

Web and App Ordering - Sofia DePasquale

User Story:

As a customer, I want to customize and order a pizza online so that I can choose my preferred size, crust, toppings, and extras according to my taste.

Acceptance Criteria:

1. Accessing the NTPP Website:

2. The customer opens their browser and searches for "Ninja Turtle Pizza Parlor" or "NTPP pizza" on Google.
3. The NTPP website appears in the search results.
4. The customer clicks on the NTPP website link, which directs them to the homepage.

5. Interacting with the Homepage:

6. The customer sees the homepage, clearly displaying the "Order Now" button.
7. The button is responsive when hovered over or clicked.
8. The customer clicks the "Order Now" button.
9. The website redirects to the menu page.

10. Navigating the Menu Page:

11. The customer is presented with a categorized menu that includes "Pizzas," "Sides," "Beverages," and "Desserts."
12. The customer scrolls through the pizza category, viewing multiple pizza options.
13. The customer clicks on a specific pizza item (Pepperoni Pizza, Cheese Pizza, Supreme Pizza).
14. This opens up the pizza details page where customization options are displayed.

15. Customizing the Pizza:

16. The customer is prompted to choose a pizza size: small, medium, or large.
17. Next, the customer selects a crust type (options include thin, stuffed, and gluten-free).
18. The customer is presented with a list of available toppings (pepperoni, mushrooms, olives).
19. The customer decides to split the toppings (pepperoni on one half and mushrooms on the other).
20. A visual representation of the pizza appears, allowing the customer to drag the toppings to each half.
21. There's a text box for entering special instructions (extra crispy crust or light cheese).
22. The customer types "extra cheese on half" into the notes field.

23. Dynamic Price Update:

24. As the customer customizes the pizza, the total price dynamically updates based on the selections.
25. The updated price is displayed just below the customization options.
26. After customizing, the customer clicks the "Add to Cart" button.
27. A pop-up appears confirming the pizza has been added to the cart, with an option to "Continue Shopping" or "View Cart."
28. The customer clicks "View Cart."

29. Reviewing the Cart:

30. The cart page displays the pizza the customer selected, including the customizations (size, crust, toppings, and special instructions).
31. The customer reviews the order details to ensure accuracy.
32. If necessary, the customer can click the "Edit" button next to the pizza item to return to the customization page and make changes.

33. Once satisfied, the customer clicks the "Proceed to Checkout" button.

34. Checkout Process:

35. Before finalizing the order, a pop-up appears asking the customer to select their favorite Ninja Turtle as their delivery driver.

36. The customer is redirected to the checkout page, which includes sections for delivery or pickup options, contact information, and payment.

37. The customer selects "Delivery" and enters their address.

38. The customer is prompted to make an account or fills in their phone number and email for order confirmation.

39. The customer enters their credit card information securely in the provided fields.

40. Order Review:

41. A final review of the order, delivery information, and payment details is shown.

42. The customer clicks the "Place Order" button to submit the order.

43. After submitting the order, the customer is redirected to a confirmation page.

44. The page displays the order summary, including the total cost, delivery address, estimated delivery time, and the customer's selected Ninja Turtle.

45. The customer sees a notification indicating that a confirmation email and SMS have been sent.

46. Tracking the Order:

47. The confirmation page includes a "Track Your Order" button.

48. The customer clicks on the button, which opens a real-time tracking interface, showing the progress of the order (Order Received, Pizza Being Prepared, Out for Delivery).

49. If using a mobile app, the customer can open the app and click on the "Track My Order" feature from the homepage to view the status of their order in real-time.

50. Shortly after placing the order, the customer receives an email and/or SMS with the order details, confirmation number, and estimated delivery time.

