



# FOOTPRINTS - TOUR REQUEST AND IMPLEMENTATION SYSTEM

**Supervisor:** Mr. Kieu Trong Khanh

**Enterprise:** Reva Enterprise Solutions Development Joint Stock Company

**Project code:** FA24SE106

**Group code:** GFA24SE78

**Members:**

1. Lê Thị Yến Nhi - Leader - SE173003
2. Trương Thuỷ Trúc - SE160369
3. Nguyễn Minh Trường Vũ - SE161207
4. Đặng Thiêm Lộc - SE160848



## CONTENT

Introduction

Our Approaches

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Challenges

Achievements



# INTRODUCTION

- **Tour Request & Implementation System (TRIS)** is a solution for **managing travel requests, design tool** for a tour request and **provide feature for tour execution.**
- TRIS provides:
  - A system for customers to **request tours and track progress.**
  - **Tools** for staff to efficiently **design** tours with suggestions that meet customer needs.
  - Supporting **interactions** between tour guides and tour members.

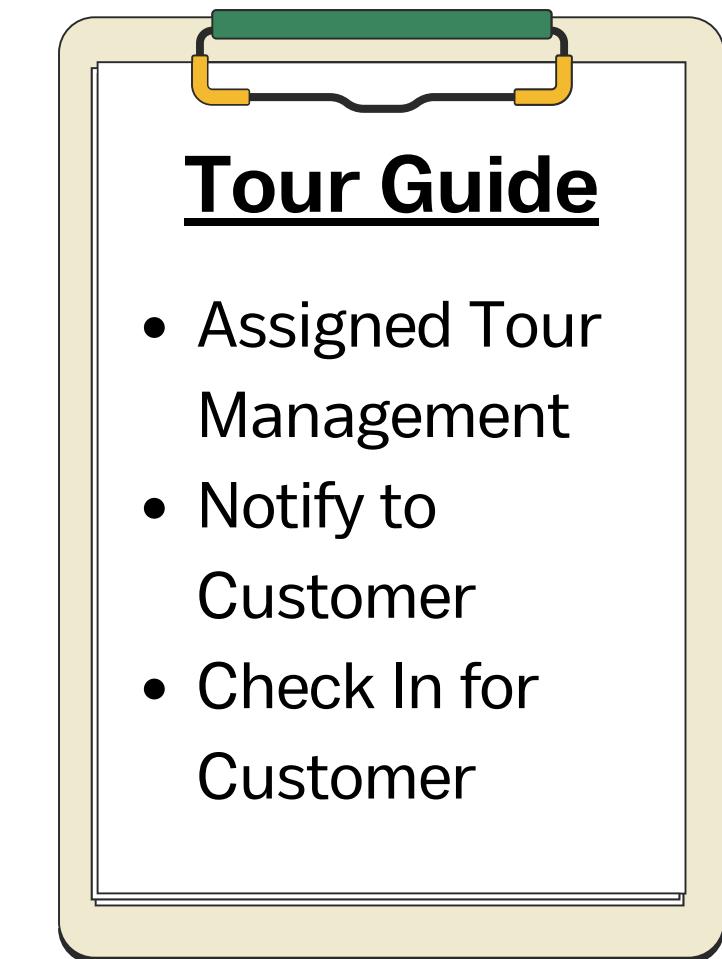
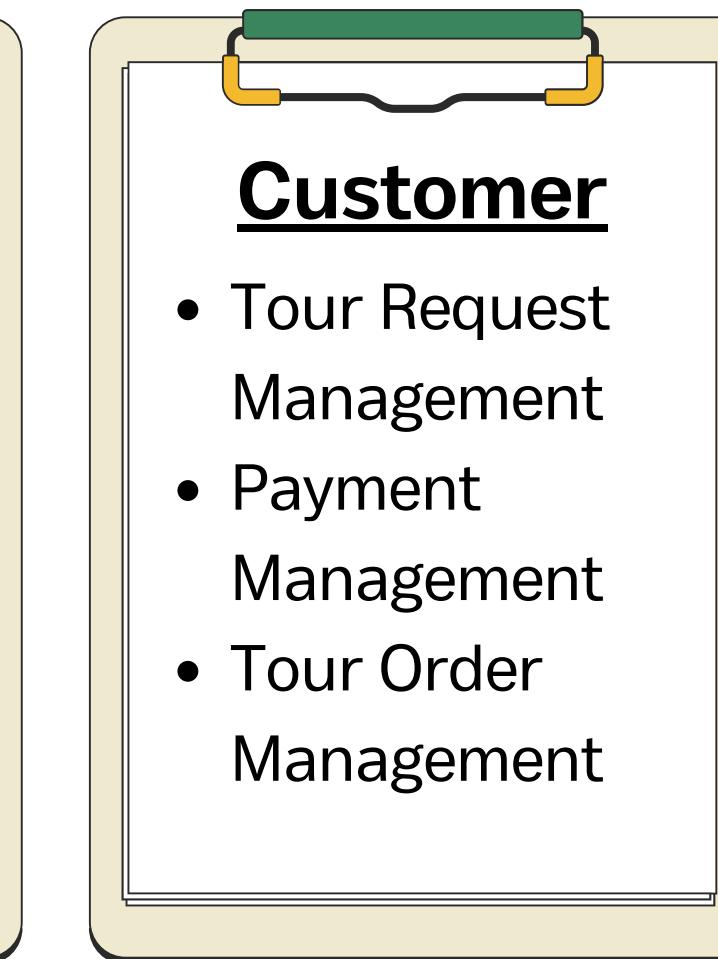
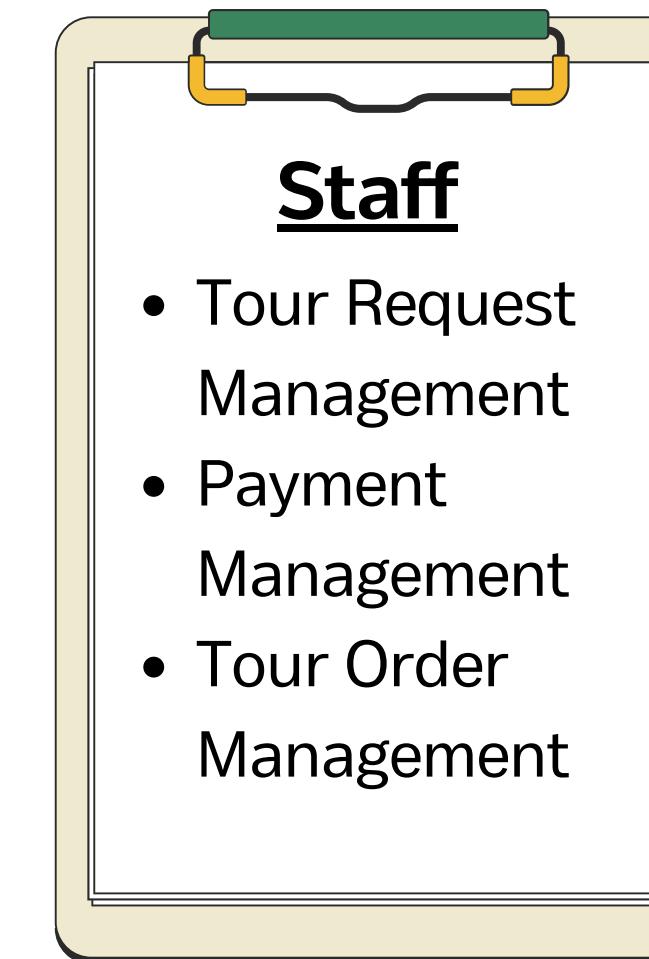
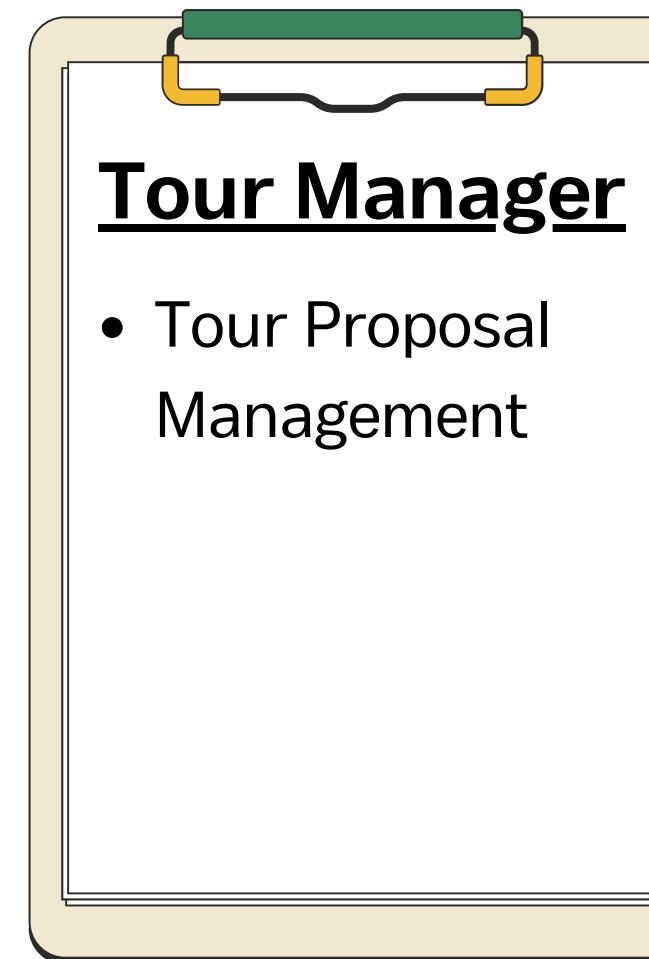


## REQUIRED FEATURES

- A **Customer's Web application** for create tour request, track progress and place a tour order
- A **Staff's Web application** for manage tour request, design proposal and processing work for tour execution
- A **Manager's web application** for manage tour proposal designed by staff and approve/reject to propcessing proposal design to customer.
- A **Tour Guide's mobile app** for manage assigned tour, checkin for customer when tour start and send SMS on the tour duration.
- A **Admin's web application** for config system and business settings.



