

# Procedure Ideation

The goal of this assignment is to develop a plan for 3-4 procedures carried out in the same context of work. For example, recall how Bellamy et al. use the running example about the Espresso machine. One could consider how the use of this machine will involve numerous types of user scenarios and goals with their own set of tasks. In sum, your ideation work should consider multiple scenarios with connected goals/technologies.

This document guides you through a series of heuristics, i.e., a set of guiding prompts and questions, to consider the details of the scenarios, goals, and tasks that will inform your writing.

Copy this document to your Google Drive. Then, follow the instructions within each section. When you have completed it, submit a PDF version of it to Moodle.

## Analyzing Your Audience

In this section, follow the guiding prompts to gather up a sense about your intended audience. Typically, you should conduct user research to qualify and verify such information. But, for the purposes of this exercise, it is fine if you rely more on your particular subjectivities. The point is to craft a more defined understanding of the audience.

***Exigence: What is the occasion for these procedural instructions?***

- Why are these procedural instructions necessary at this particular time and place? What issues/problems do these instructions aim to address?

ABC Hotel has acquired a new Point-of-Sales system, as their existing tool has limited features and performance issues.

The newly acquired POS system is compatible with their business operations, and has cutting-edge features like cashless payments, loyalty integrations, and state-of-the art inventory management.

These procedural instructions are targeted at educating the hotel staff on how to leverage the product to achieve their business goals. They aim to educate the front-desk staff, managers, and support personnel on performing their day-to-day operations such as onboarding users, running business reports, and

troubleshooting the system to ensure business contingency.

- **Why is this issue important right now? What is at stake, and for whom?**

The new POS system is complex compared to the one that was already in use, and it is important that front-desk staff, cashiers, and other employees at the hotel are equipped to handle it efficiently, which could improve customer satisfaction, and reduce the time and resources spent on training sessions.

## ***Who is the audience?***

Highlight some of the characteristics that you think might apply to the projected audience:

- **Potential user** (someone who's exploring the product)
- **New user** (someone who's getting started with the product)
- **Intermediate user** (someone who has used the product before)
- Experienced user (someone who's well-versed with the product)
- New professional (someone who is new to the field and probably new to your product)
- **Experienced professional** (someone who is an expert in the field but might be new to your product)
- Admin/Leadership
- New contributor
- Experienced contributor
- Other: [Consider a more specific actor with a more specific role to the context of your procedure. For example, a software developer, if the procedure concerned some tool/feature for developers.]

***What are the audience's goals for these procedures? Develop 4 goals that all share the same context of activity with each other.*** Here are some examples to follow: 4 goals pertaining to making espresso drinks; 4 goals when playing Zelda: Tears of the Kingdom game; or 4 goals to improve one's basketball skills.

1. Processing sales and refunds.
2. Generating end-of-the-day revenue reports.
3. Updating kitchen and bar inventory information.
4. Applying promotions, discounts, and offers.

***What situations and reasons might have brought the readers to your document(s)?***

Readers might refer to the procedural instructions for the following reasons:

1. Employee training and onboarding.
2. Troubleshooting errors while performing transactions and applying discounts.
3. Monitoring and updating stock inventory.
4. Understanding the hardware, software, and networking requirements needed to successfully install the system, and ensure smooth operations.

### ***How might have they come to find your document?***

They may find the document as a help build, or a web page or a pdf file.

### ***What information do they already have about the product/feature?***

As they are already employed in the hospitality sector, they are aware about the general functions of a POS system such as handling transactions, creating user accounts, and generating revenue reports. However, they need to understand the workflow of the new POS system and get comfortable with navigating through its layered user interface to accomplish their goals.

### ***What are the main questions readers are likely to have?***

1. How to log in to the POS system?
2. How to create user accounts and permissions?
3. How to process sales, refunds, and returns?
4. How to handle payments?
5. How to connect the POS system with cash drawers and receipt printers?
6. How to apply discounts and offers?
7. How to enable integration of the POS system with CRM tools or property management systems?
8. How to generate sales and inventory reports?
9. How to fix sales errors?
10. How to add and remove stock information?

## **Write Your User Scenarios**

Based on the above information, write 4 scenarios that include the 4 main parts of information: Who, Motivation(s), Goal, and Important Characteristics.