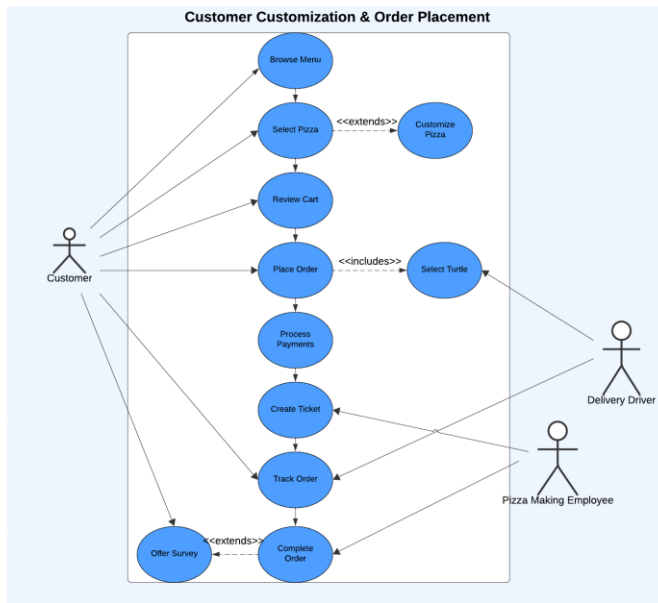
51. The customer can refer to the email or SMS for any future reference or to contact support in case of issues with the order.

Use Case Title: Customer customizes and places pizza order
Primary Actor: Customer
Stakeholders: Customer, Pizza Making Employees, and Drivers
Precondition: Customer access NTPP Website or Mobile App
Minimal Guarantee: Page is refreshed with a pop up stating the error
Success Guarantee: Order Customized and Placed
Trigger: Customer customizes menu item
Main Success Scenario: <div>1. Customer accesses website/app</div>

2. Customer browses menu options
3. Pizza option is clicked
4. Customer selects customizations wanted
5. Pizza is added to cart
6. Ninja Turtle Delivery driver is selected
7. Payment information is entered
8. Order is processed and sends a confirmation email
9. Order progress can be tracked through the website/app

Extensions:

1. Menu is not Displayed
 - a. Customer exits website/app
 - b. Customer reloads application
2. Payment Declines
 - a. Page refreshes
 - b. Customer is prompted to enter a different card
3. Order Tracking Unavailable
 - a. GPS signal is lost
 - b. Customer manually inputs address



User Story:

As the restaurant owner, I want to navigate through the website's admin interface to view order histories and analyze which menu items are the most popular so that I can make data-driven decisions about menu adjustments or promotions.

Acceptance Criteria:

1. Log In to the Admin Dashboard

2. The owner visits the Ninja Turtle Pizza Parlor website.
3. In the footer, there is a link labeled "Admin Login."
4. The owner clicks on "Admin Login."
5. A secure login page appears, prompting the owner to enter their credentials.
6. Owner enters email and password.
7. Dual authentication is needed to verify identity.
8. After entering the credentials, the owner clicks the "Sign In" button.

9. Accessing Order History:

10. Once logged in, the admin dashboard displays a sidebar menu with different options related to website and ordering (Overview, Orders, Menu Management, Reports).
11. The owner clicks on the "Orders" tab in the sidebar menu.
12. A drop-down menu or direct page appears with several options (Active Orders, Order History, etc.).
13. The owner clicks on the "Order History" option.
14. The "Order History" page loads, showing a chronological list of past orders.

15. Viewing Individual Orders:

16. Each order entry displays basic details like the order number, customer name, date and time of order, and total order amount.
17. To view more detailed information, the owner clicks on a specific order.
18. The order details page opens, displaying a breakdown of each item ordered, any customizations (pizza size, crust type, toppings), and the total price for each item.
19. The page also includes payment status (paid, pending) and delivery status (delivered, in-progress).

20. Filtering and Sorting Orders:

21. At the top of the "Order History" page, there are filtering options.
22. The owner can filter by date range (daily, weekly, monthly) by selecting the desired range.
23. Additionally, there is a sorting option to display orders by criteria (Most Recent, Highest Value, or Most Items Ordered.).
24. The owner selects "Most Items Ordered" to prioritize viewing bulk orders.

25. Viewing Popular Menu Items:

26. Within the "Order History" page, there is an additional section labeled "Popular Items Report."
27. The owner clicks on the "Popular Items Report" tab.
28. A new page shows a chart of the most frequently ordered menu items (pizzas, sides, beverages, and desserts) for a selected time period.
29. Each item displays the number of times it has been ordered, as well as any frequent customizations (most popular toppings, pizza sizes).

30. Exporting Data:

31. If the owner wants to analyze the data further, they can export the order history or popular items report.
32. At the top-right corner of the report, there's an "Export Data" button.
33. The owner clicks the "Export Data" button.
34. A dropdown appears with file format options (CSV, Excel).

35. The owner selects the desired format, clicks "Download," and the file is saved to their computer or mobile device for further review.