# ACTOR



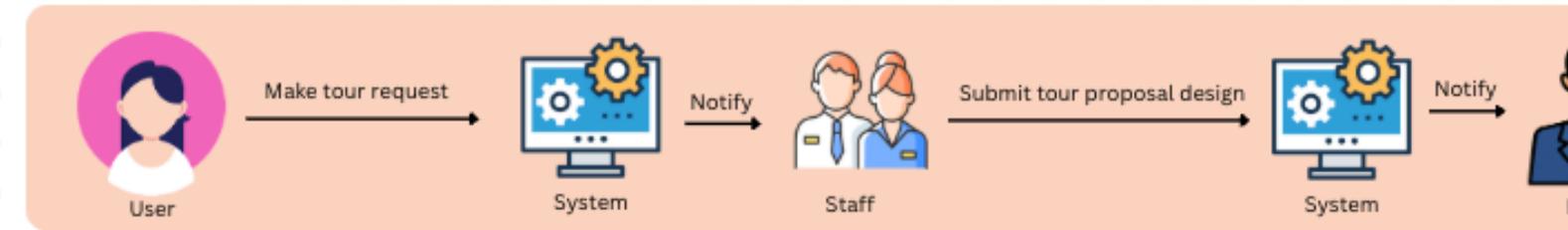


# OUR APPROACHES

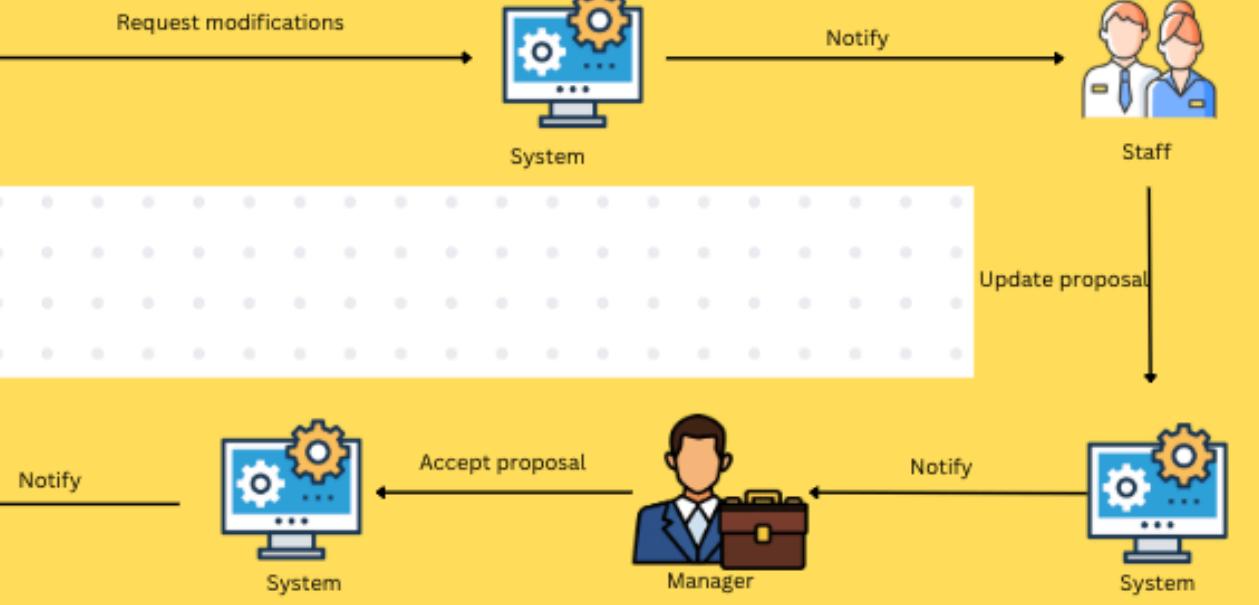


# OVERVIEW CORE FLOW

## Tour Request and Proposal Creation



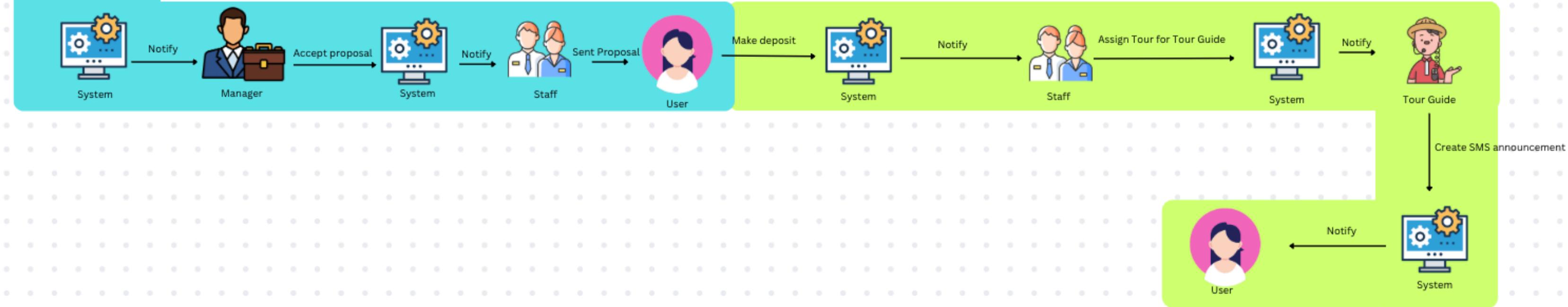
## Proposal Modification



## Proposal Deal



## Tour Execution





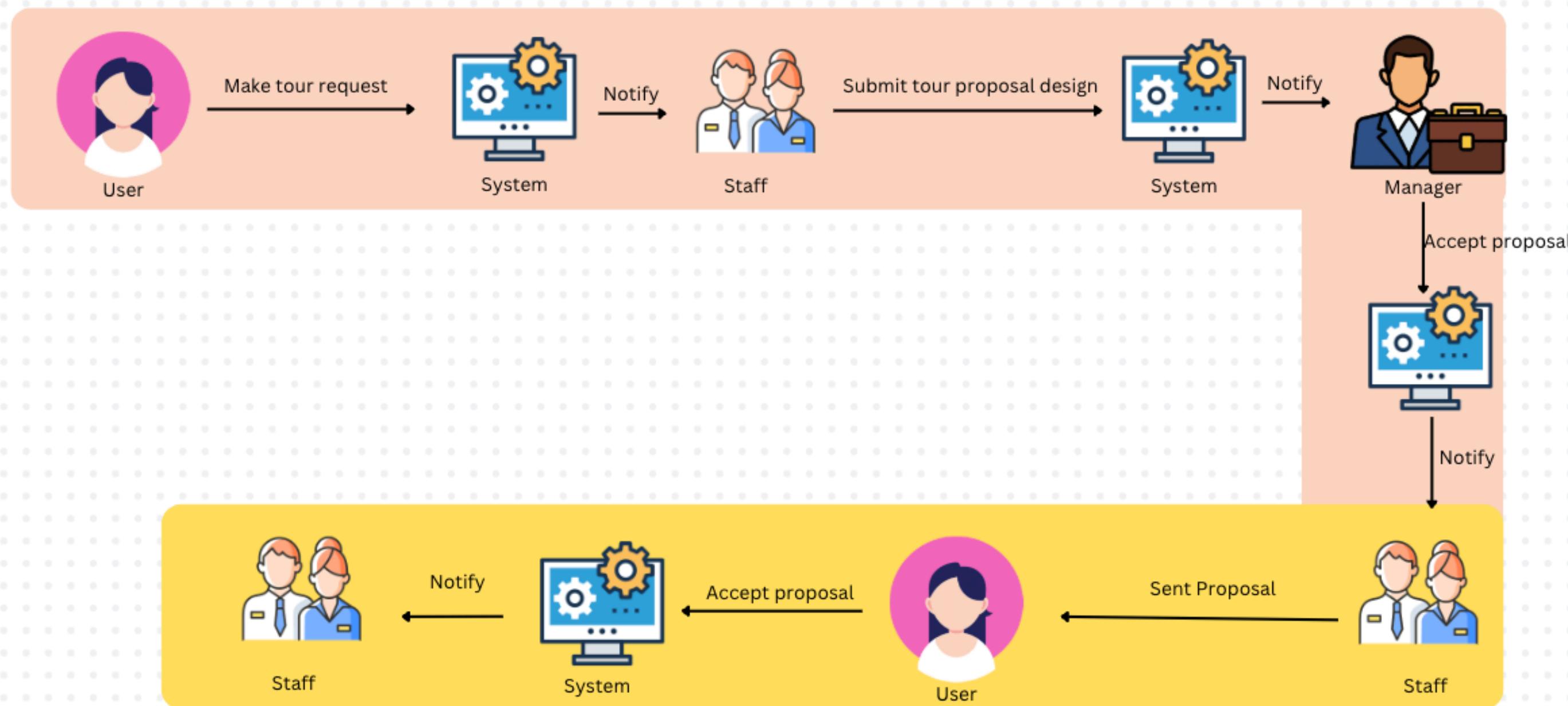
# DEFINITIONS OF SYSTEM

- **Tour Request:** A customer's formal **request to create a customized tour** with the company.
- **Tour Proposal:** A **detailed tour proposal designed by the company's staff** based on the customer's tour request information.
- **Tour Order:** A **finalized tour**, confirmed for execution, for which the customer has **completed deposit** based on the approved tour proposal.



# FLOW: TOUR REQUEST AND PROPOSAL CREATION

## Tour Request and Proposal Creation



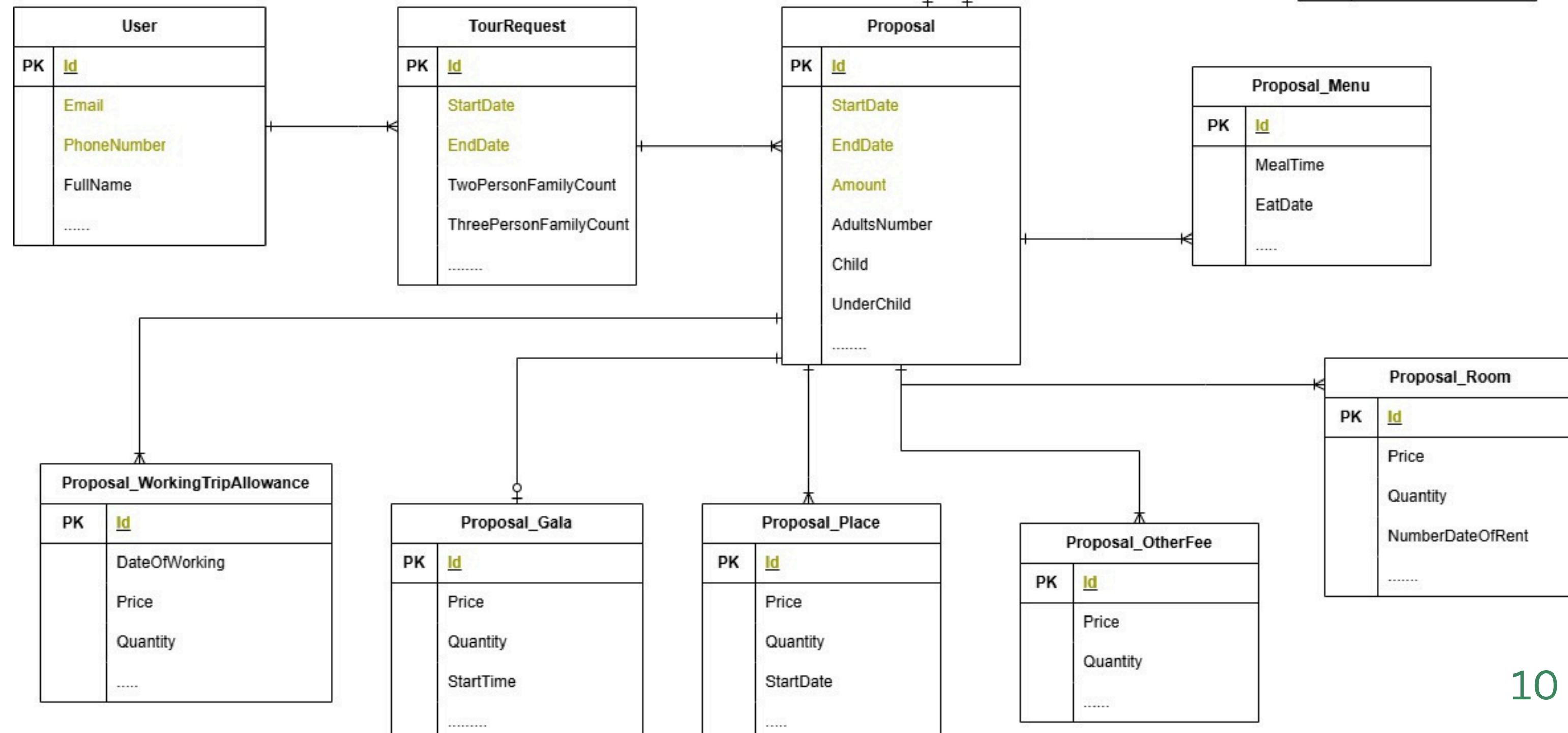


# TOUR REQUEST AND IMPLEMENTATION SYSTEM

## Definition: Tour request and Proposal Entity

The system will create a **Tour Request** after the customer submits a tour booking request.

After the Staff designs the tour according to the customer's request, the system will create a **Proposal** with the information requested by the customer.





# BUSINESS RULES: TOUR REQUEST AND PROPOSAL CREATION

Users can only select **destinations provided by the system**.

Total participants for cost calculation include **adults and children aged 4-10**. Children under **4 years are not included in the cost calculation**. Children **aged 4-10 are charged n% (system configuration)** of the adult rate as a surcharge.

Proposals require **manager approval before being sent** to the customer.

The Manager approves the proposal, but it is not sent to the customer immediately. The **staff** review the proposal, add a message, and then **send it to the customer**.

The system **only supports road transportation** for tours, excluding air travel due to issues like flight delays, fluctuating airfare, management challenges, and time-consuming airport procedures. This ensures service stability and efficiency.



# DEMONSTRATION: TOUR REQUEST AND PROPOSAL CREATION

## SCENARIO:

**Customer Hung** wants to find a **3-day, 2-night** start on **Jan 10 2025** for 55 employees of Department A of Company B to Buon Me Thuot. Hung wishes to create a custom tour based on the preferences of the employees.

Specifically, some employees will join the tour with their spouses and children.

The group includes:

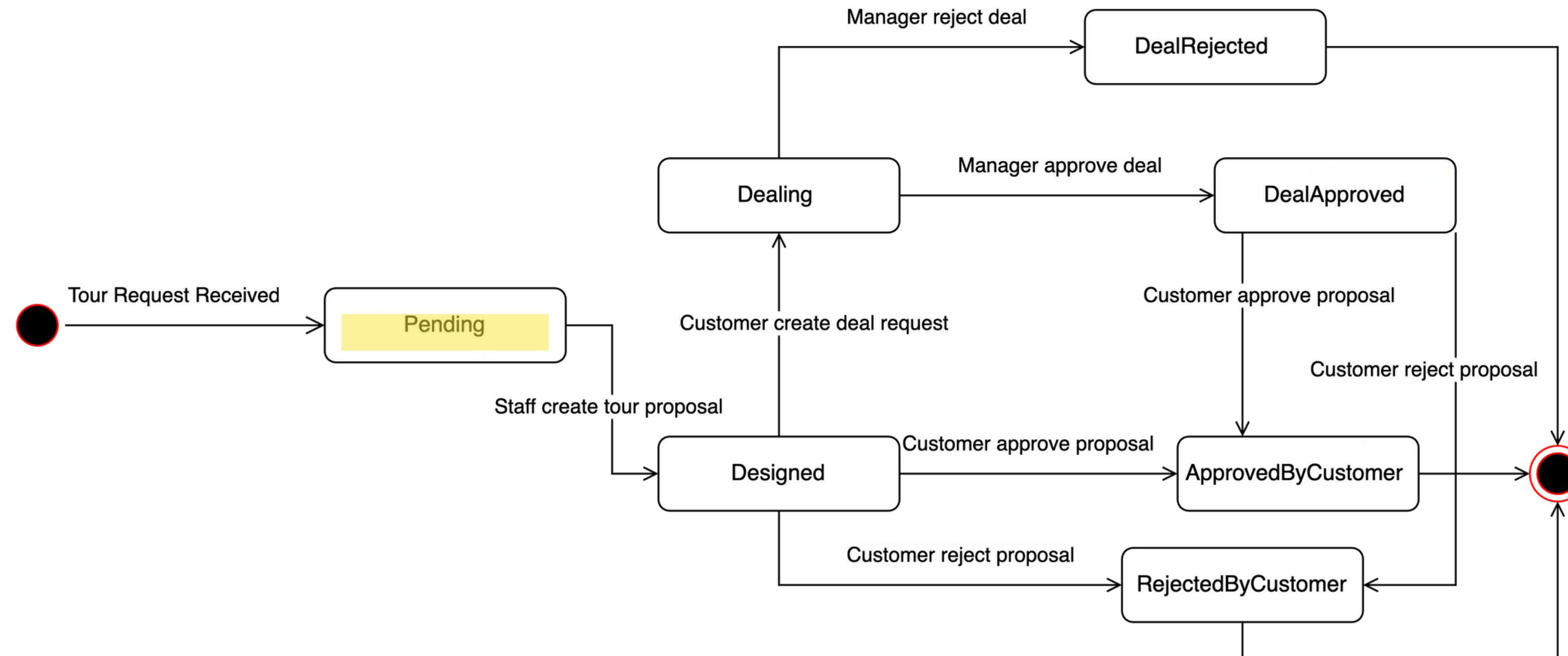
- 8 families of 2
- 5 families of 3
- 2 families of 4
- 7 single females,
- 9 single males
- 12 children aged 4–10
- 5 children under 4 years old

They would like to include **a gala dinner and organize team-building activities**. Most participants prefer regular meals, but 10 people would like vegetarian meals. Additionally, they wish to stay at a 4-star hotel.



## STATE DIAGRAM: TOUR REQUEST

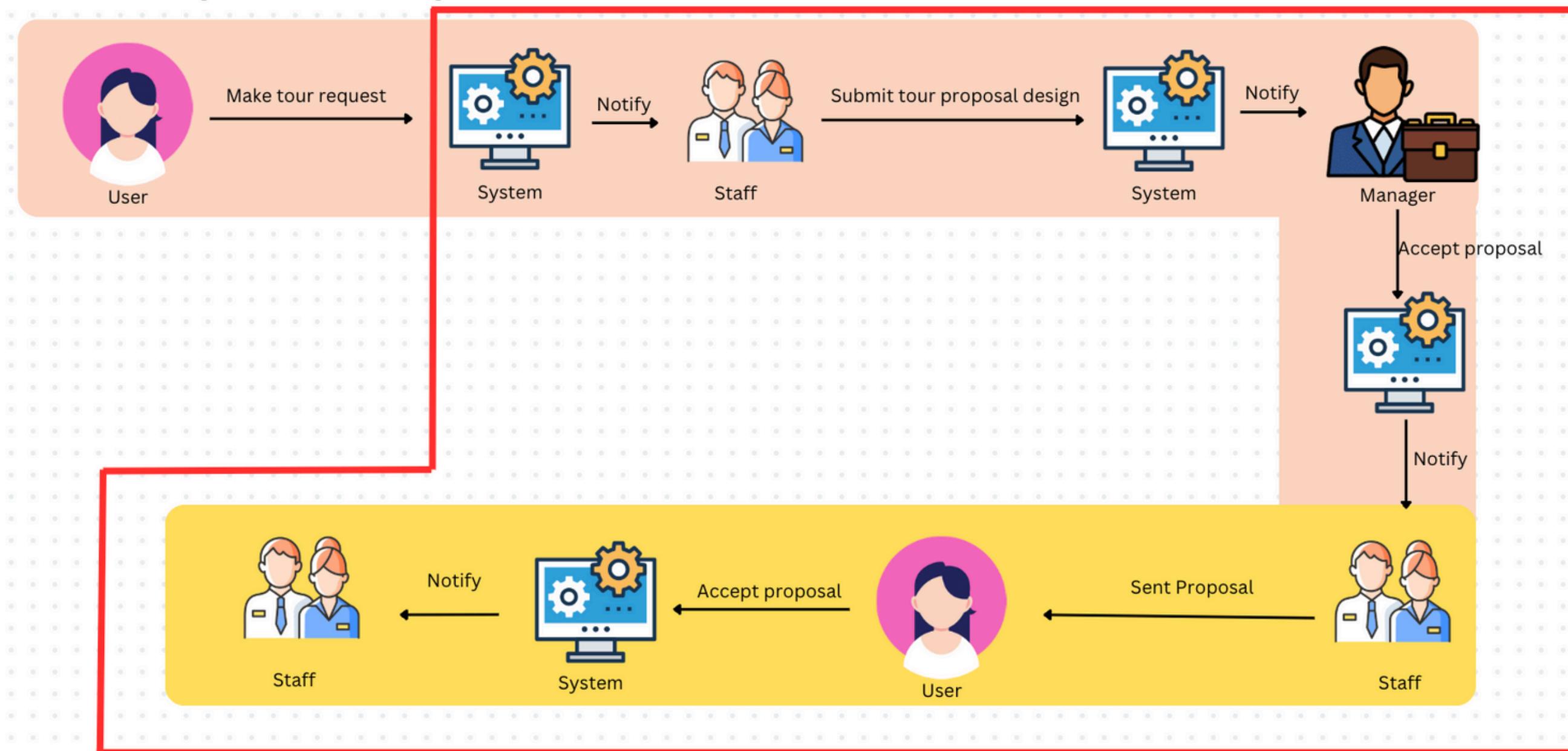
### Tour Request Status





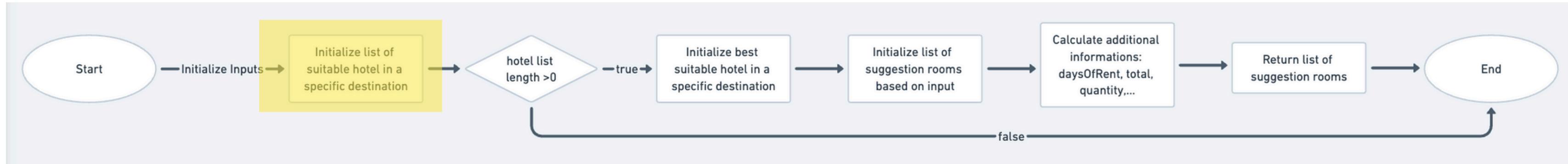
## TOUR PROPOSAL CREATION

### Tour Request and Proposal Creation





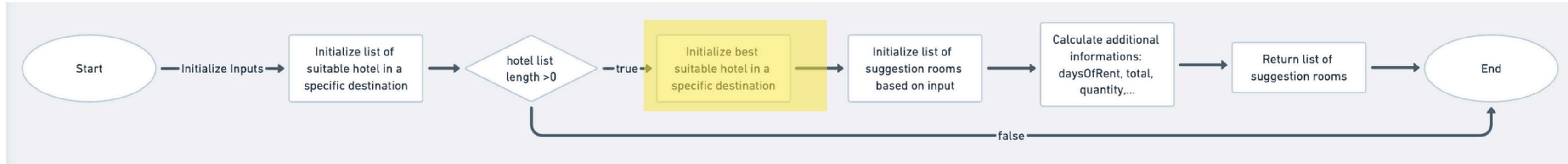
# ROOM SUGGESTION ALGORITHM



- **Issue:** Finding a hotel in a specific location and selecting rooms based on customer needs, such as the **number of people in a family, single people, hotel quality**, is a **manual** and time-consuming process.
- **Solution:** The algorithm automates this by identifying hotels in the **desired location** that meet the customer's requirements. It suggests **appropriate room types** based on customer input, providing a list with **room quantities, prices, and rental durations**, while ensuring the **best price** for the customer.



