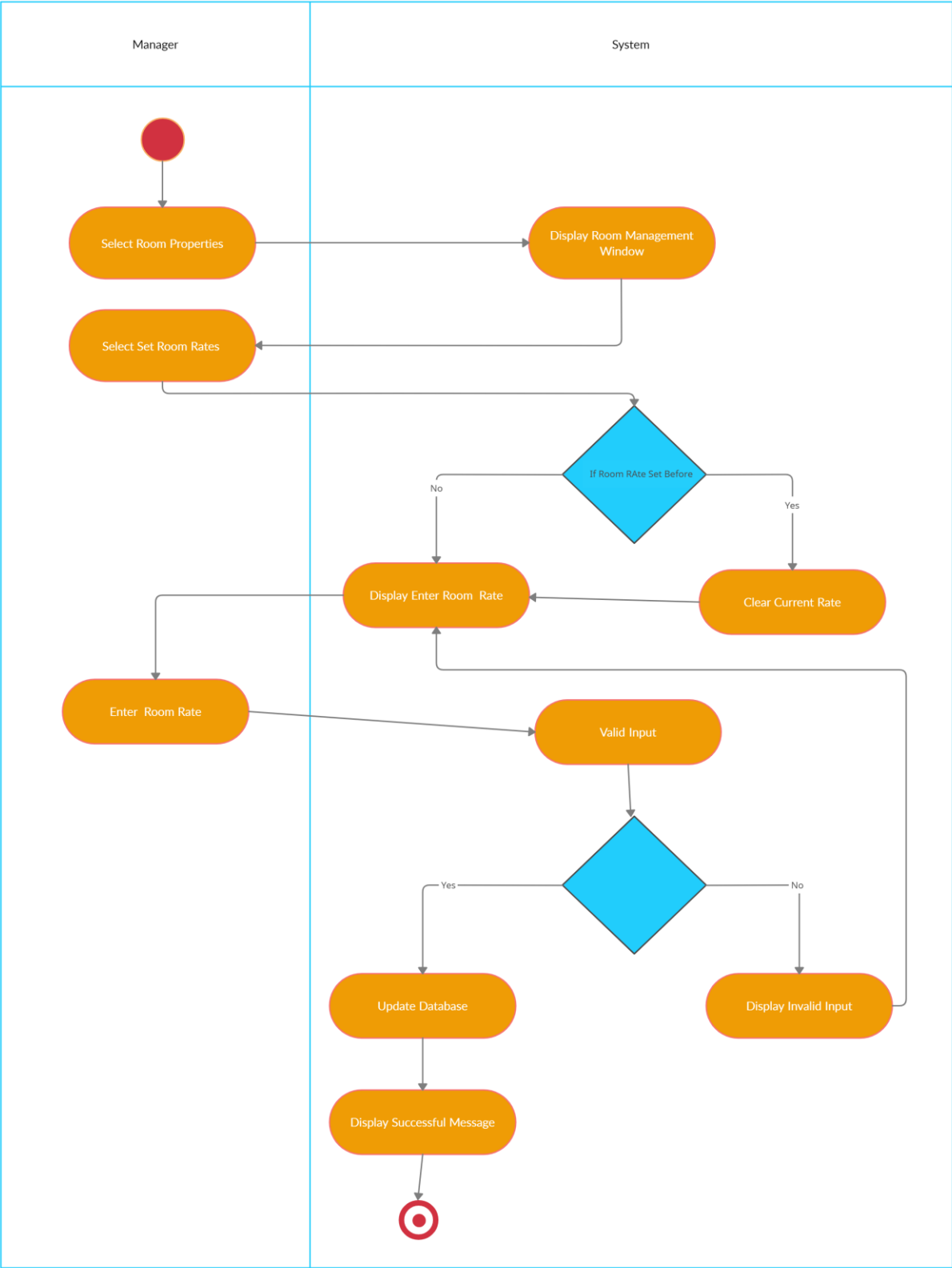
# Add Guest



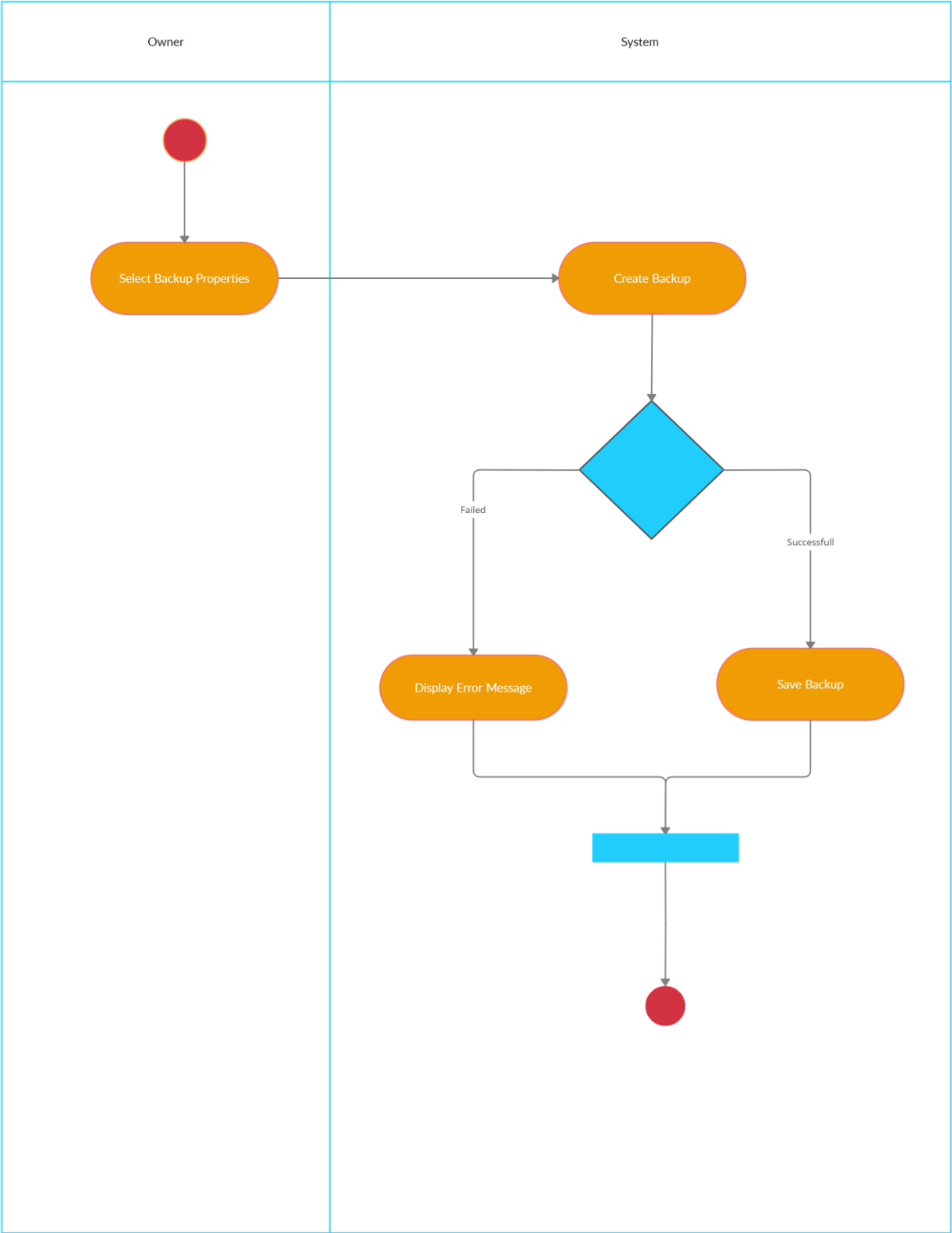