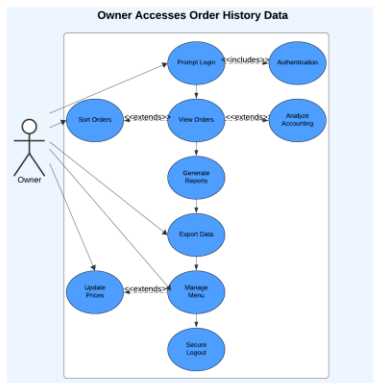
36. Making Adjustments Based on Data:

37. Based on the data, the owner can return to the "Menu Management" section from the sidebar menu to adjust prices, run promotions on popular items, or remove underperforming items.
38. The owner clicks on "Menu Management," where they can make changes to pricing, availability, or highlight popular items with special tags like "Best Seller" or "Customer Favorite."

39. Logging Out:

40. Once the owner has finished reviewing the data, they return to the dashboard homepage.
41. At the top-right corner of the dashboard, the owner clicks on their profile icon.
42. From the dropdown, they select "Log Out" to securely exit the admin portal.

Use Case Title: Owner Accesses Order History Data
Primary Actor: Owner
Stakeholders: Owner, Customers, Vendors
Precondition: Owner Logs in to NTPP Website Admin Account
Minimal Guarantee: Order History Data is refreshed to show up-to-date data
Success Guarantee: Owner accesses data and statistics
Trigger: Owner Logs in to NTPP Website Admin Account
Main Success Scenario: <ol style="list-style-type: none">Owner goes to Admin login on websiteOwner enters credentials successfullyOwner is presented with a dashboardOwner selects what data to look atOwner selects "Popular Items Report"Owner exports data to ExcelOwner logs out of admin access
Extensions: <ol style="list-style-type: none">Admin credentials do not work<ol style="list-style-type: none">Error message prompting user to reenter their credentialsOption to reset password appearsMenu Data is not automatically updated<ol style="list-style-type: none">Button to update order history for that current moment



User Story: As an employee of NTPP, I want to view a scheduled list of customer tickets to know the order in which pizzas should be made, so that I can manage the workflow efficiently and ensure pizzas are prepared in the correct order.

1. Logging into the Employee Dashboard:

2. The employee opens the NTPP website and clicks the "Employee Login" link in the footer or header.
3. On the login page, the employee enters their username and password.
4. After entering the credentials, the employee clicks the "Sign In" button to access the employee dashboard.

5. Navigating to the Ticket Queue:

6. Upon logging in, the employee sees a main menu with options "Current Orders," "Order History," and "Ticket Queue."
7. The employee clicks on the "Ticket Queue" tab to view a list of active orders awaiting preparation.
8. The ticket queue page shows a chronological list of pizza-making tickets, with the most urgent orders at the top.

9. Order Details per Ticket:

10. Each ticket represents an order and includes key details
 - a. Customer name or order number.
 - b. Time the order was placed.
 - c. Estimated delivery or pickup time.
 - d. List of pizzas, sides, and other items in the order.
 - e. Special instructions (extra cheese, gluten-free crust).
11. Tickets may be color-coded based on urgency (e.g., red for orders nearing their deadline, yellow for those in progress, and green for new orders).
12. The employee can click on any ticket to expand and see detailed instructions (e.g., pizza size, crust type, toppings, and any customizations).

13. Filter by Time or Type:

14. At the top of the ticket queue page, there are options to filter or sort the list.
15. The employee clicks on the "Sort By" button and selects either "Time Remaining" or "Order Placement Time" to adjust the order of the tickets.
16. The employee can also filter the tickets by order type, such as "Delivery" or "Pickup," to focus on specific types of orders.
17. After selecting filters, the employee clicks the "Apply" button to update the ticket list.

18. Managing Ticket Workflow:

19. Once the employee begins making a pizza, they click the "Start" or "In Progress" button next to the ticket.

20. Status of the ticket changes and moves it to the "In Progress" section of the queue.
21. After finishing the pizza, the employee clicks the "Complete" button to mark the order as ready.
22. The ticket is moved to the "Completed" section, and the system updates the kitchen and delivery team with the progress.

23. Real-Time Updates and Notifications:

24. As new orders come in, the ticket queue updates in real-time, automatically adding new tickets to the list.
25. If an order is nearing its estimated completion time or has special instructions, a notification pops up at the top of the page to alert the employee.
26. High-priority orders may be highlighted with a special marker (flashing border) to grab the employee's attention.