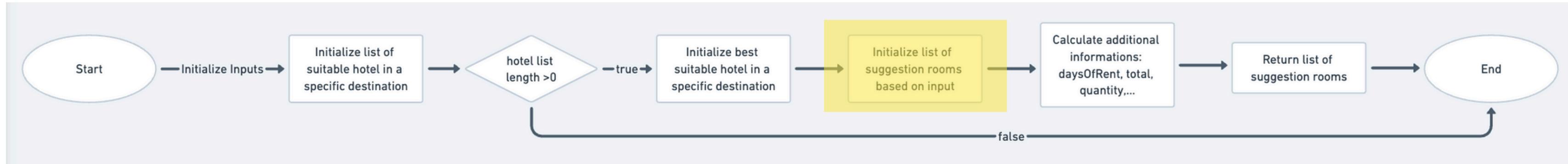
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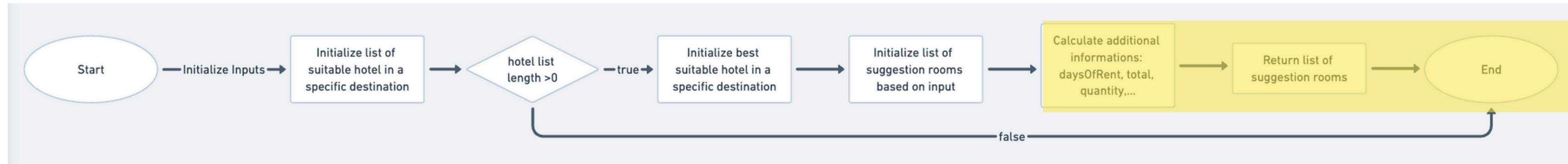
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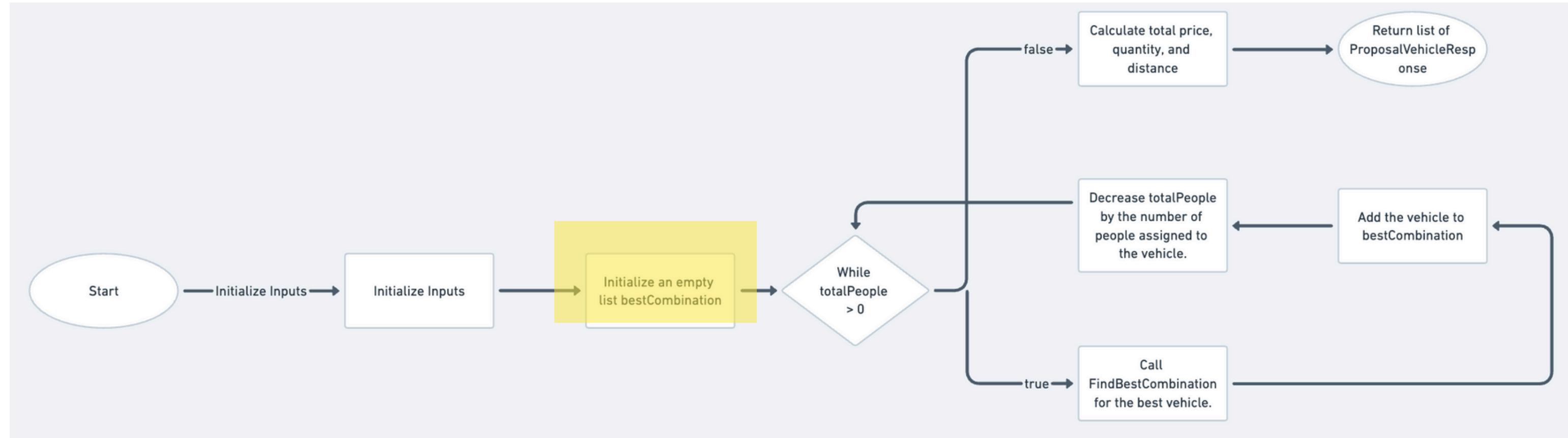
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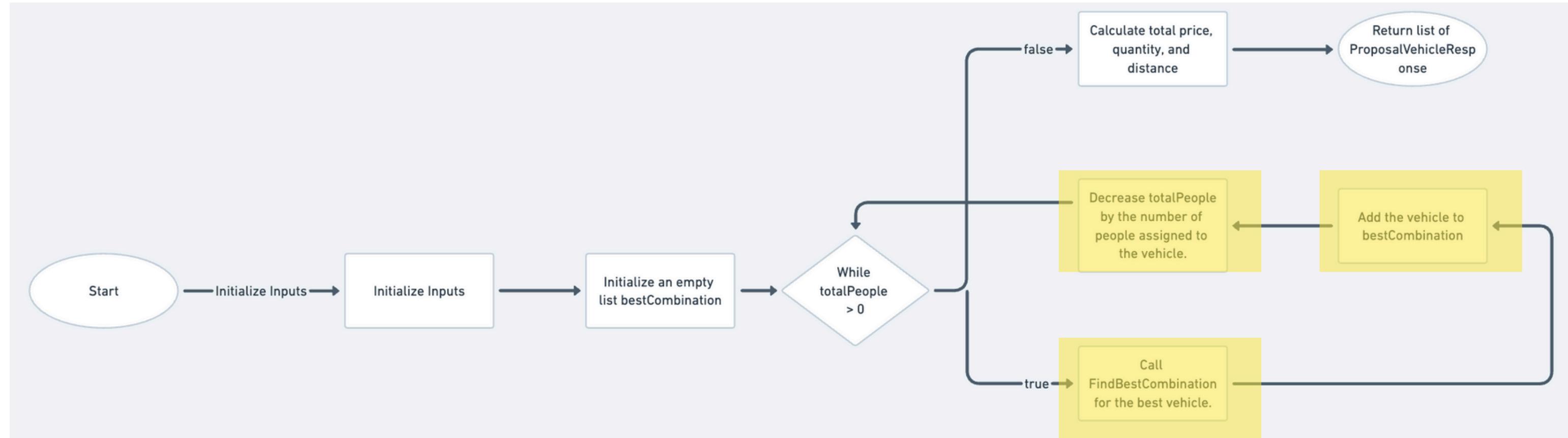
# VEHICLE SUGGESTION ALGORITHM



- **Issue:** Manually selecting the vehicle type and calculating the quantity based on the **number of people** provided by the customer is a cumbersome process.
- **Solution:** The algorithm automates this by **suggesting the most suitable vehicle types and quantities** that align with the number of people on the tour, based on the customer's input.



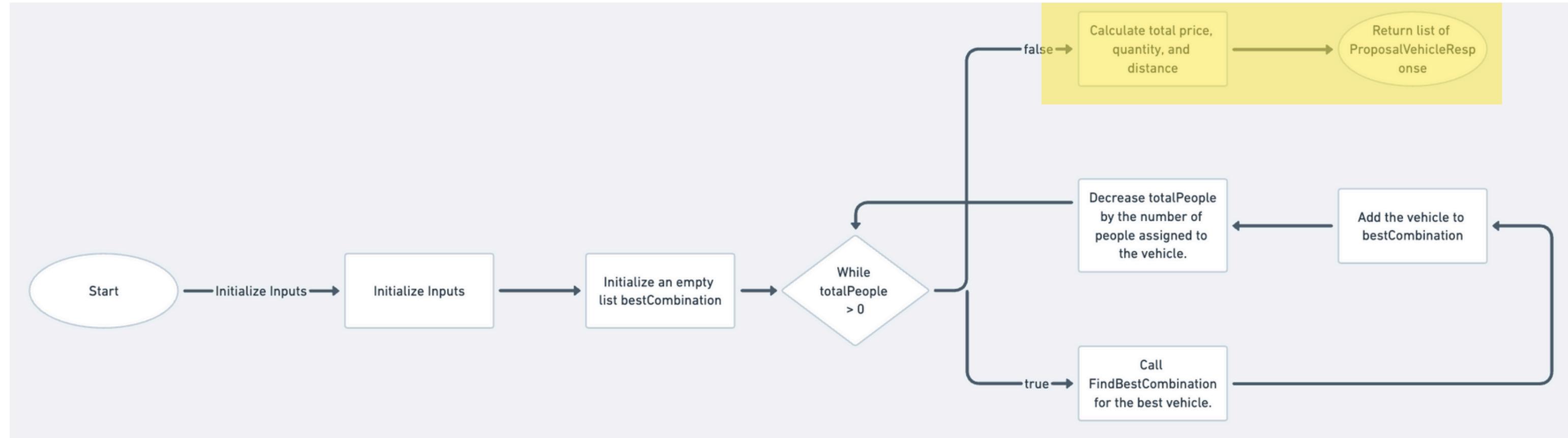
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# DEMONSTRATION: PROPOSAL CREATION

## SCENARIO:

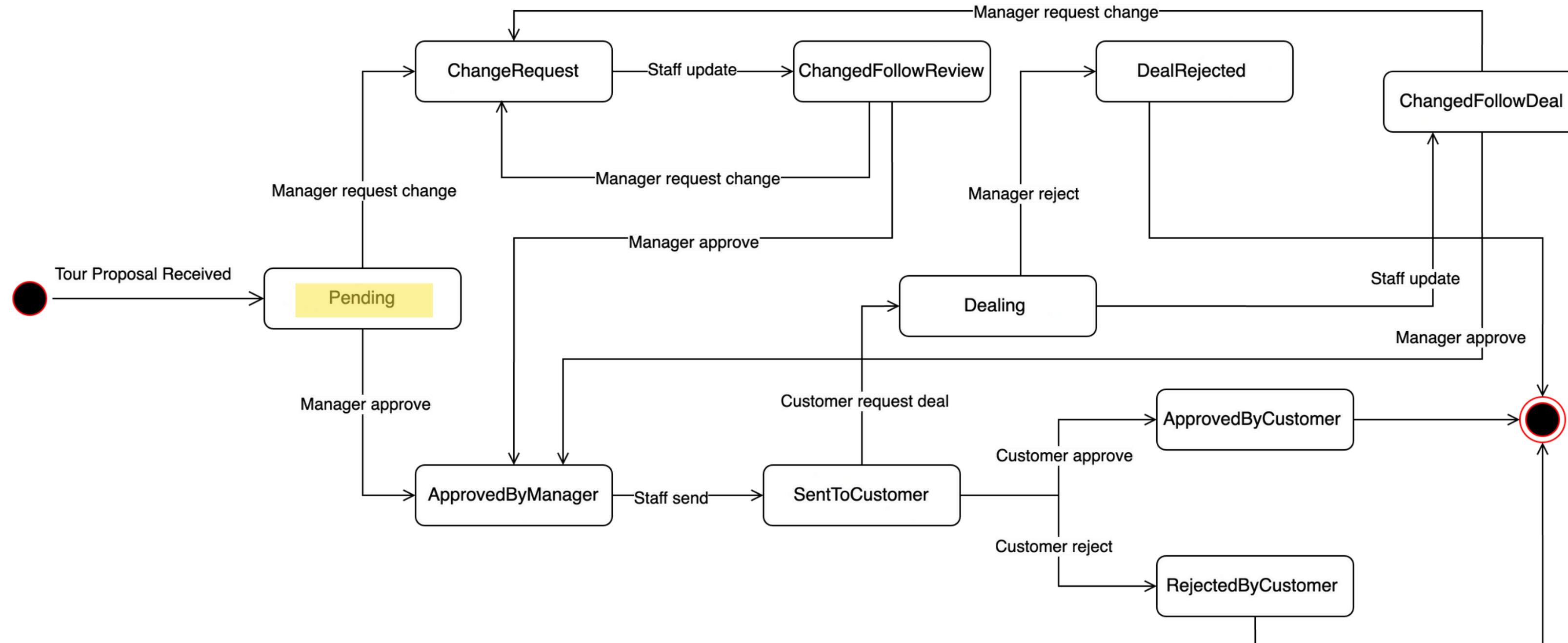
- **Staff Huyen** receives a tour request from customer Hung. She reviews the details of the request and creates a tour proposal to send to the Manager for processing.
- Ms. Huyen **utilizes system suggestions to design** the proposal but **makes adjustments to ensure it is well-suited** and customized to the customer's needs.
- A tour proposal includes the following **8 components** that need to be designed:
  - **Room:** Designed based on system suggestions.
  - **Menu:** Customized as per customer requirements and preferences.
  - **Tourism Places**
  - **Working Trip Allowance**
  - **Other Fees:** Any additional costs are detailed.
  - **Team Building:** Activities planned and outlined.
  - **Gala Dinner**

Ms. Huyen ensures all components are designed effectively to create a suitable tour proposal.