# Add Staff



# Set Room Rate

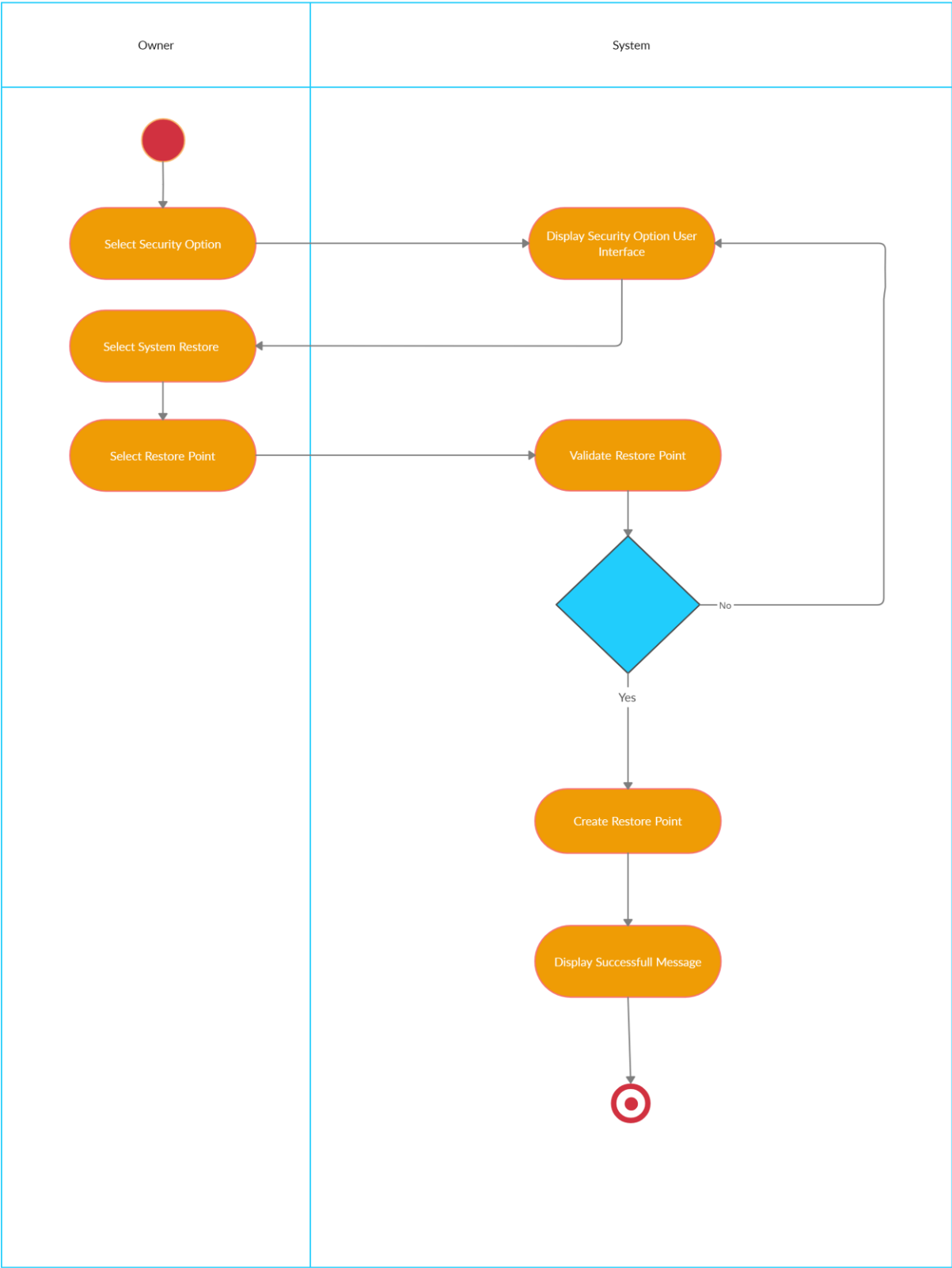


# Take Backup