27. Tracking Ongoing Orders:

28. The employee can navigate to the "In Progress" tab to see all pizzas currently being prepared.
29. Each ticket shows which step of the pizza-making process it is in (dough stretching, topping, baking).
30. For complex orders (pizzas with multiple customizations), the employee can click on the ticket to expand it and see step-by-step progress.

31. Tagging for Delivery/Pickup Team:

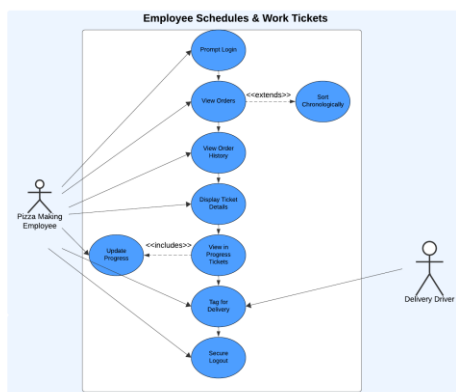
32. Once a pizza is completed, the employee can tag it for the delivery or pickup team by clicking a "Ready for Delivery" or "Ready for Pickup" button on the ticket.
33. This sends a real-time notification to the delivery driver or pickup coordinator.
34. If needed, the employee can add internal notes to a ticket (Delayed due to oven maintenance) by clicking on the "Add Note" button.
35. At the end of their shift, the employee clicks the "Shift Summary" button in the dashboard, which shows the tickets completed during their shift.
36. The employee can also leave notes or tag tickets for the next employee coming on shift, ensuring seamless handoff of orders in progress.
37. After reviewing or completing any final tickets, the employee clicks their profile icon and selects "Log Out" to exit the system.

Use Case Title: Employee Schedules & Works through Order Tickets
Primary Actor: Employee(pizza maker)
Stakeholders: Employee(pizza maker), delivery driver
Precondition: Employee Accesses Ticket Dashboard
Minimal Guarantee: Automatic refresh of the ticket queue at regular intervals to ensure orders are up-to-date, provide a fallback manual system for viewing and updating order statuses if real-time updates fail.
Success Guarantee: Employee can log in, view a chronological list of pizza orders, and mark them as "In Progress" or "Complete."
Trigger: Employee Accesses Ticket Dashboard
Main Success Scenario: <ol style="list-style-type: none"> 1. Employee goes to employee login

2. Employee enters credentials successfully
3. Employee is presented with ticket dashboard
4. Employee selects the ticket they want to work on
5. Employee updates ticket status as pizza is made
6. Employee tags pizza for delivery
7. Employee leaves notes on pending orders for next shift
8. Employee logs out of ticket dashboard

Extensions:

1. Employees are unable to log in
 - a. Password recovery feature and error message pop-up
 2. The ticket queue does not refresh automatically, causing employees to work with outdated information
 - a. Refresh feature that updates the ticket queue at regular intervals
 - b. Option to manually input tickets into the system



Use Case:

As a customer, I want to be able to save my favorite orders so that I can reorder quickly without customizing every time.

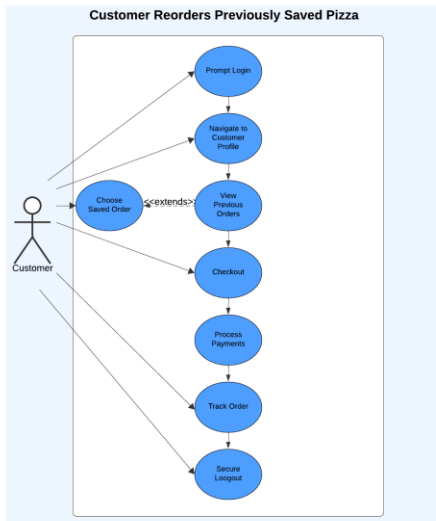
Acceptance criteria:

1. Accessing the NTPP Website or App:
2. The customer logs into their existing NTPP account or creates a new one.
3. Once logged in, the customer clicks on the "Order Now" button from the homepage to browse the menu.
4. The customer selects pizza(s), sides, desserts, or drinks.
5. The customer customizes each item (pizza size, crust, toppings).
6. The customer clicks the "Add to Cart" button for each item.
7. **Proceed to Checkout**
8. After reviewing the order, the customer clicks "Proceed to Checkout" and places the order.
9. On the confirmation page, the customer sees an option to "Save as Favorite Order."
10. The customer clicks this button to save their entire order with the customizations.