## STATE DIAGRAM: PROPOSAL CREATION

### Proposal Status





## PROPOSAL CREATION: FORMULA FOR PRICE CALCULATION

To calculate the total price for proposal, including both **adults** and **children aged 4-10**:

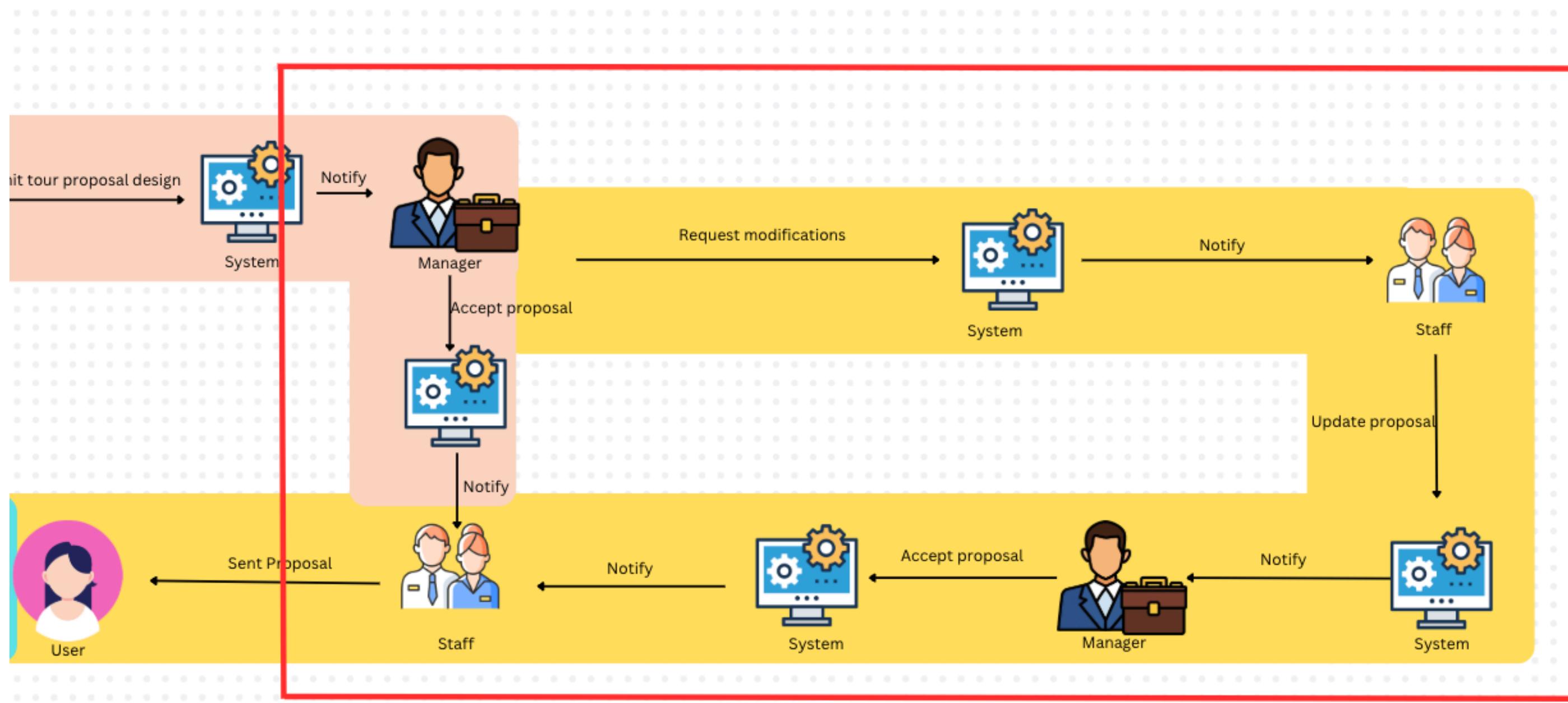
- **Total Cost** = Room + Menu + Tourism Places + Working Trip Allowance + Other Fees + Team Building + Gala Dinner
- **Adult Price** = Total Cost ÷ Number of Adults
- **Child Price** =  $n\% \times$  Adult Price
- **Total Price** =  $(\text{Adult Price} \times \text{Number of Adults} + \text{Child Price} \times \text{Number of Children}) \times (1 + \text{VAT})$

Where:

- Room, Menu, Tourism Places, Working Trip Allowance, Other Fees, Team Building, Gala Dinner are the various cost components in tour proposal.
- $n\%$  is the surcharge percentage for children (e.g: 50%).
- VAT is the value-added tax rate (e.g: 8%).
- Number of Adults and Number of Children are the total number of adult and children aged 4-10.



## MANAGER APPROVE/CHANGE REQUEST PROPOSAL





## MANAGER CREATE CHANGE REQUEST

Số điện thoại: [REDACTED]

**Thông tin order**

Số lượng khách: 72  
Số lượng người lớn: 55  
Số lượng trẻ em 4-10 tuổi: 12  
Số lượng trẻ em dưới 4 tuổi: 5

Thời gian thực hiện: 19/01/2025 đến 21/01/2025

**Địa điểm**

Tuyến tham quan:  
**Trường Đại học FPT TP.HCM, Lô E2a-7, Đường D1, Phường Long Thạnh Mỹ, Thành phố Thủ Đức, Thành phố Hồ Chí Minh, 71300, Việt Nam → Buôn Ma Thuột**

Các địa điểm tham quan:  
**1 - Làng cà phê Trung Nguyên  
2 - Đền Vạn Kiếp**

**File thiết kế**

Xuất chi phí dự tính tour

Xuất Menu

Xuất tour dự kiến

**Nội dung**

**Yêu cầu thiết kế lại**

Nhập những ý nhân viên cần thay đổi trong proposal

Vui lòng chọn thành phần bạn muốn chỉnh sửa:

Khách sạn  Ăn uống  Địa điểm  Phương tiện  Team building  Gala  Khác

**Địa điểm:**  
Làng cà phê Trung Nguyên - 2 giờ  
Đền Vạn Kiếp - 4 giờ

Hãy thêm địa điểm

**Khác:**  
thêm khăn lạnh và nước uống

**Team building:**  
1 Gói teambuilding nâng cao

Tặng gói teambuilding

**Thành tiền**

Khách sạn có thể tăng 10% cho ngày chủ nhật

Thành tiền	Ghi chú
38.880.000đ	Gợi ý cho gia đình 2 người
13.800.000đ	Gợi ý cho gia đình 3 người
10.920.000đ	Gợi ý cho gia đình 4+ người
13.770.000đ	Gợi ý cho nữ single ghép phòng; Gợi ý cho nam single ghép phòng
24.000.000đ	
1.000.000đ	
24.000.000đ	
1.000.000đ	
0đ	
0đ	

**Ghi chú**

Khách sạn có phục vụ buffet vào buổi sáng

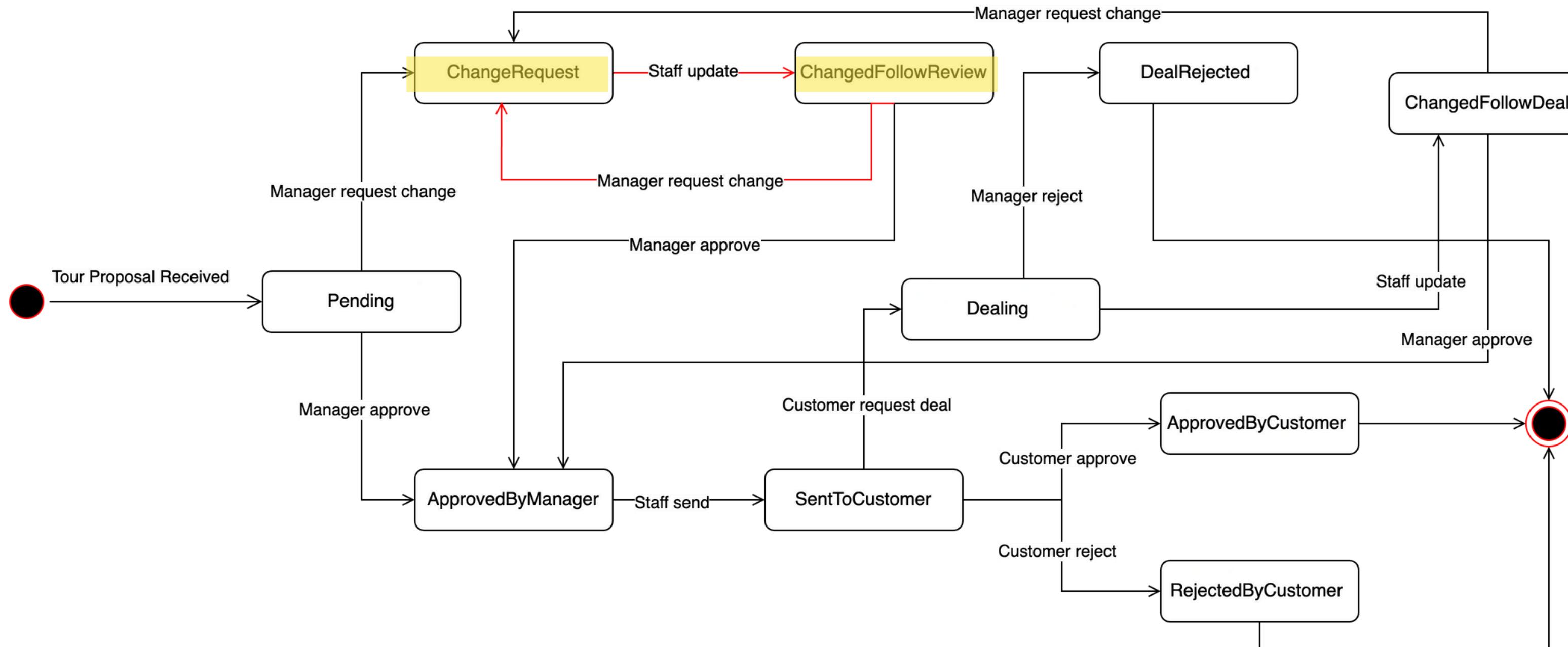
Güng bình mỗi người (không tính trẻ em dưới 4 tuổi): 100.000 VND 1 người mỗi bữa ăn