You may not write a procedure for all of the scenarios in the end, but this will help you gather a sense of how many procedures you will need to write for the major assignment.

**IMPORTANT:** All of your scenarios should be within the same context of activity or tool use. In other words, don't write up 4 scenarios from 4 completely different contexts of activity. Here are some examples to follow: 4 scenarios pertaining to making espresso drinks; 4 scenarios when playing Zelda: Tears of the Kingdom game; or 4 scenarios to improve one's basketball skills.

### **Scenario 1:**

A new front-desk employee who is a novice at hotel operations and new to the product, must learn how to perform sales transactions. His goal is to be quick at scanning an item's barcode, adding it to the cart, adding a payment method, and finishing a checkout without causing any delays for customers.

#### **Scenario 2:**

An accounting manager who has worked on the product before but is not aware of its advanced features and wants to generate revenue reports at the end of each business day for auditing purposes.

#### **Scenario 3:**

An experienced Food and Beverage manager who is an expert at hotel inventory operations, but new to the product, and wants to monitor and update stock information, ensuring the kitchen and bar do not run out of supplies.

#### **Scenario 4:**

A hotel sales manager who has worked on other similar products before, and is on the lookout for a robust POS system with sophisticated features and wants to explore what the product has to offer in terms of customer loyalty support.

## Analyzing Your Audience(s) Tasks

Complete one of the following tables to analyze the tasks that you will write for each user scenario. A task analysis will help you develop a better understanding of the following questions:

- How much supporting reference and conceptual information to provide
- What level of “completeness” (low, mid, high) may you need to write the steps

Remember that this is meant to be an ideation exercise—not a finished draft of the actual procedure. Yet, it should help you develop an initial rough draft.

Refer to Bellamy et al.'s discussion and example of a task analysis in Chapter 1 for support, as you move through this analysis work.

### ***Task Analysis for Scenario 1***

Guiding Question	Details
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<p>What is the user-oriented goal?</p> <ul style="list-style-type: none"> <li>Do not fall into the function/feature-oriented goal.</li> </ul>	<p>To perform sales transactions.</p>
<p>What tasks does the user need to perform to accomplish the goal?</p> <ul style="list-style-type: none"> <li>Remember tasks are not the same as goals, and tasks are not synonymous with steps.</li> <li>Steps are the more specific actions needed to complete a larger “high-level” task.</li> <li>Don’t worry about sequence or the “completeness” yet.</li> </ul>	<ul style="list-style-type: none"> <li>Log into the system.</li> <li>Select the item required by the customer from the list of available items.</li> <li>Scan the barcode and add it to the cart.</li> <li>Add the customer’s payment method.</li> <li>Process the sale.</li> </ul>
<p>What are the mental and physical steps involved in each task?</p>	<p><b>Mental:</b></p> <ul style="list-style-type: none"> <li>Clearly understand the guest’s request.</li> <li>Find the right product to bill.</li> <li>Maintain a cheerful demeanor while serving the guest.</li> <li>Assist the guest with finding the right product.</li> <li>Informing the guest politely if the ordered item is not available.</li> </ul> <p><b>Physical:</b></p> <ul style="list-style-type: none"> <li>Choose the right item from the Order screen.</li> <li>Use a barcode scanner to scan the product.</li> <li>Open the cash drawer to offer change.</li> <li>Register the end of sale in the system.</li> </ul>
<p>Who performs the task?</p>	<p><b>Audience:</b> A new front-desk employee who is unaware of POS system features and is new with managing the front desk as well.</p> <p><b>Experience:</b>  Fresher</p>