11. The system prompts the customer to name the favorite order (Friday Night Pizza, Soccer Team Order, etc.).
12. A confirmation message appears, letting the customer know the order has been saved to their account for future use.
- 13. Access Saved Orders:**
14. On future visits, the customer logs in and navigates to their Account and then Favorites section.
15. The customer clicks on their saved favorite order and reviews the items.
16. The customer clicks the "Reorder" button, which adds the saved order directly to the cart.
17. The customer is prompted to pick their delivery turtle through a pop up selection
18. The customer reviews the order and clicks "Proceed to Checkout" to place it.

Use Case Title: Customer saves and reorders order
Primary Actor: Customer
Stakeholders: Customer, pizza makers, drivers
Precondition: Customer Accesses Account Login
Minimal Guarantee: The website will feature retry options, an auto-save feature for recent orders, and backup storage to temporarily save favorites
Success Guarantee: The customer can quickly access and reorder their favorite orders
Trigger: Customer Accesses Account Login
Main Success Scenario: <ol style="list-style-type: none"> 1. Customer accesses NTPP website 2. Customer successfully logs into their account 3. Customer navigates to their "Account" tab 4. Customer clicks on "Favorites" tab 5. Customer browses favorites by their saved name and chooses their order 6. Customer clicks reorder 7. Customer chooses Ninja Turtle 8. Customer checks out
Extensions: <ol style="list-style-type: none"> 1. The system fails to save a favorite order due to a server or database error. <ol style="list-style-type: none"> a. Implement backup storage to temporarily save the order locally b. Retry saving automatically once the issue is resolved. 2. Customers receive no feedback when their order fails to save as a favorite. <ol style="list-style-type: none"> a. Clear error message is displayed explaining the issue

- b. Retry option is provided for the customer.
- 3. The system doesn't validate all order details before saving, causing incomplete or incorrect favorite orders.
- a. Incorporate data validation that checks for completeness of customizations before allowing the order to be saved.



User Story

As a delivery driver for NTPP, I want to view my assigned delivery schedule, routes, and the required Ninja Turtle costume for the day, so that I can prepare efficiently and ensure on-time deliveries.

Acceptance Criteria:

1. Accessing the Driver Dashboard:

- 2. The driver logs into the NTPP driver portal using their credentials.
- 3. From the main menu, the driver clicks on "My Schedule" to view their shift start and end times, and any breaks or special instructions for the day.

4. Viewing Delivery Routes:

- 5. The driver sees a list of all assigned deliveries for the day, displayed in chronological order with the customer's name, address, and order details.
- 6. The driver clicks on each delivery location to view a map with optimized route directions and integrates with GPS app Waze for real-time traffic updates.
- 7. The driver can view estimated delivery times for each stop and update the system in case of delays, providing customers with real-time delivery tracking.

8. Viewing and Preparing the Costume:

- 9. The driver navigates to the "Costume" tab to see which Ninja Turtle costume is assigned for the shift.
- 10. The driver receives a reminder notification to pick up their assigned costume from the staff room or designated costume storage area before starting deliveries.
- 11. The driver confirms that the costume is in good condition and ready to wear; if there are issues (Rips, Stains, Missing Pieces), they notify management through the system.

12. Review Special Instructions:

- 13. The driver reviews any special customer requests (contactless delivery, specific instructions related to parking or building access).

14. The driver performs a quick pre-shift vehicle check (fuel, cleanliness) and updates the system to indicate readiness.

15. Starting the Shift and Updating Orders:

16. The driver clicks "Start Shift" to begin the assigned deliveries, the system tracks their progress in real-time.

17. After each delivery, the driver clicks "Complete Delivery" button that notifies both the customer and management that the order has been delivered successfully.

18. If the driver encounters delays (traffic, weather), they can update the system to adjust the delivery ETA, ensuring customers receive accurate updates.