**Chấp nhận**

Hủy Gửi



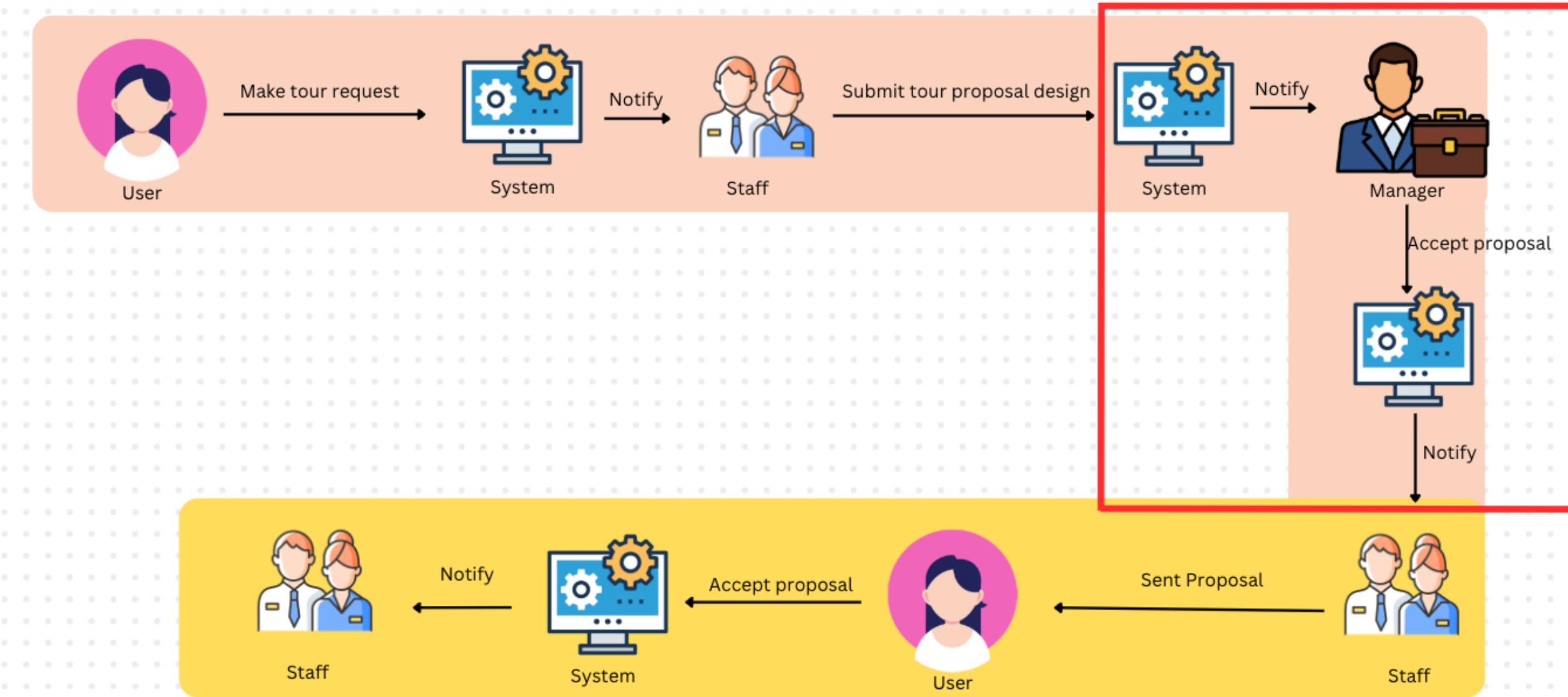
## MANAGER CREATE CHANGE REQUEST





## MANAGER APPROVE PROPOSAL

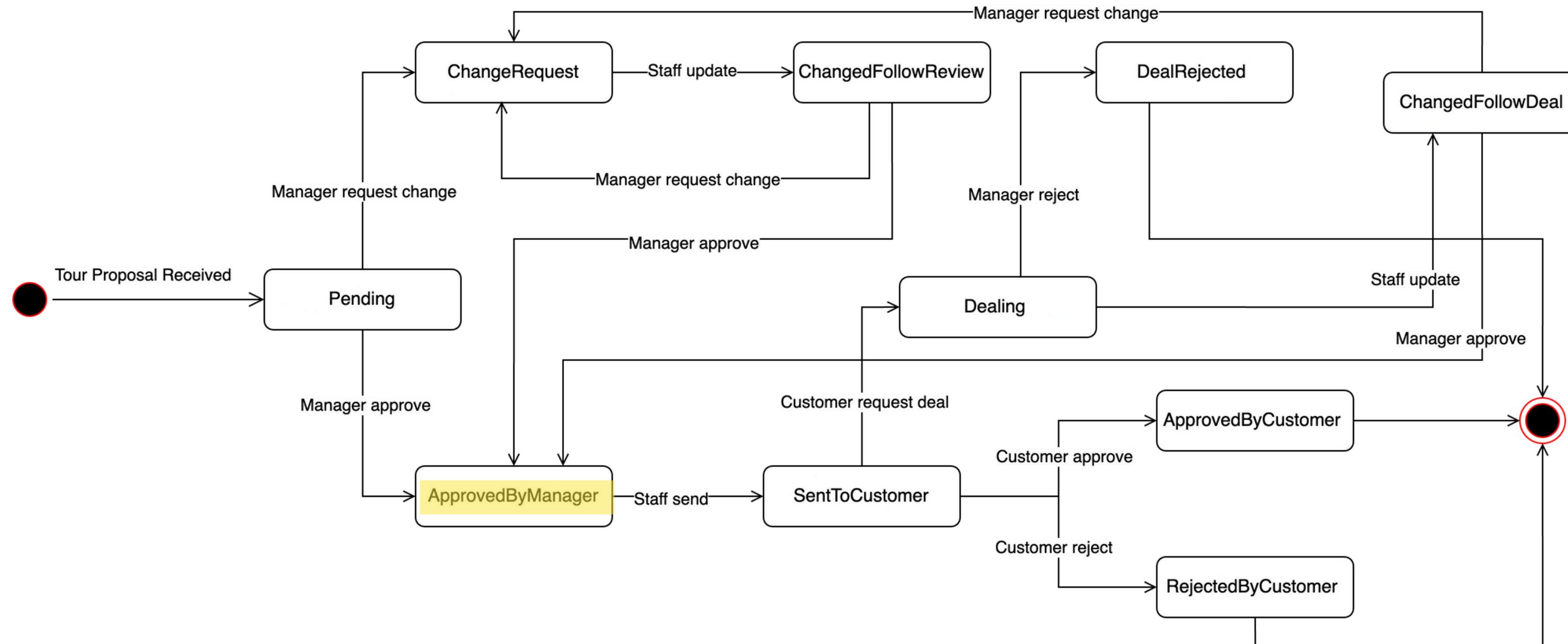
### Tour Request and Proposal Creation





## STATE DIAGRAM: PROPOSAL CREATION

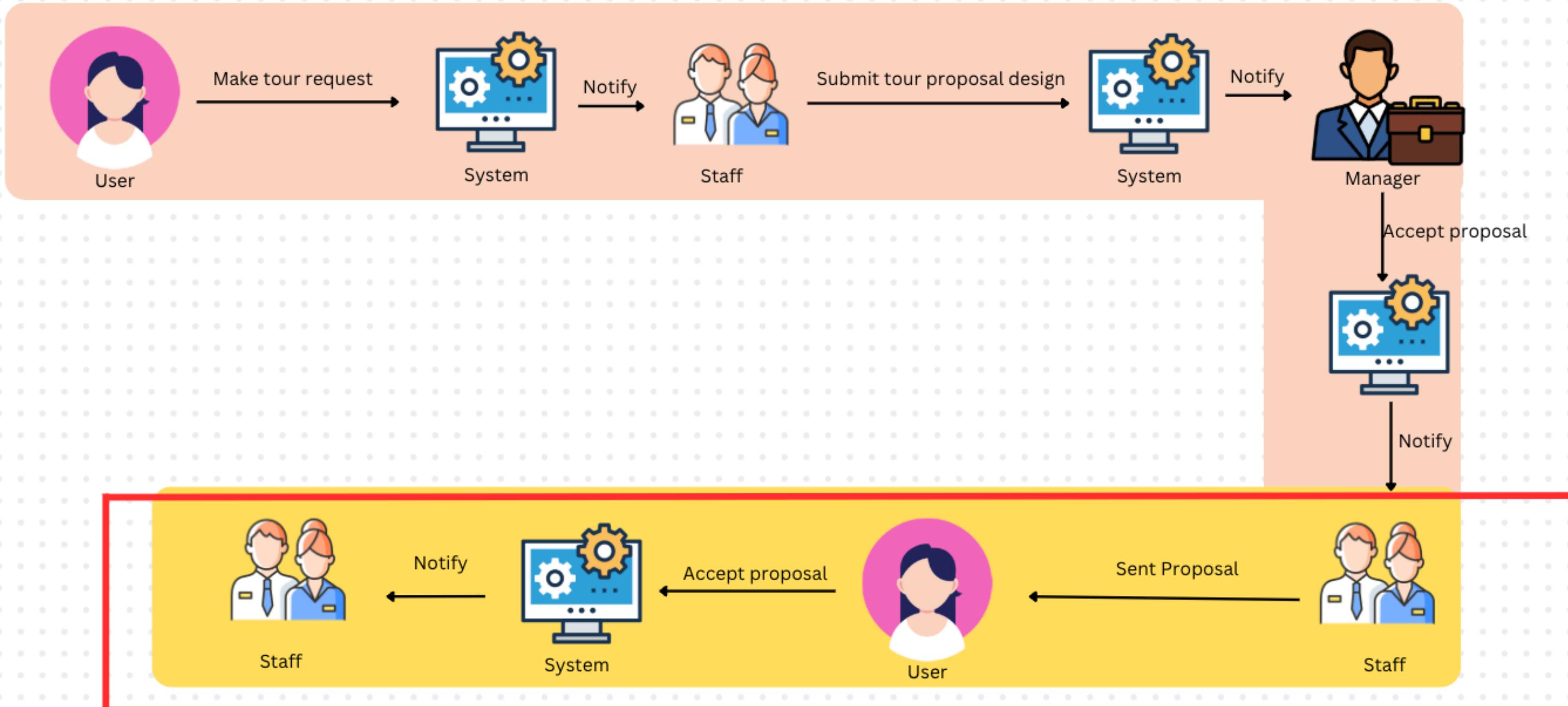
### Proposal Status





## STAFF SEND PROPOSAL TO CUSTOMER

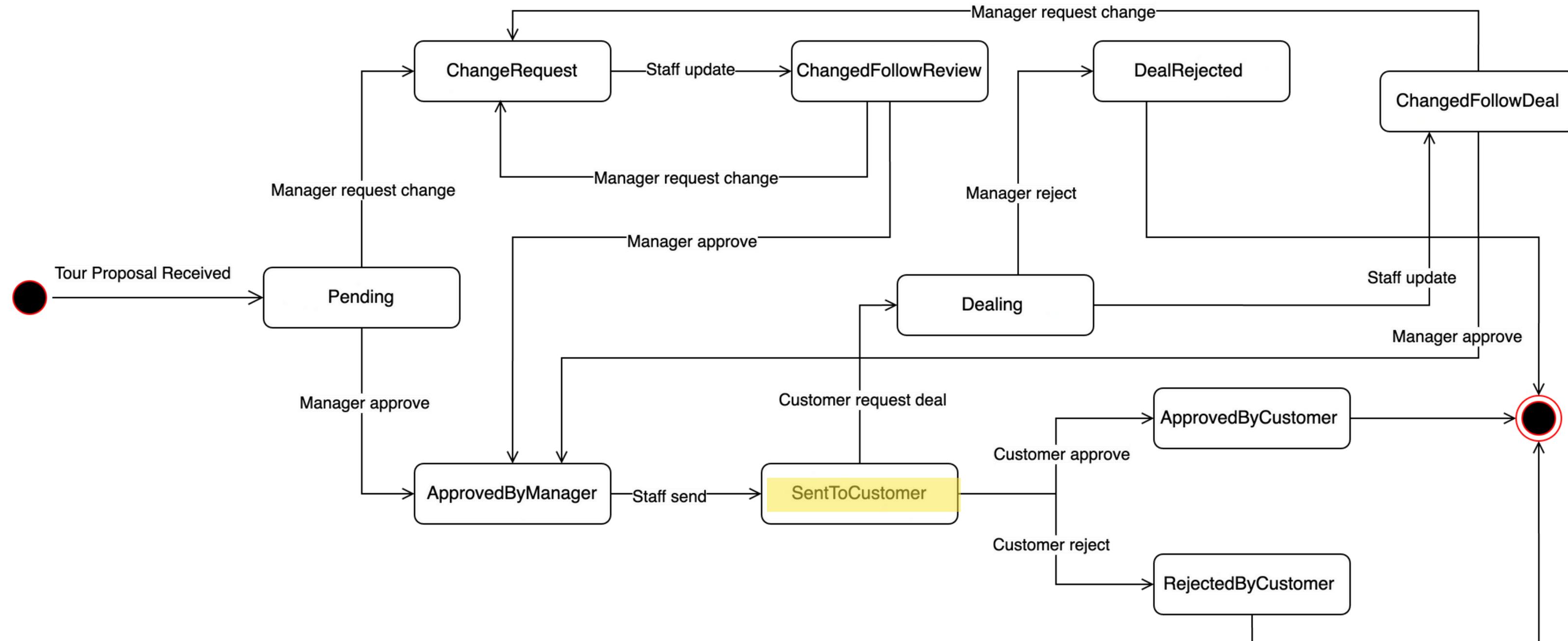
### Tour Request and Proposal Creation





## STATE DIAGRAM: PROPOSAL CREATION

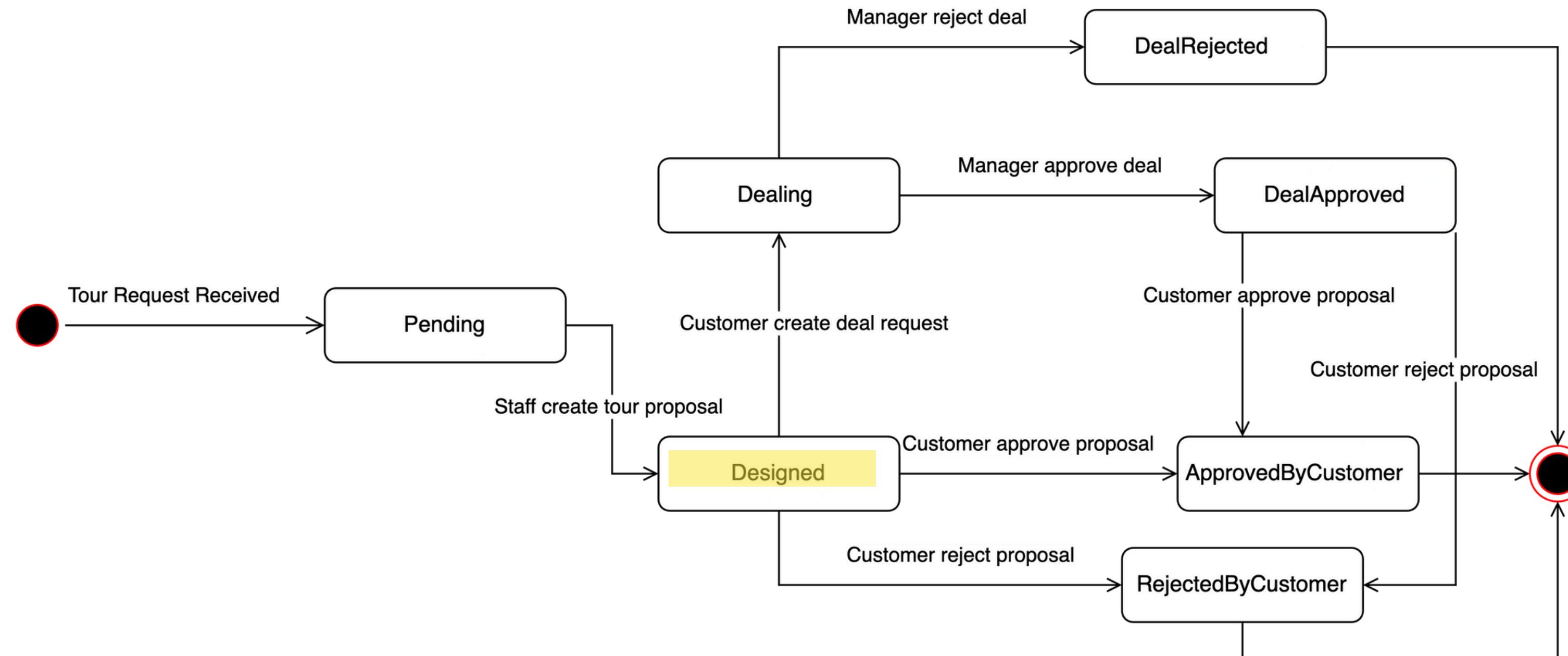
### Proposal Status





## STATE DIAGRAM: TOUR REQUEST

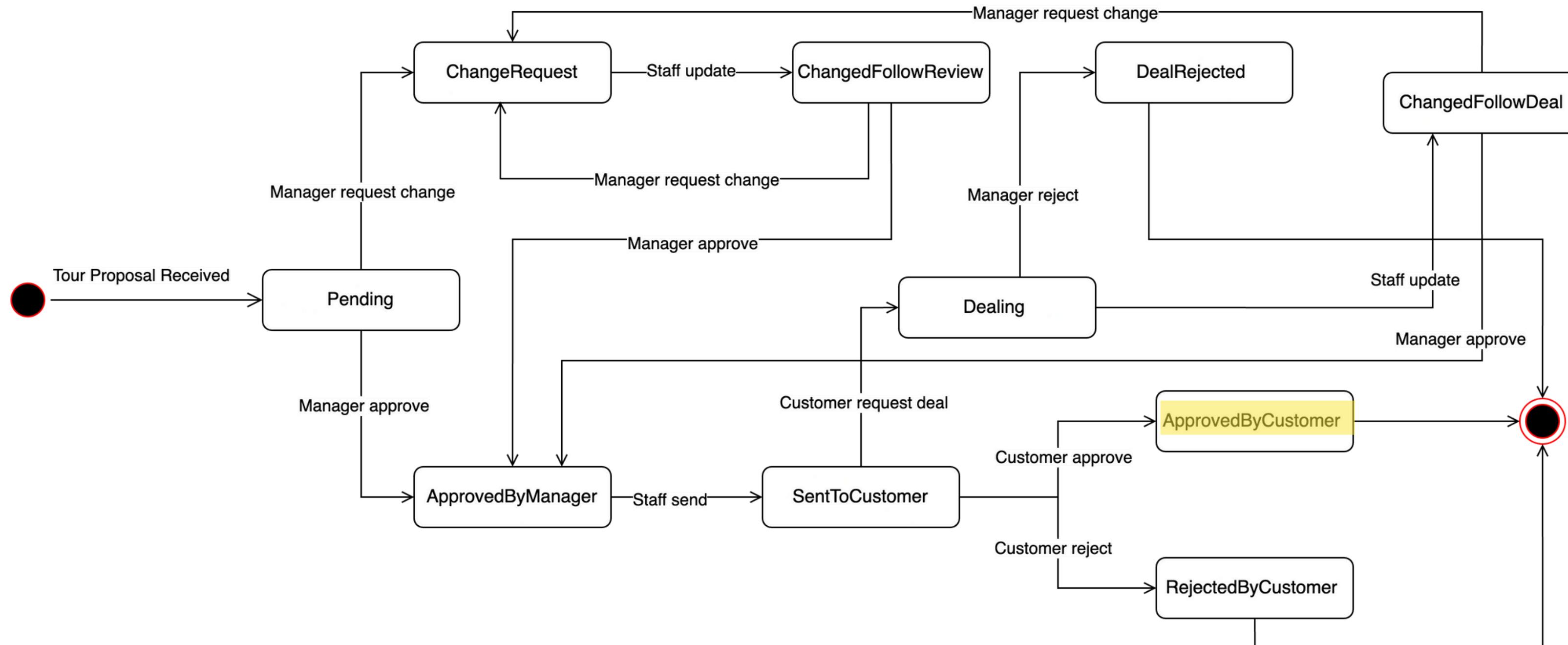
### Tour Request Status





## STATE DIAGRAM: PROPOSAL CREATION

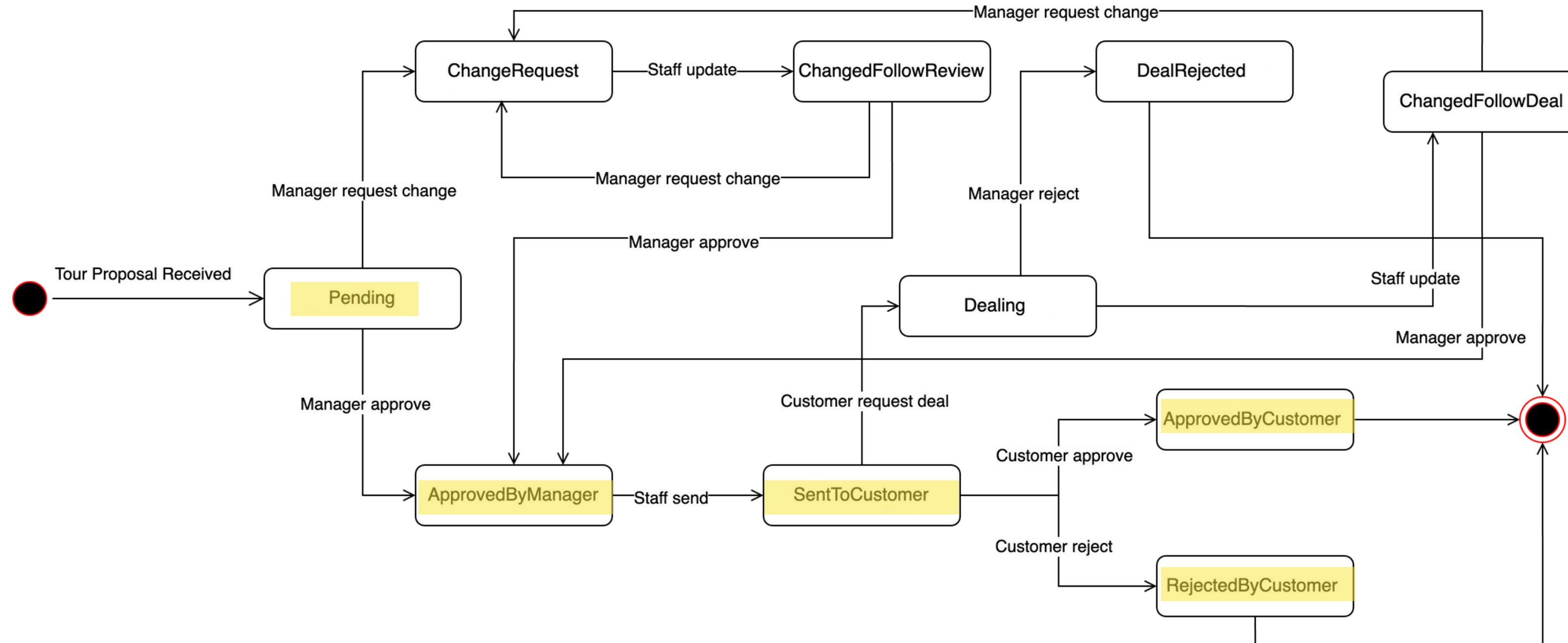
### Proposal Status





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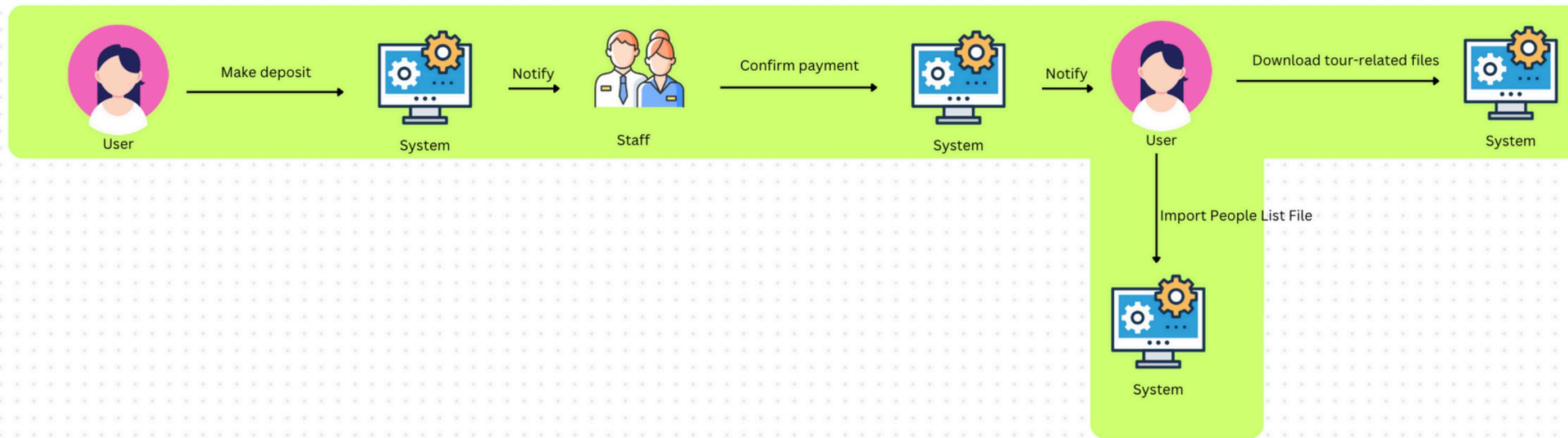
### Proposal Status





## CORE FLOW: TOUR EXECUTION

### Tour Execution

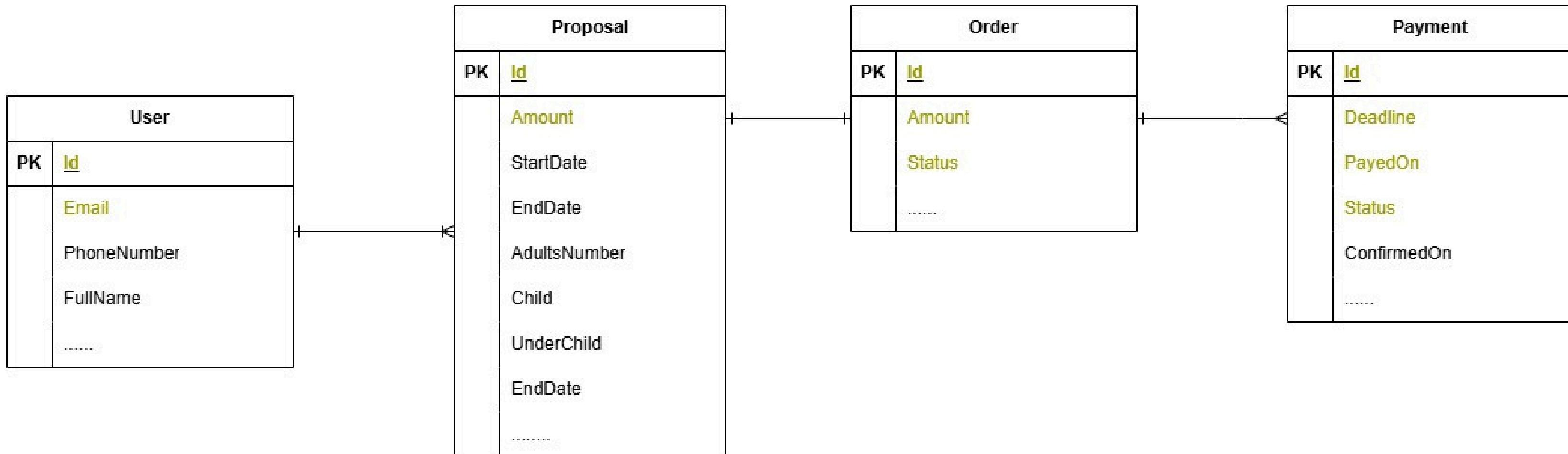




## Create order

The system will create a tour design order after the customer makes payment.