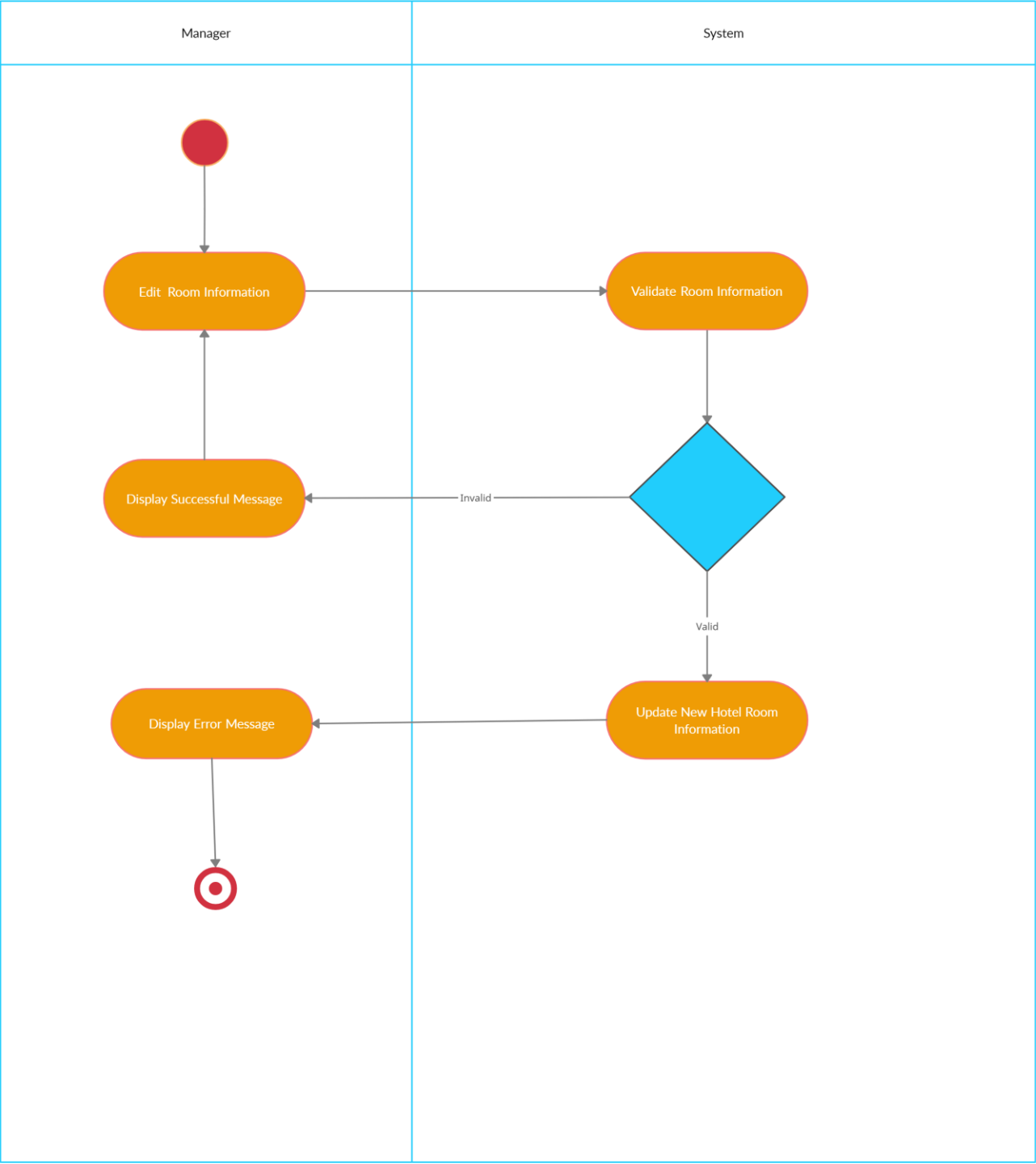




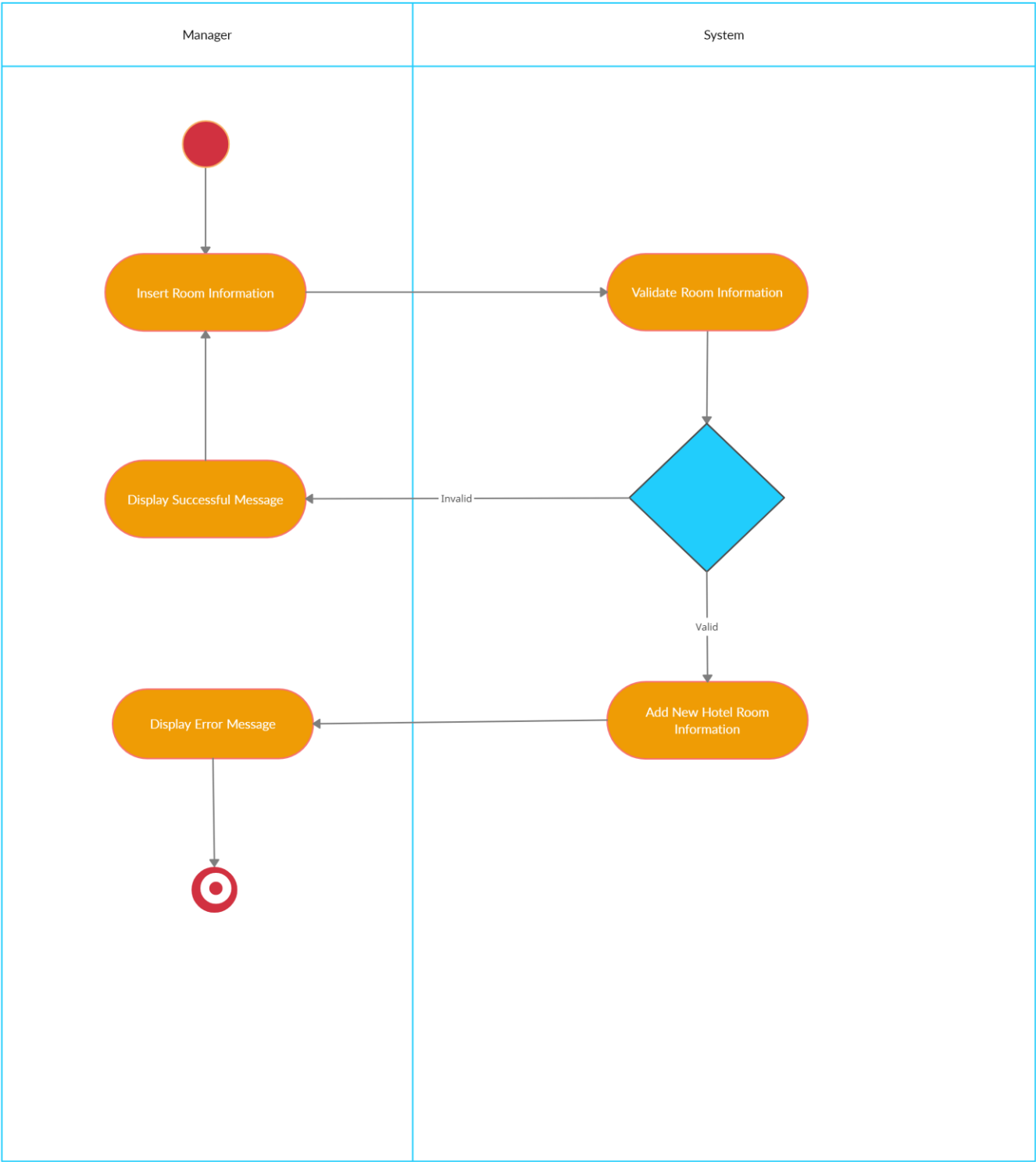
# Create System Restore