	<p><b>Role:</b></p> <p>Junior Front-Desk Staff.</p> <p><b>Authority:</b></p> <ul style="list-style-type: none"> <li>• Normal User - Can place orders only.</li> <li>• Admin - Can customize order details without manager override.</li> <li>• Super User - Can edit stock information in case an item is available at the counter, but inventory is not synced.</li> </ul>
When and under what conditions is the task performed?	<p><b>Requirements:</b></p> <p>The employee details must be available in the system, and his user account must have the permission to perform a sale.</p> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>• Items might appear available in the Order screen if the inventory information is not updated.</li> <li>• Partial orders cannot be saved in the system while the staff is handling multiple guests at the same time and is interrupted while performing a sale.</li> <li>• Not all items in the POS system can be customized according to the customer demands.</li> </ul> <p><b>Environment:</b> A busy hotel with a steady stream of guests who are checking in to rooms as well as buying products off the retail counter at the front-desk.</p>
What are the potential distractions to accomplishing the goal?	<p><b>Alternative path:</b></p> <p>Items can be added to the cart by the customer through self-checkout kiosks.</p> <p>Automated orders can be made for saved guest profiles.</p> <p><b>Exception path:</b></p>

	<ul style="list-style-type: none"> <li>• Ordered item is out of stock.</li> <li>• POS system crashes while placing an order.</li> <li>• Wrong item is scanned instead of the item ordered by the guest.</li> <li>• A sudden loss of network connectivity.</li> </ul> <p><b>Boundaries:</b></p> <ul style="list-style-type: none"> <li>• Orders cannot be edited after the payment is processed.</li> <li>• Employees cannot access customer info.</li> </ul>
What does the user need to know about the task?	<p><b>Duration:</b> About 5 mins to add an item to the cart and make a sale.</p> <p><b>Complexity:</b></p> <p>Simple and straight forward.</p> <p><b>Frequency:</b></p> <p>Performed very frequently.</p>
What is the sequence of tasks or steps?	<ol style="list-style-type: none"> <li>1. Log in to the system.</li> <li>2. Navigate to the Order screen.</li> <li>3. Select the item ordered by the guest.</li> <li>4. Scan the barcode of the item and add it to the cart.</li> <li>5. Navigate to the Payments screen.</li> <li>6. Select the appropriate payment method as instructed by the guest.</li> <li>7. Allow the guest to swipe their card or enter the card number.</li> <li>8. Process the payment, open the cash drawer if required to handle cash transactions.</li> <li>9. Print the invoice receipt.</li> <li>10. Send the receipt to the guest's email.</li> <li>11. Register the end of sale in the system.</li> </ol>
What is the expected result?	To perform a sales transaction successfully without any delays.



## Task Analysis for Scenario 2

Guiding Question	Details
What is the user-oriented goal?	To generate revenue reports for each business day.
What tasks does the user need to perform to accomplish the goal? ( <i>Don't worry about sequence or the "completeness" yet.</i> )	<ul style="list-style-type: none"> <li>• Access the Reports screen in the POS system.</li> <li>• Select the category of report from the list of reports available.</li> <li>• Generate the report.</li> </ul>
What are the mental and physical steps involved in each task?	<p><b>Mental:</b></p> <ul style="list-style-type: none"> <li>• Identifying the right report to be generated as per the business purpose.</li> <li>• Remembering to generate reports at the end of each day to not miss out on auditing deadlines.</li> </ul> <p><b>Physical:</b></p> <ul style="list-style-type: none"> <li>• Log in to the system and select the appropriate user role.</li> <li>• Choose the right report category from the system.</li> <li>• Inputting the appropriate date ranges.</li> <li>• Exporting the report data.</li> </ul>
Who performs the task?	<p><b>Audience:</b> An accounting manager who has already worked on a previous version of the same POS product but is not aware of its advanced report generating and visualization features.</p> <p><b>Experience:</b> Intermediary</p> <p><b>Role:</b> Finance Manager</p> <p><b>Authority:</b></p> <ul style="list-style-type: none"> <li>• Normal User - Can generate reports but not export it.</li> <li>• Admin - Can schedule automatic generation of reports.</li> </ul>