Information about payment due date through **Deadline** attribute and payment time through **PayedOn** attribute.





## BUSINESS RULES: TOUR EXECUTION

Customers must pay for tours in **three instalments**:

- 1st instalment:  $m(*)\%$  of the total cost.
- 2nd instalment:  $n(*)\%$  of the total cost.
- 3rd instalment:  $k(*)\%$  of the total cost.

**Payment deadlines are calculated** by the system.

Payments are only allowed for customers if made within the deadlines and **require manual confirmation by staff**.

**After the deadline, customers cannot upload proof of payment**, but **staff can manage such documents**.



# DEMONSTRATION: TOUR EXECUTION

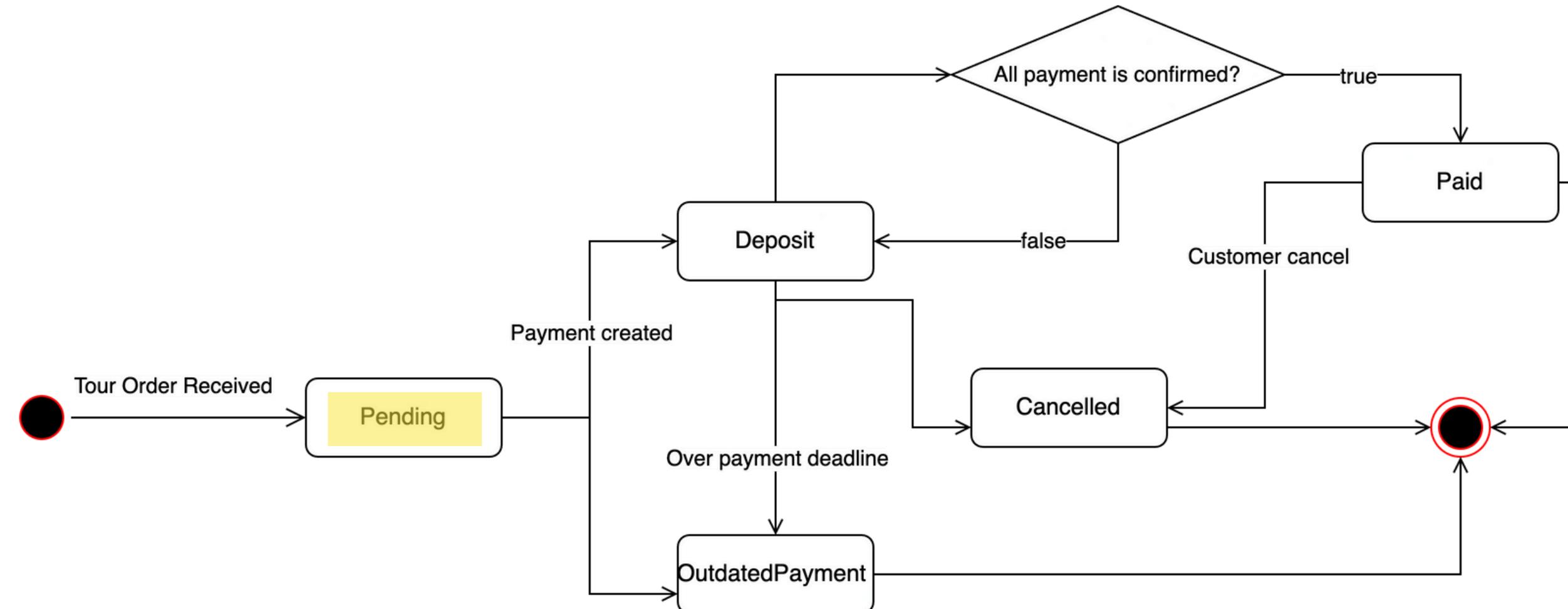
## SCENARIO:

- Mr. Hung is a customer **booking a tour** for his team **based on an approved proposal**. He **makes two deposit payments for the tour**.
- Ms. Huyen, a staff member of the tour company, processes the tour by **confirming both deposit payments** made by Mr. Hung.