Point



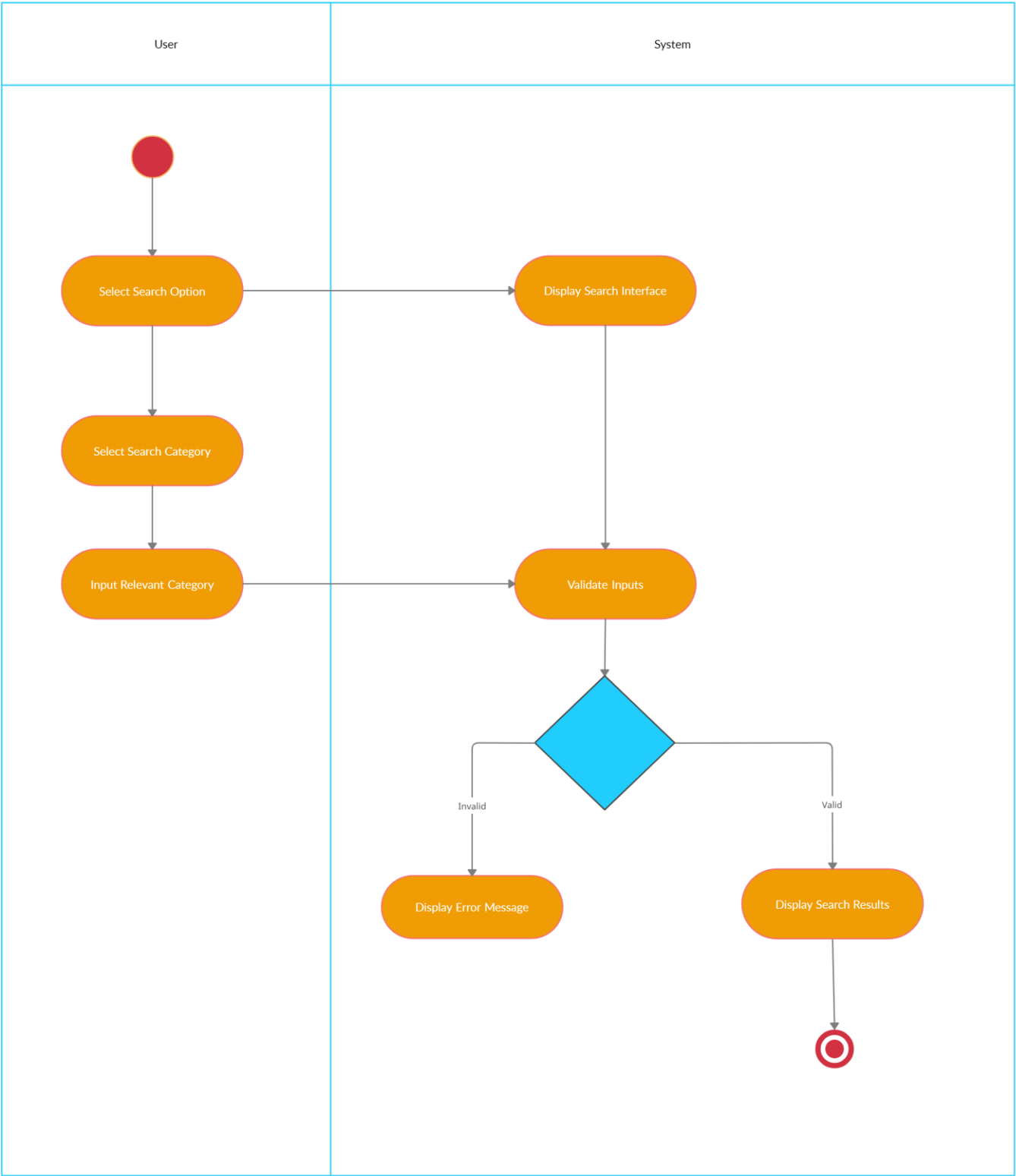
# Edit Hotel Room



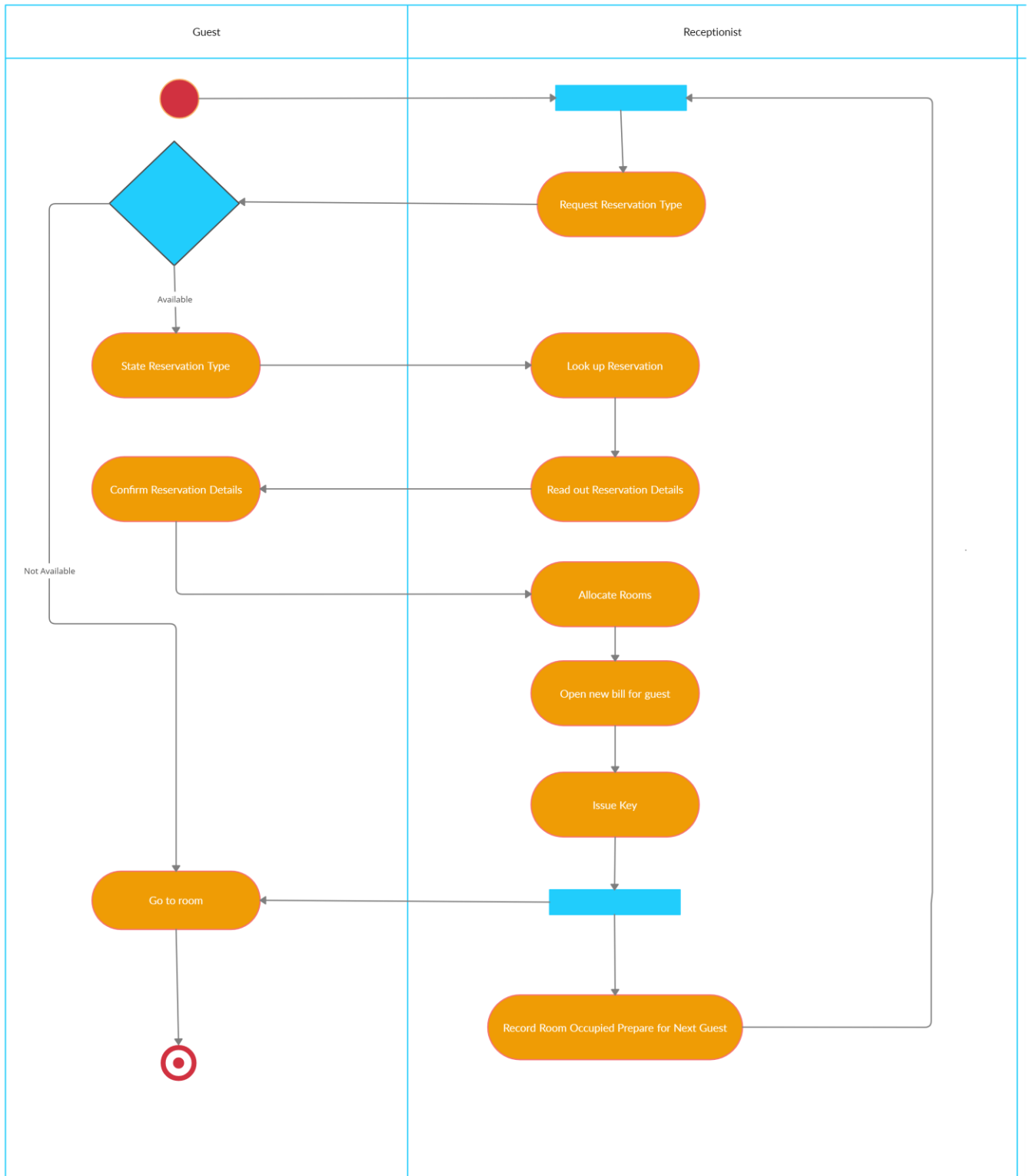