	<ul style="list-style-type: none"> <li>• Super User - Can edit transactional data in case of total mismatch.</li> </ul>
When and under what conditions is the task performed?	<p><b>Requirements:</b></p> <p>The user account must be enabled with report generating permissions. The system must be integrated with third-party tools that allow extraction and analysis of reports data.</p> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>• Limited availability of report templates.</li> <li>• Delayed batch updates of transactional data.</li> </ul> <p><b>Environment:</b></p> <p>The user is accessing the system remotely.</p>
What are the potential distractions to accomplishing the goal?	<p><b>Alternative path:</b></p> <p>Automatic generation of reports can be scheduled in the system.</p> <p><b>Exception path:</b></p> <ul style="list-style-type: none"> <li>• Mismatch of totals in the report due to wrong data input.</li> <li>• The report generation failed due to system errors or crashes.</li> </ul> <p><b>Boundaries:</b></p> <ul style="list-style-type: none"> <li>• Cannot access reports after 1 month of placing orders.</li> <li>• Reports cannot be generated in real-time.</li> <li>• There is limited filtering and grouping options.</li> </ul>
What does the user need to know about the task?	<p><b>Duration:</b> 10 mins to select the category, input the necessary information, and generate the report.</p> <p><b>Complexity:</b></p> <p>Simple for advanced users. New users may need external help with understanding reporting parameters.</p>

	<b>Frequency:</b>  Done at the end of every business day.
What is the sequence of tasks or steps?	<ol style="list-style-type: none"> <li>1. Log in to the POS system with the appropriate user ID.</li> <li>2. Navigate to the Reports screen.</li> <li>3. Choose the report category such as Sales or Revenue.</li> <li>4. Select the date ranges and apply filters or grouping options.</li> <li>5. Generate the report.</li> <li>6. Extract the report data into a third-party system like Tableau or Power BI.</li> <li>7. Export the report in .csv or pdf formats.</li> <li>8. Sign out from the system.</li> </ol>
What is the expected result?	To generate a report and extract business data from it.

### Task Analysis for Scenario 3

Guiding Question	Details
What is the user-oriented goal?	To check and update the kitchen and bar inventory information
What tasks does the user need to perform to accomplish the goal? (Don't worry about sequence or the "completeness" yet.)	<ul style="list-style-type: none"> <li>• Navigate to the Inventory screen within the POS system.</li> <li>• Choose a particular item.</li> <li>• Check the units in stock for the item.</li> <li>• Enable alert notifications for items that are low in stock.</li> </ul>
What are the mental and physical steps involved in each task?	<b>Mental:</b> <ul style="list-style-type: none"> <li>• Assess the availability of items in the bar and kitchen, guessing the item supplies that may deplete soon.</li> <li>• Analyze if the system data matches the physical counts in the bar and kitchen.</li> </ul> <b>Physical:</b>

	<ul style="list-style-type: none"> <li>• Log in to the system and navigate to the Inventory screen.</li> <li>• Update the item counts as per the stocks available.</li> <li>• Set alert notifications when item counts go below sale thresholds.</li> </ul>
Who performs the task?	<p><b>Audience:</b> An experienced F&amp;B manager who is an expert at handling kitchen inventory operations but is new to the product workflow.</p> <p><b>Experience:</b> Expert user</p> <p><b>Role:</b> F&amp;B manager</p> <p><b>Authority:</b></p> <ul style="list-style-type: none"> <li>• Normal User - Can input stock counts in the system but not edit it.</li> <li>• Admin - Can enter and update stock units in the system.</li> <li>• Super User - Can export inventory information and share it with vendors/suppliers.</li> </ul>
When and under what conditions is the task performed?	<p><b>Requirements:</b></p> <p>User must have permission to enter or update stock information.</p> <p><b>Limitations:</b></p> <p>Inventory changes are not reflected in the system due to network errors.</p> <p><b>Environment:</b></p> <p>A very busy bar/kitchen setup with a continuous flow of orders, that needs the inventory to be up to date.</p>
What are the potential distractions to accomplishing the goal?	<p><b>Alternative path:</b></p> <p>Automated updates to stock unit information through APIs.</p> <p><b>Exception path:</b></p> <ul style="list-style-type: none"> <li>• Wrong counts are entered for stock units.</li> <li>• The items in stock are spoilt and cannot be sold despite availability.</li> </ul>