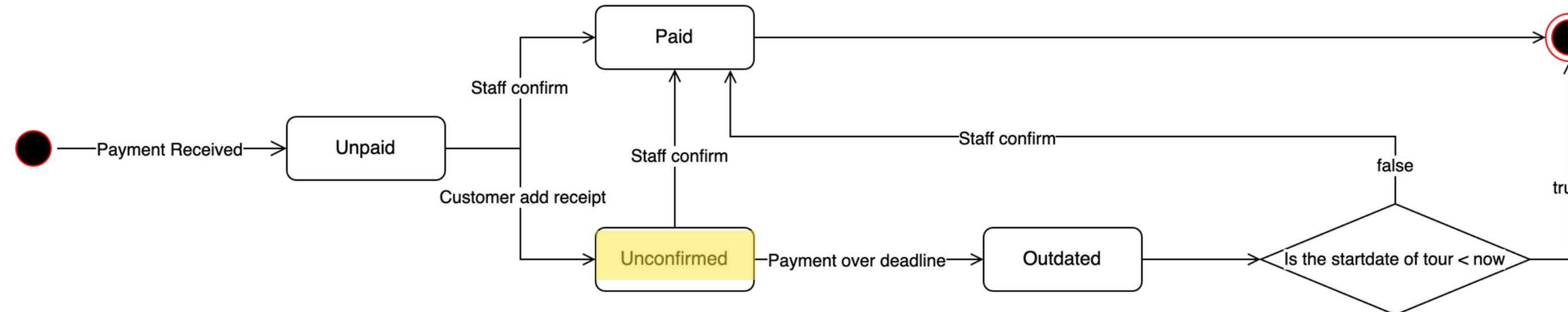


# State Diagram: Tour Order, Payment Process

## Order Status



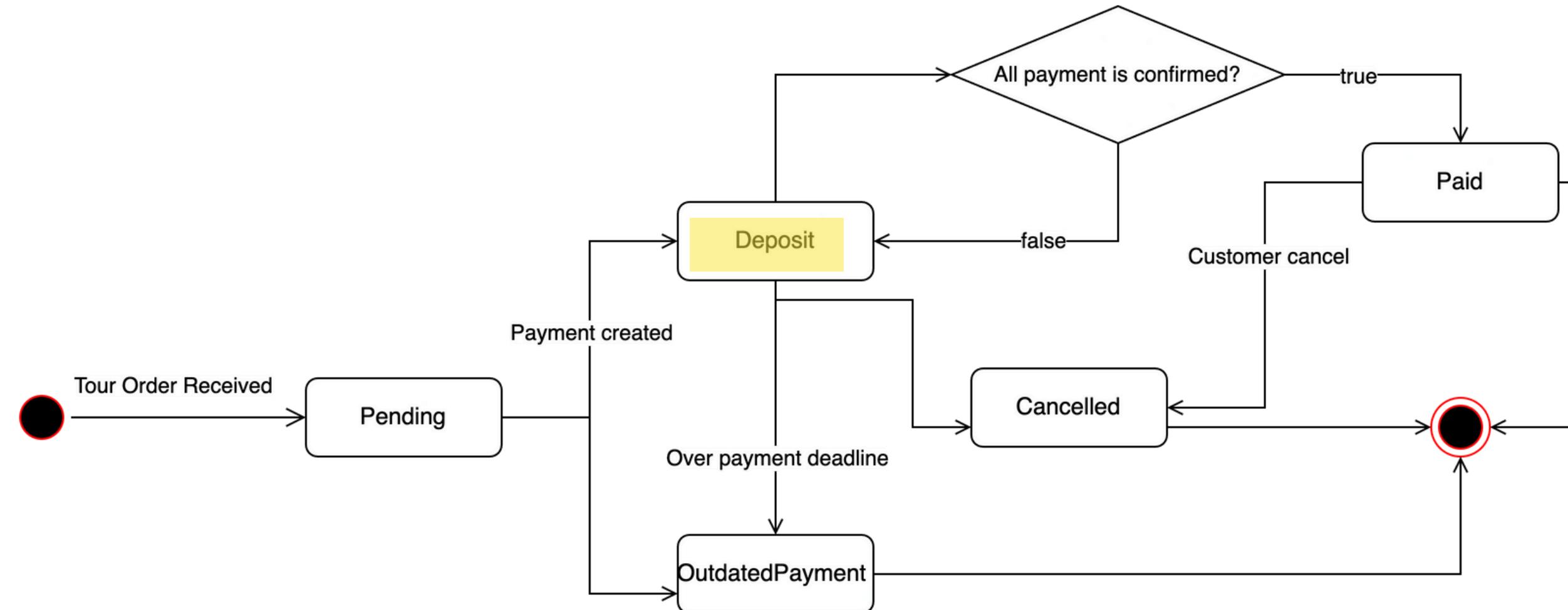
## Payment Status



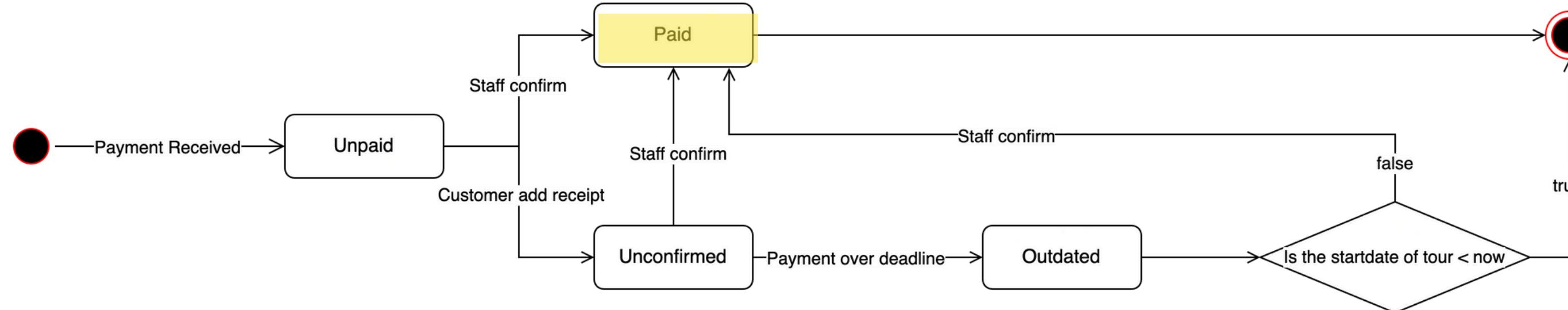


# State Diagram: Tour Order, Payment Process

## Order Status



## Payment Status

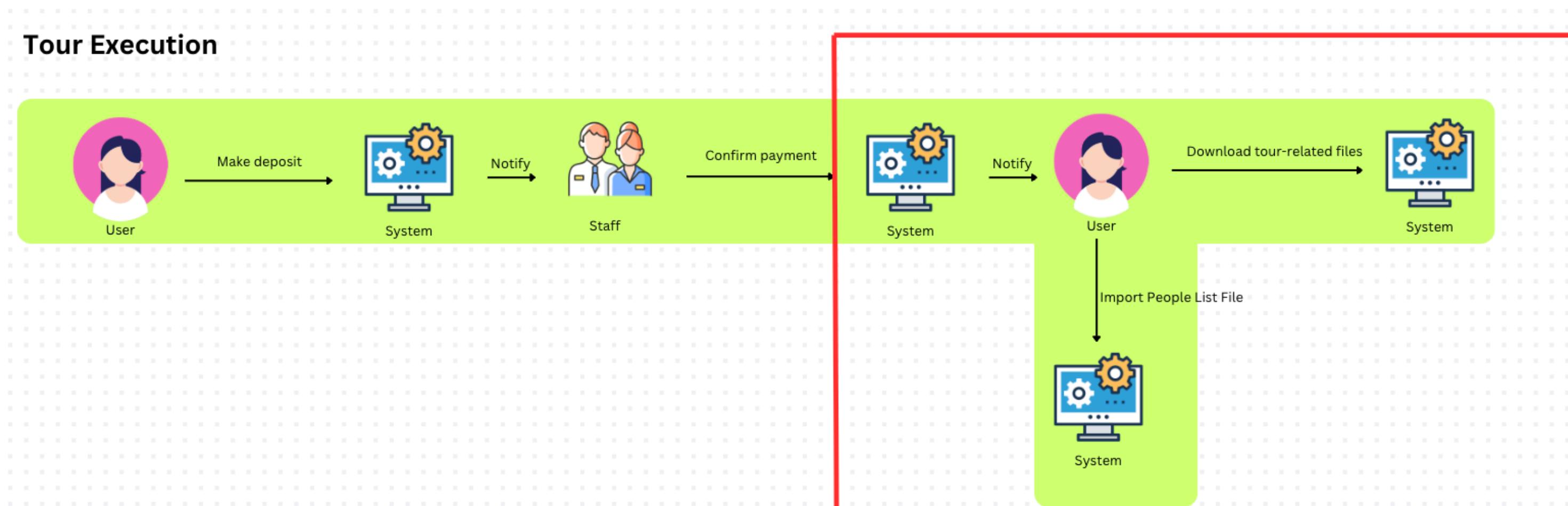




## DEMONSTRATION: TOUR EXECUTION

### SCENARIO:

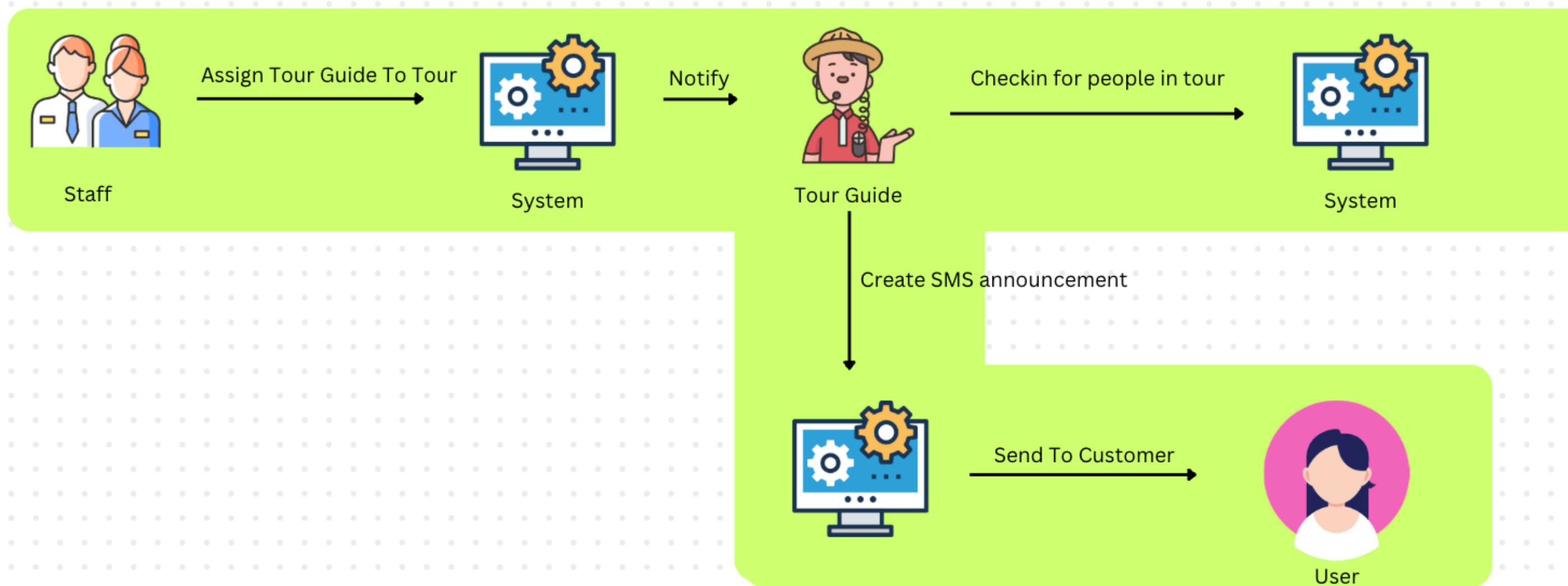
- Once the deposits are confirmed, staff Huyen **assigns a tour guide** to the tour and **adds the license plate** details for transportation.
- After two deposit payments are confirmed, Customer Hung can **import the attendee list** for the tour and **download the related proposal files**.





## DEMONSTRATION: TOUR EXECUTION

### Tour Execution





# DEMONSTRATION: TOUR EXECUTION

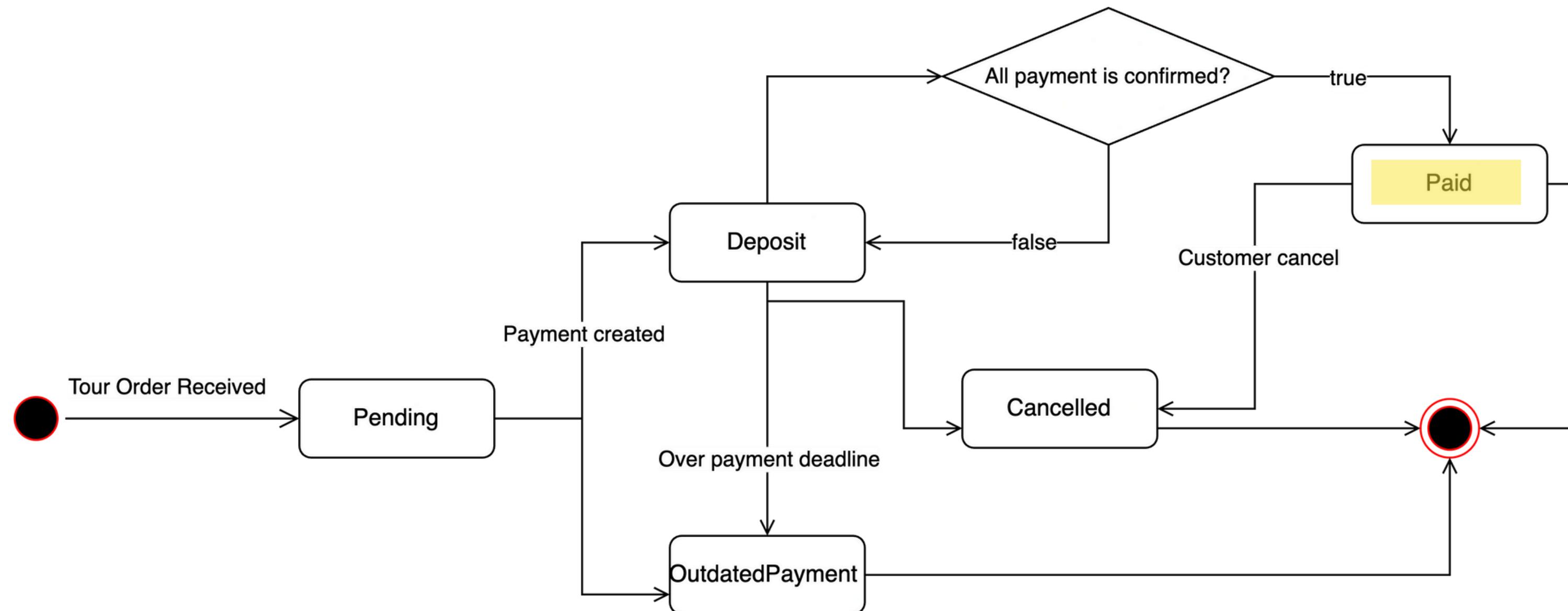
## SCENARIO:

- Ms. Linh is the tour guide assigned to lead the tour. She can view the details of the tour she is assigned to lead, which include the following information: [departure, destination, startDate, endDate, Hotel.....].
- On the **first day** of the tour, she sends an SMS **notification to customers** based on the phone list provided which imported by customer.
- She **checks in all attendees** before departure to ensure everyone is accounted for.
- Daily Tasks:
  - **Day 1:** She sends an SMS notification to remind attendees about lunch arrangements.
  - **Day 2:** Since the schedule includes team-building activities, she sends an SMS notification to remind attendees about the team-building session.
  - **Last Day:** If the schedule includes visiting a specific location (X place), she sends an SMS notification to provide details about this activity.
- After the Tour: Once the tour is completed, staff Huyen confirm last payment for tour order.



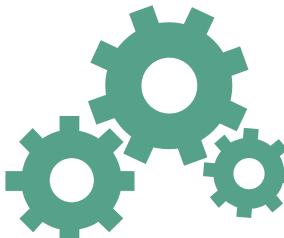
# State Diagram: Tour Order, Payment Process

## Order Status





## OTHER FEATURES



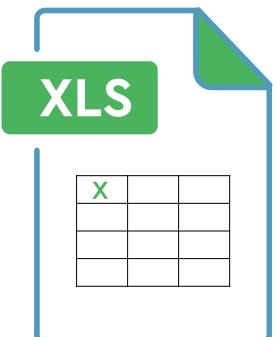
- **Admin Business Settings Configuration**  
Allows the admin to configure and manage **business settings**.



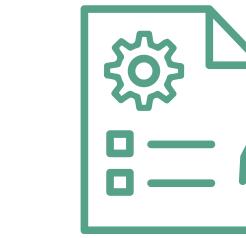
- **Tour Order Cancellation**  
Allows cancellation of a tour order.



- **Email and Notification Alerts**  
Sends email and notification **alerts** for **important tour-related events**.



- **Import Excel File**  
Administrators can import data into the system.



- **Proposal Change Request by Manager**  
Enables managers to request modifications to a tour proposal.



- **Draft Saving During Design**  
Provides the **auto save progress** as a draft during the tour design process.



- **Customer Request Deal**  
The customer **sends a deal request** to ask the tour company to modify the proposal. After the proposal is updated, the customer can view the new proposal with the **changes highlighted**.



# OUTCOME



- **Simplified Tour Request Process**

Provides customers with an easy way to request and track tours.



- **Efficient Tour Design**

Helps staff design tours, ensuring customer needs are met.



- **Support for Tour Execution**

Offers tools to facilitate the execution of tours.

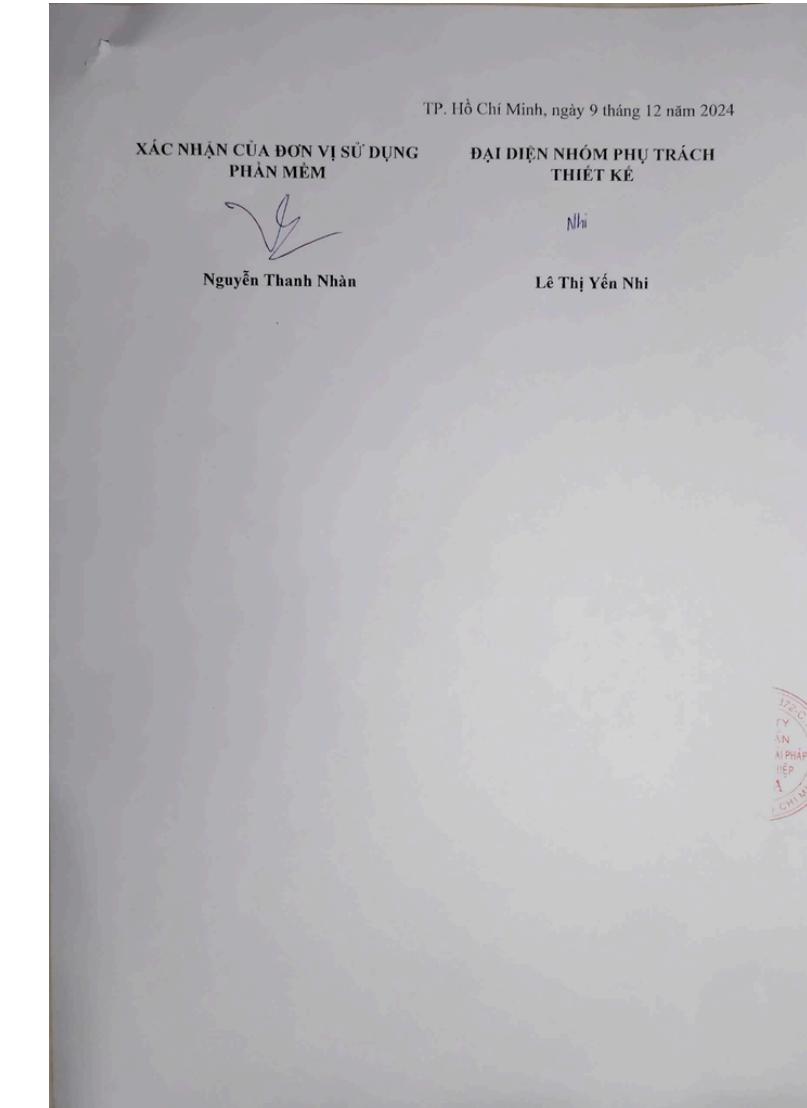
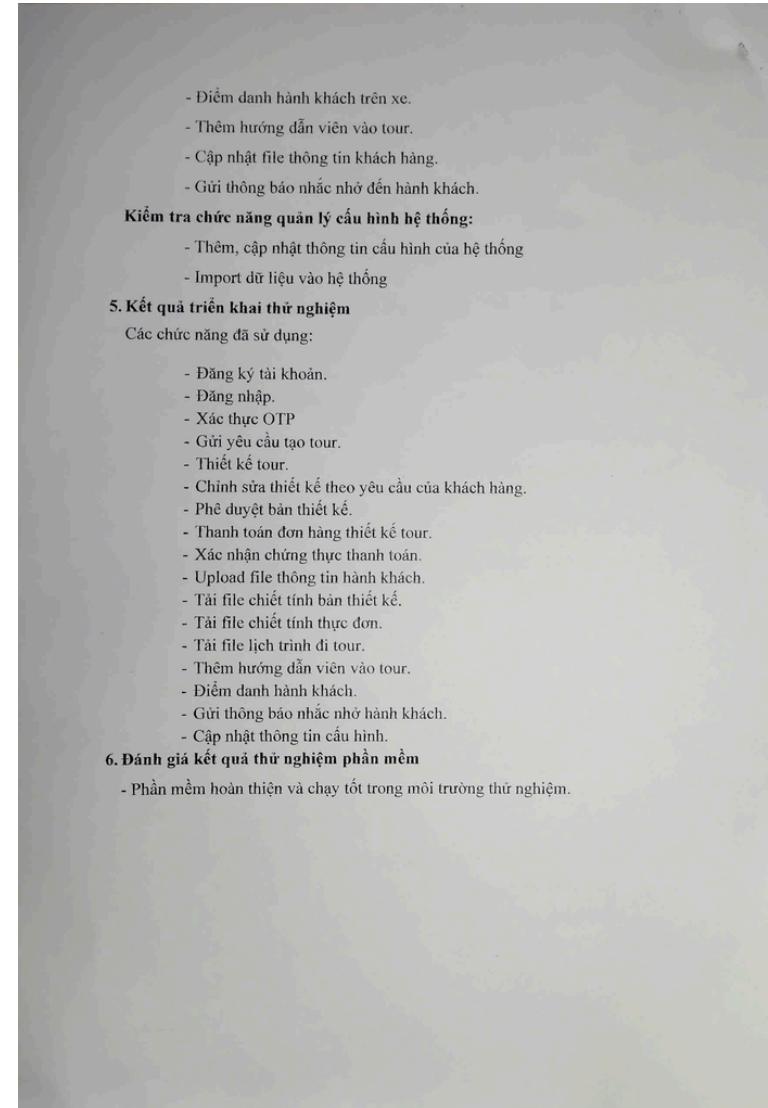
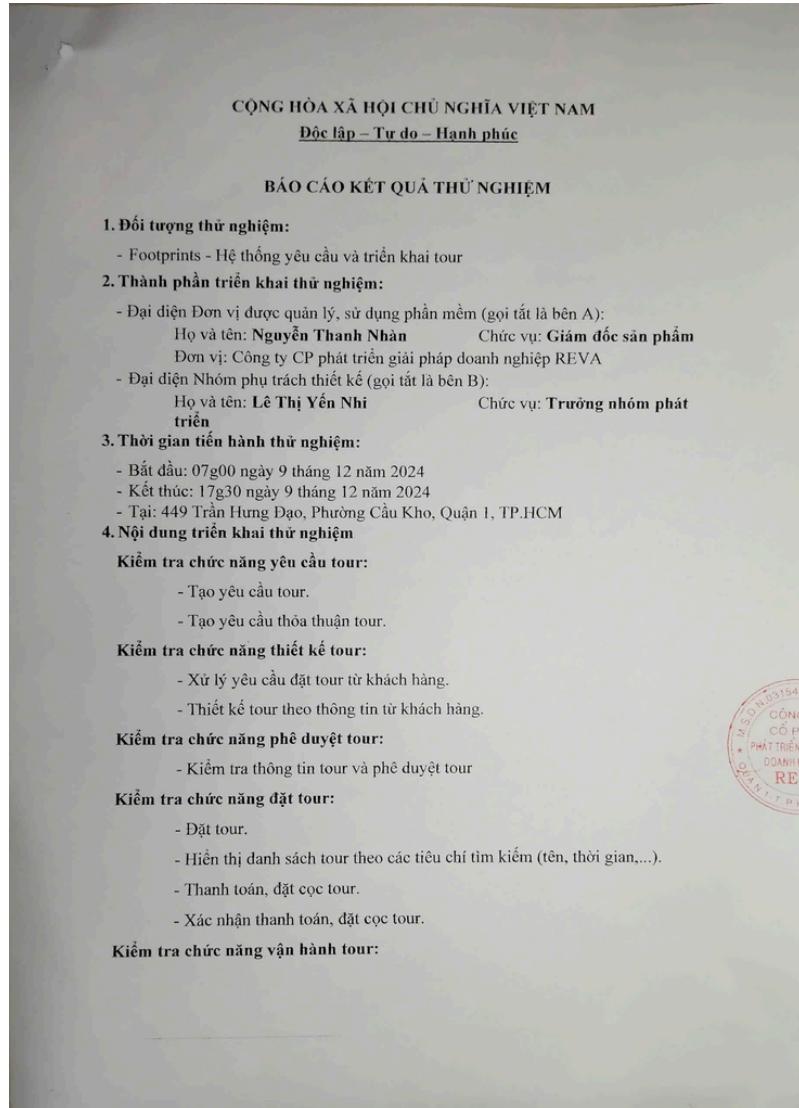