# Add New Hotel Room



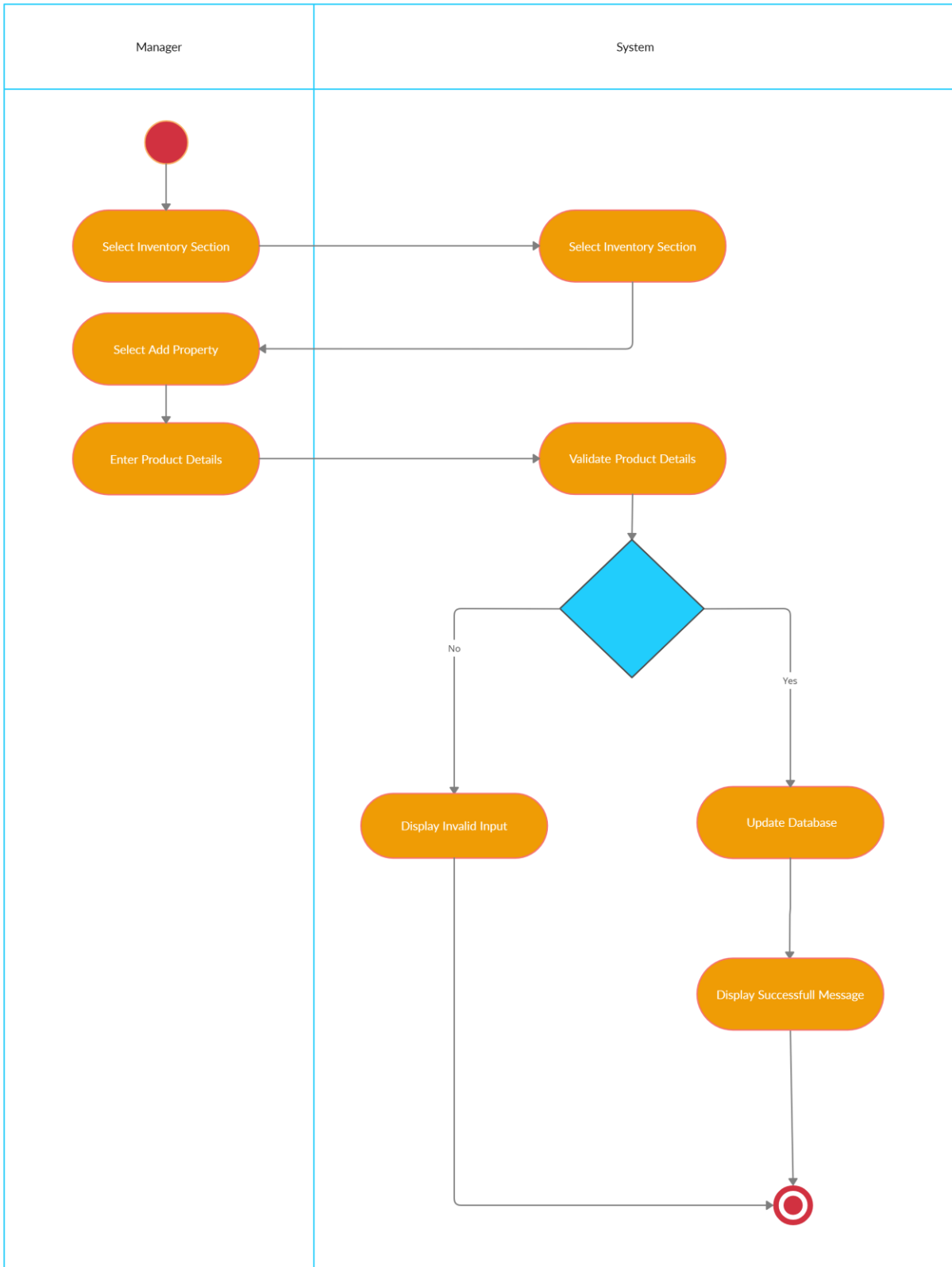
# Search