	<ul style="list-style-type: none"> <li>• Network failure causes delays in stock information updates.</li> </ul> <p><b>Boundaries:</b></p> <ul style="list-style-type: none"> <li>• Cannot place orders with suppliers for depleted items.</li> <li>• Cannot export inventory data.</li> </ul>
What does the user need to know about the task?	<p><b>Duration:</b> Approximately 20 mins to run the entire inventory cycle.</p> <p><b>Complexity:</b> Mid-level.</p> <p><b>Frequency:</b> Must be performed every alternate day.</p>
What is the sequence of tasks or steps?	<ol style="list-style-type: none"> <li>1. Log in to the system.</li> <li>2. Navigate to the Inventory screen.</li> <li>3. Enter or update the stock unit counts for all the bar and kitchen items sold.</li> <li>4. Set the counts below which the system alerts the user.</li> <li>5. Monitor the alignment of kitchen and bar item counts with the data in the system.</li> <li>6. Replenish items with depleted quantities in the kitchen/bar and update the current counts in the system.</li> </ol>
What is the expected result?	To successfully manage item inventory information, resulting in undisrupted sales.

#### **Task Analysis for Scenario 4**

Guiding Question	Details
What is the user-oriented goal?	To check and apply promotions, discounts, and offers.
What tasks does the user need to perform to accomplish the goal? (Don't worry about sequence or the "completeness" yet.)	<ol style="list-style-type: none"> <li>1. Navigate to the Loyalty and Promotions section in the system.</li> <li>2. Apply offers and discounts on eligible orders.</li> <li>3. Deny offers if the customer is already benefiting from another scheme or existing coupons.</li> </ol>

<p>What are the mental and physical steps involved in each task?</p>	<p><b>Mental:</b></p> <ul style="list-style-type: none"> <li>• Assess the eligibility of the customer to avail an order.</li> <li>• Think of ways to keep customers happy by providing them loyalty benefits.</li> <li>• Reminding customers to use their coupons or comp cards before they expire.</li> <li>• Be ready to deny offers to certain customers who may not be deemed eligible.</li> </ul> <p><b>Physical:</b></p> <ul style="list-style-type: none"> <li>• Navigate to the Loyalty Benefits screen in the system.</li> <li>• Select the appropriate discount/offer as per the customer type.</li> <li>• Apply discounts on the order and ensure it reflects on the bill amount.</li> </ul>
<p>Who performs the task?</p>	<p><b>Audience:</b></p> <p>An experience restaurant sales manager who has used multiple POS systems before and is looking for a new system that offers customer benefits.</p> <p><b>Experience:</b></p> <p>Potential user who is new to the product but experienced in the restaurant/hotel management domain.</p> <p><b>Role:</b> Sales Manager</p> <p><b>Authority:</b></p> <ul style="list-style-type: none"> <li>• Normal User - Can apply the discounts on orders.</li> <li>• Admin - Can edit or remove discounts from orders if a customer is not eligible to avail offers.</li> <li>• Super User - Can update existing discounts and add new discounts to the system.</li> </ul>

When and under what conditions is the task performed?	<p><b>Requirements:</b> User must have permissions enabled to offer discounts to eligible customers.</p> <p><b>Limitations:</b> User may not have access to customer information and purchase history in case of network error or outages.</p> <p><b>Environment:</b> A busy sales environment with high customer foot falls where decisions to offer discounts must be made quickly, without affecting the profits made.</p>
What are the potential distractions to accomplishing the goal?	<p><b>Alternative path:</b> Offers can be selected by customers during self-checkout.</p> <p><b>Exception path:</b> The customer information is not properly updated in the system, causing confusions about order eligibility.  The offers may not be reflected in the receipts/invoices.</p> <p><b>Boundaries:</b> The user cannot decide who they can offer discounts to by themselves.</p>
What does the user need to know about the task?	<p><b>Duration:</b> Less than 2 minutes to apply offer on orders.</p> <p><b>Complexity:</b> Mid-level</p> <p><b>Frequency:</b> Must be performed multiple times in a day.</p>
What is the sequence of tasks or steps?	<ol style="list-style-type: none"> <li>1. Log in to the system.</li> <li>2. Navigate to the Orders screen.</li> <li>3. Select orders that are eligible for discounts.</li> </ol>

	<ol style="list-style-type: none"><li>4. Verify the customer information and their purchase history.</li><li>5. Select the appropriate offer the customer is eligible for.</li><li>6. Apply it on the orders.</li></ol>
What is the expected result?	To successfully apply loyalty promotions, discounts, and offers on eligible orders.