# CHALLENGES

- The system does **not manage personnel**, such as employees or tour guides.
- The system does **not support checking the availability of rooms in hotels** or seats in **restaurants** at destinations. Instead, restaurant and hotel arrangements are based on data imported by the admin into the system, according to contracts signed between the company and the respective hotels or restaurants.



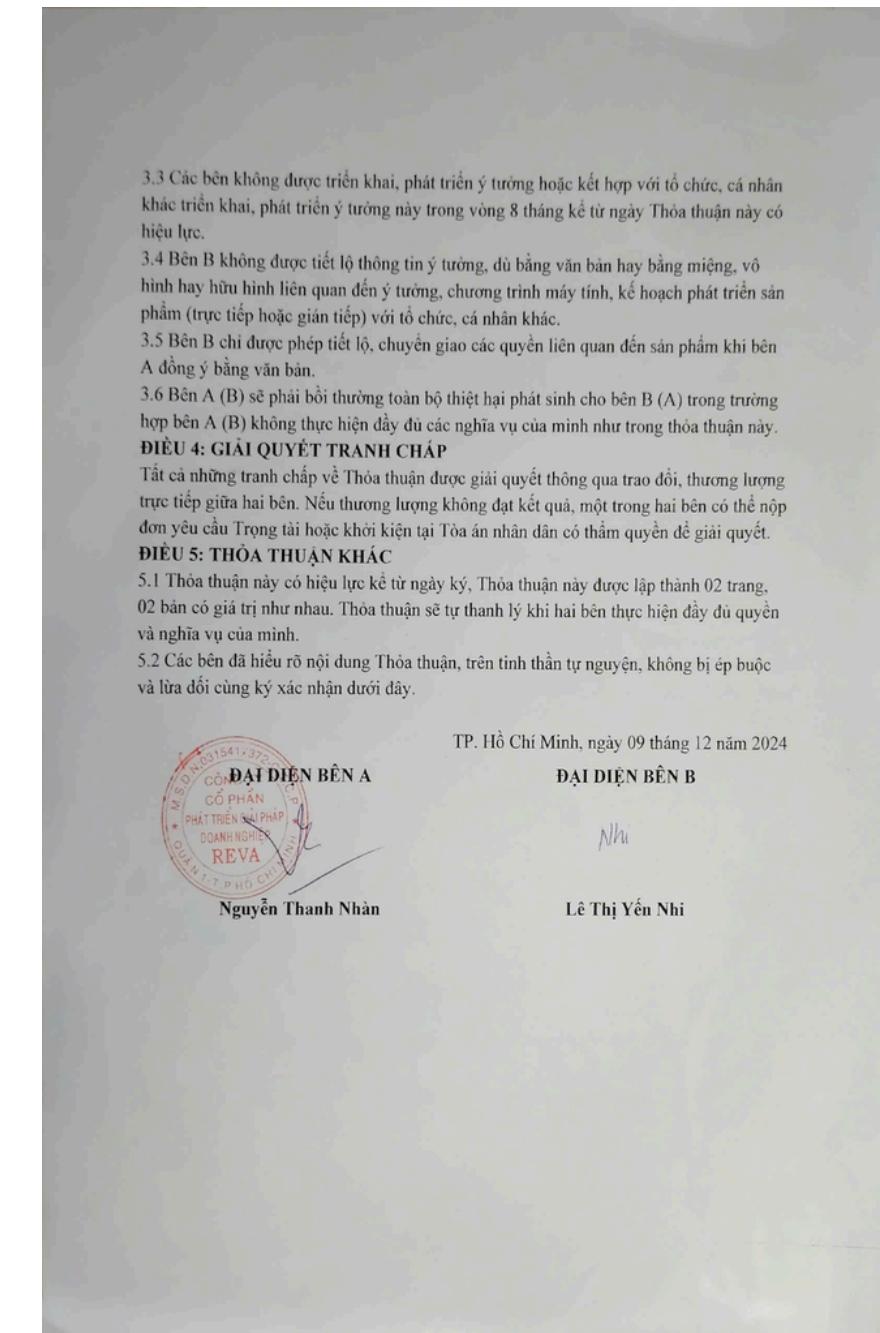
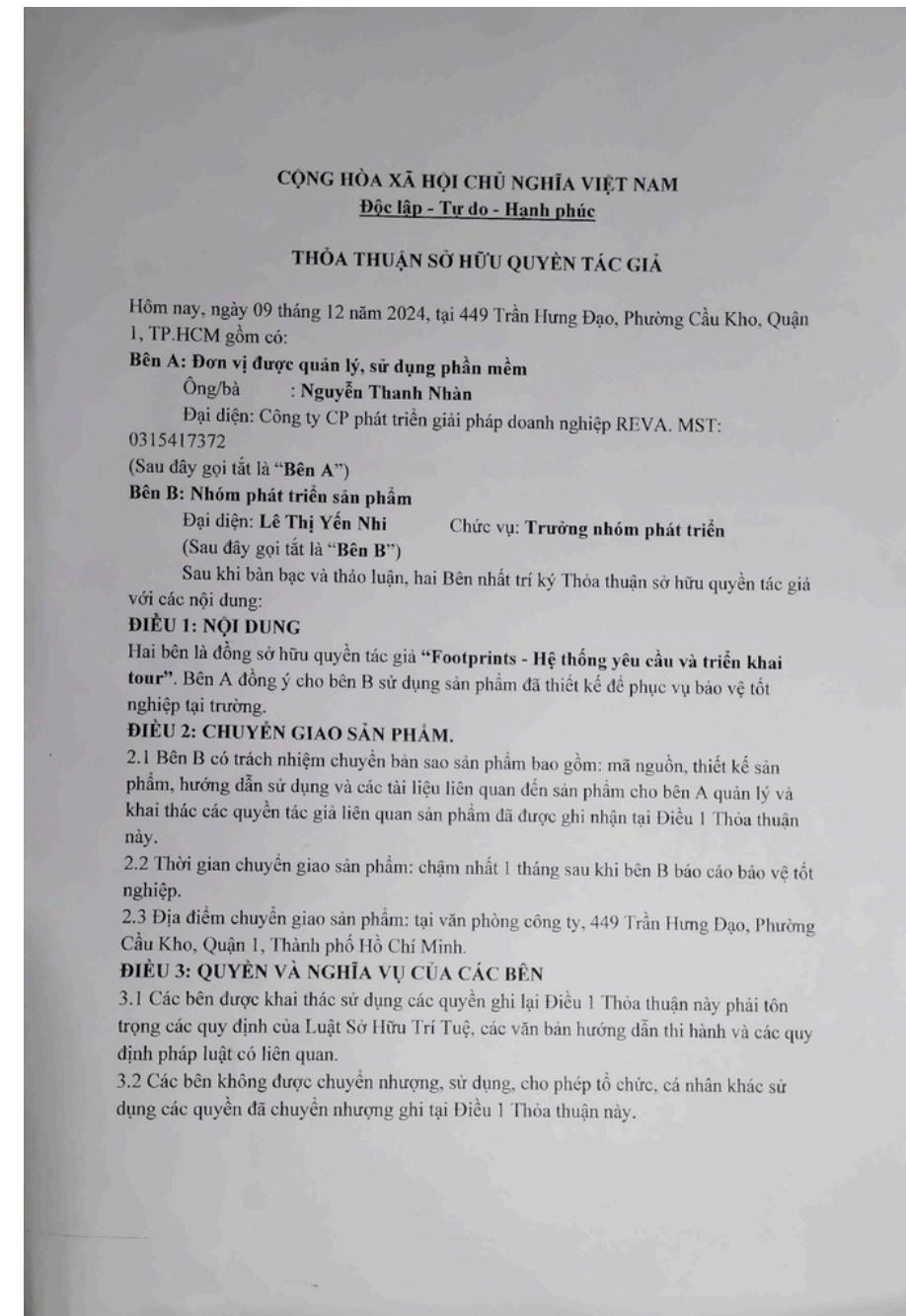
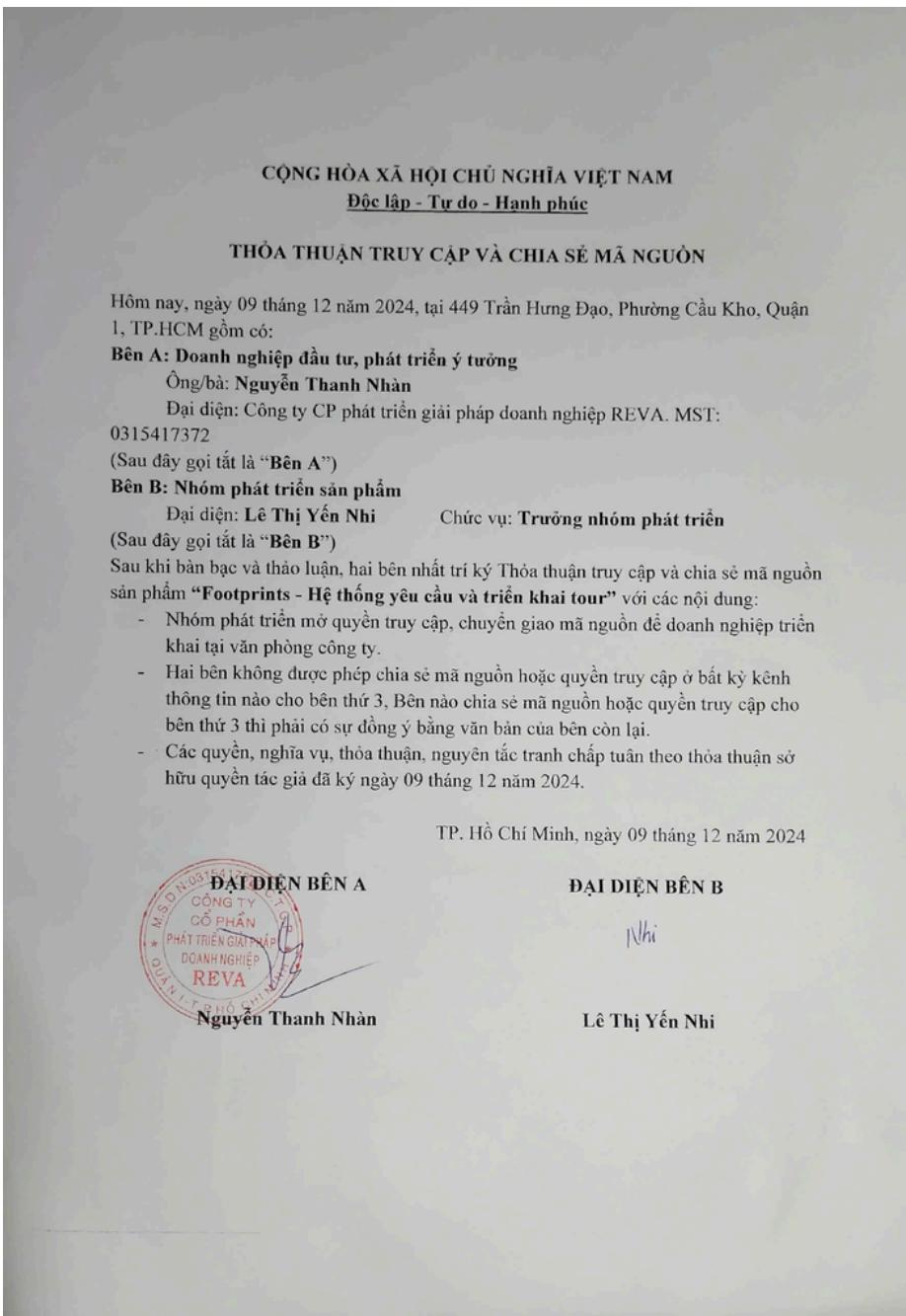
# ACHIEVEMENTS



Reva Enterprise Solutions  
Development Joint Stock Company  
has tested and approved tour system  
at domain  
<https://tour.novelfootprint.online>



# ACHIEVEMENTS





# ACKNOWLEDGEMENTS

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**THANK  
YOU**