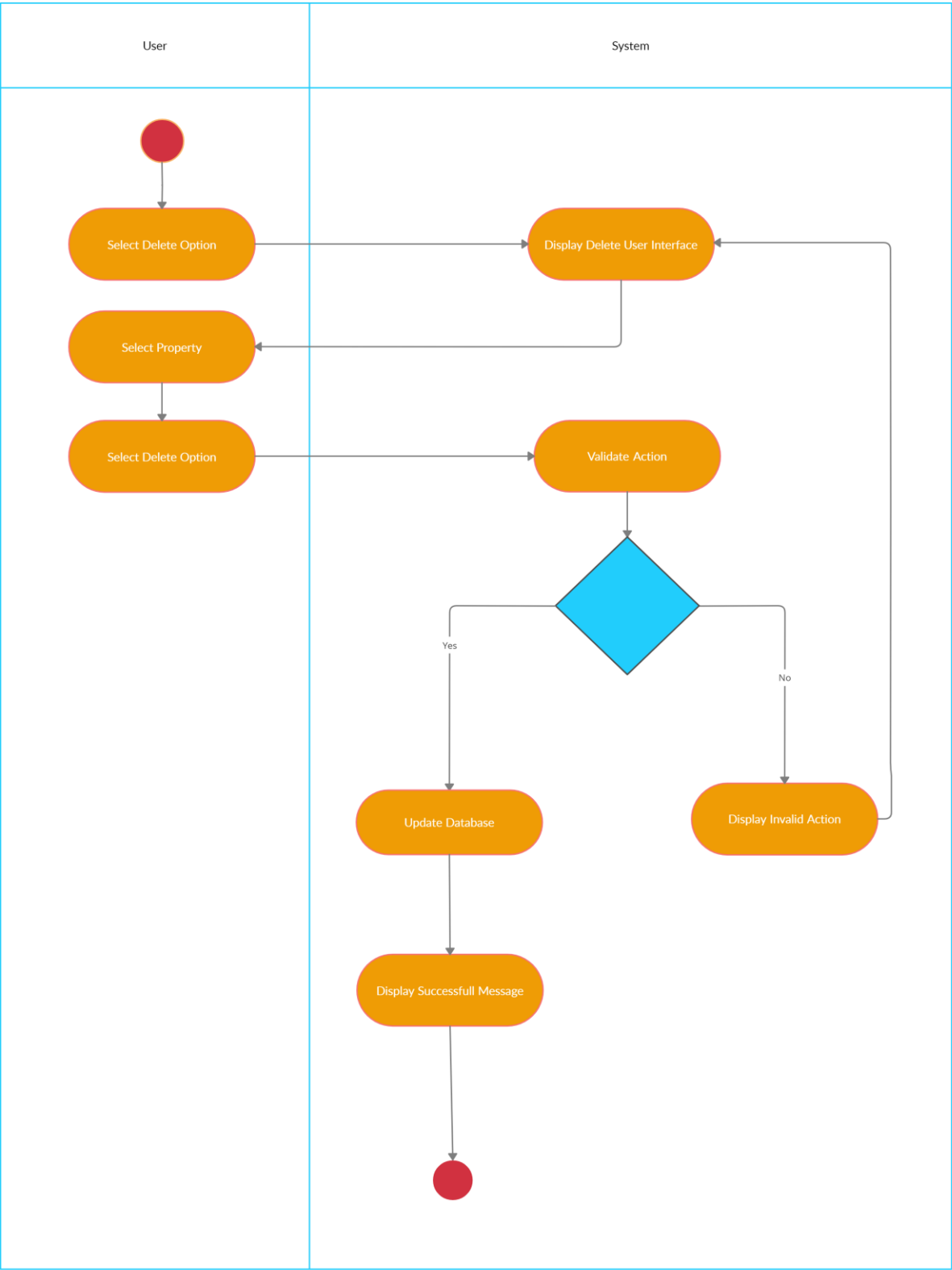
## Make reservation

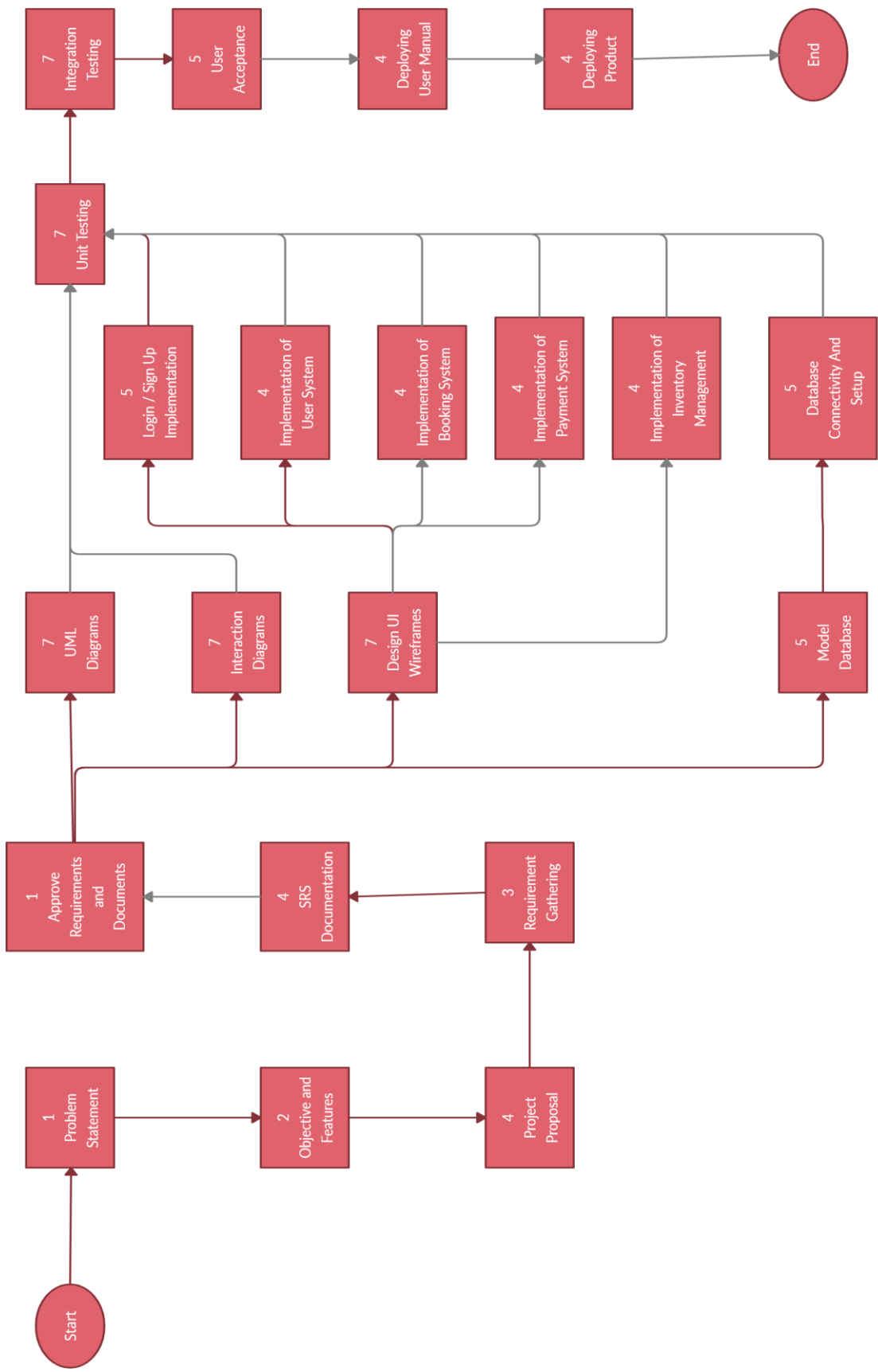


## Add Property



# Delete Property







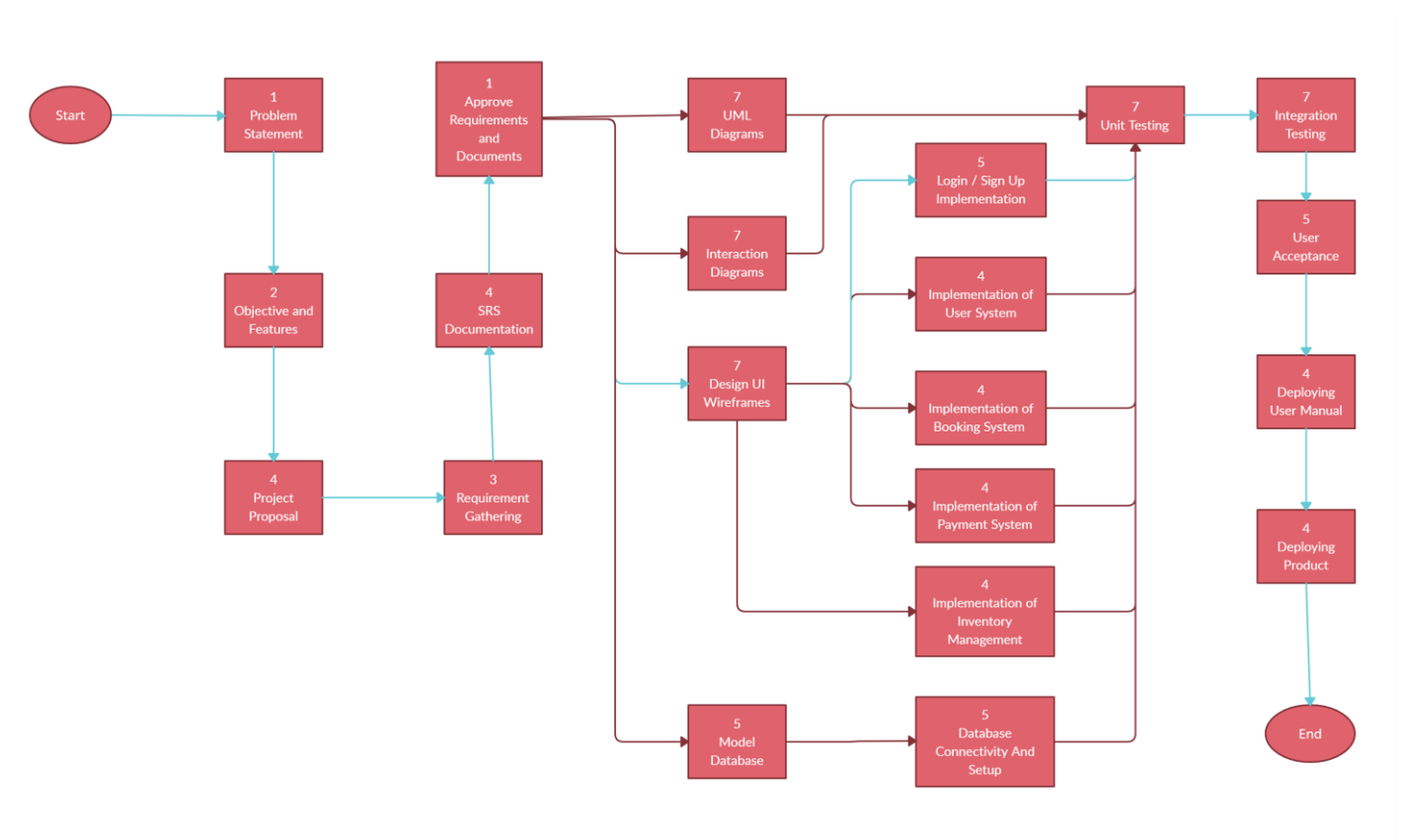
## Gantt Chart :

SR. No.	Task	Duration	Start Date	End Date
1	Intialization		08-09-2021	17-09-2021
1.1	Defining Problem Statement	1	08-09-2021	09-09-2021
1.2	Defining Objectives and Features	2	10-09-2021	12-09-2021
1.3	Proposal Documentation	4	13-09-2021	17-09-2021
2	Requirement		18-09-2021	28-09-2021
2.1	Requirement Gathering	3	18-09-2021	21-09-2021
2.2	SRS Documentation	4	22-09-2021	26-09-2021
2.3	Approve Requirements and Documents	1	27-09-2021	28-09-2021
3	Design		29-09-2021	28-10-2021
3.1	UML Diagrams	7	29-09-2021	06-10-2021
3.2	Interaction & Data Flow Diagrams	7	07-10-2021	14-10-2021
3.3	Design UI Wireframes	7	15-10-2021	22-10-2021
3.4	Model Database	5	23-10-2021	28-10-2021
4	Implementation		29-10-2021	29-11-2021
4.1	Database Connectivity and Setup	5	29-10-2021	03-11-2021
4.2	Login / Sign Up Implementation	5	04-11-2021	09-11-2021
4.3	Implementation of User System	4	10-11-2021	14-11-2021
4.4	Implementation of Booking System	4	15-11-2021	19-11-2021
4.5	Implementation of Payment System	4	20-11-2021	24-11-2021
4.6	Implementation of Inventory Management System	4	25-11-2021	29-11-2021
5	Testing		30-11-2021	21-12-2021
5.1	Unit Testing	7	30-11-2021	07-12-2021
5.2	Integration Testing	7	08-12-2021	15-12-2021
5.3	User Acceptance	5	16-12-2021	21-12-2021
6	Deploy		22-12-2021	31-12-2021
6.1	Deploying User Manual	4	22-12-2021	26-12-2021
6.2	Deploying Product	4	27-12-2021	31-12-2021



## Critical Path & Slack Time :

SR. No.	Task	Duration	Start Date	End Date	Start		Finish		Predecessors	Slack Time	Critical
					Early	Late	Early	Late			
1	Defining Problem Statement	1	08-09-2021	09-09-2021	0	0	1	1		0	
2	Defining Objectives and Features	2	10-09-2021	12-09-2021	1	1	3	3	1	0	
3	Proposal Documentation	4	13-09-2021	17-09-2021	3	3	7	7	2	0	
4	Requirement Gathering	3	18-09-2021	21-09-2021	7	7	10	10	3	0	
5	SRS Documentation	4	22-09-2021	26-09-2021	10	10	14	14	4	0	
6	Approve Requirements and Documents	1	27-09-2021	28-09-2021	14	14	15	15	5	0	
7	UML Diagrams	7	29-09-2021	06-10-2021	15	20	22	27	6	5	
8	Interaction & Data Flow Diagrams	7	07-10-2021	14-10-2021	15	20	22	27	6	5	
9	Design UI Wireframes	7	15-10-2021	22-10-2021	15	15	22	22	6	0	
10	Model Database	5	23-10-2021	28-10-2021	15	17	20	22	6	2	
11	Database Connectivity and Setup	5	29-10-2021	03-11-2021	20	22	25	27	10	2	
12	Login / Sign Up Implementation	5	04-11-2021	09-11-2021	22	22	27	27	9	0	
13	Implementation of User System	4	10-11-2021	14-11-2021	22	23	26	27	9	1	
14	Implementation of Booking System	4	15-11-2021	19-11-2021	22	23	26	27	9	1	
15	Implementation of Payment System	4	20-11-2021	24-11-2021	22	23	26	27	9	1	
16	Implementation of Inventory Management System	4	25-11-2021	29-11-2021	22	23	26	27	9	1	
17	Unit Testing	7	30-11-2021	07-12-2021	27	27	34	34	7, 8, 11, 12, 13, 14, 15, 16	0	
18	Integration Testing	7	08-12-2021	15-12-2021	34	34	41	41	17	0	
19	User Acceptance	5	16-12-2021	21-12-2021	41	41	46	46	18	0	
20	Deploying User Manual	4	22-12-2021	26-12-2021	46	46	50	50	19	0	
21	Deploying Product	4	27-12-2021	31-12-2021	50	50	54	54	19	0	



**Conclusion:** Thus, in this experiment, we studied WBS structure and Activity Diagram and created both of them for our case study. We also created a Gantt chart using the Activity Diagram and calculated the critical path and slack time.