19. End of Shift:

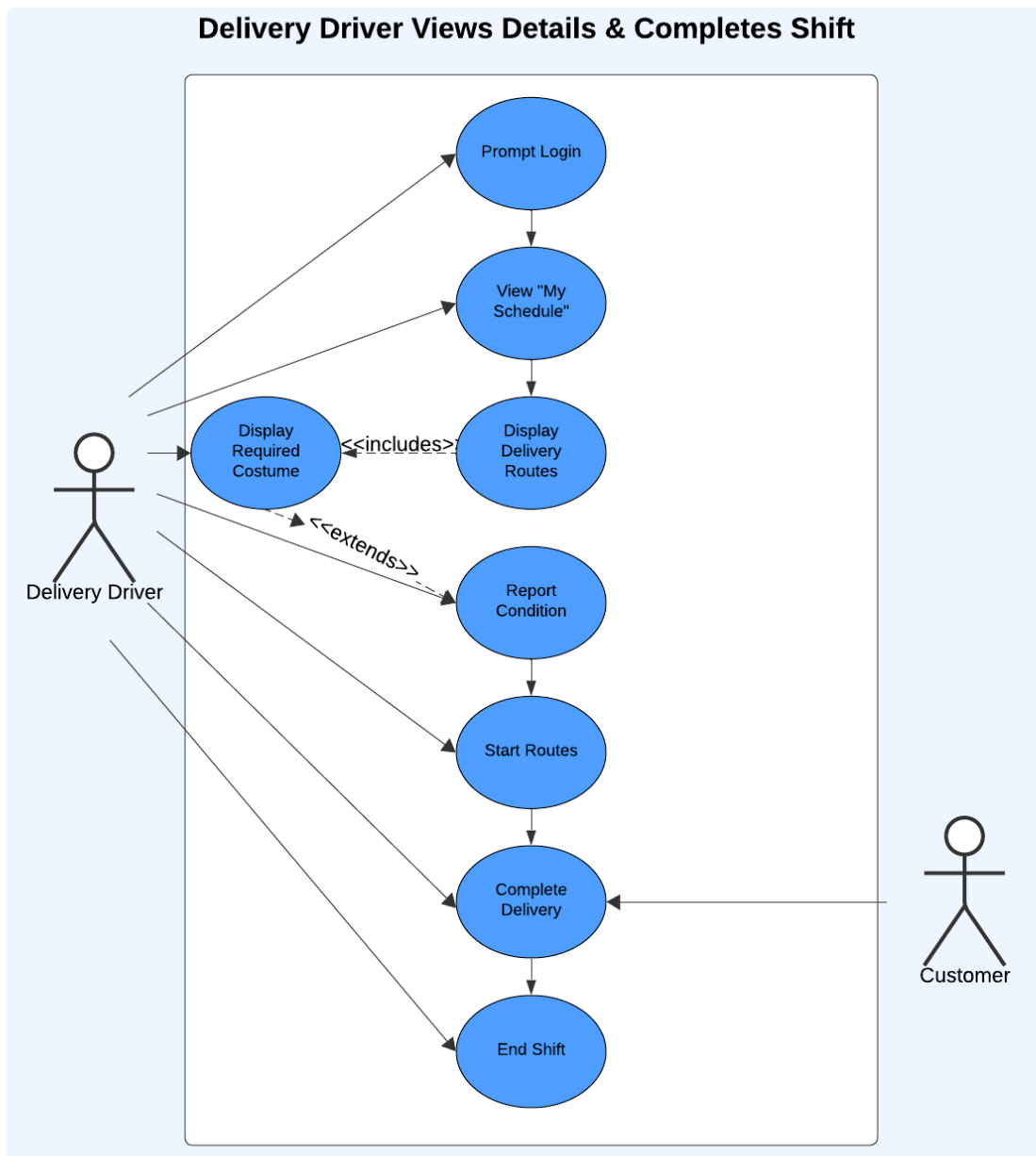
20. At the end of the shift, the driver clicks "End Shift" and views a summary of completed deliveries, customer feedback, and any issues encountered.

21. The system reminds the driver to return the costume, and they confirm the return in the app by clicking "Costume Returned."

22. The driver can leave feedback about their shift, including suggestions for route optimization or issues with the costume, directly in the system.

Use Case Title: Delivery Diver views details and completes shift
Primary Actor: Delivery Driver
Stakeholders: Delivery Driver, Customer
Precondition: Delivery Driver logs into portal to start shift
Minimal Guarantee: The system will alert the manager of any problems and the manager can manually update what the driver should do
Success Guarantee: Driver successfully logs in, wears the right costume, and delivers pizzas efficiently
Trigger: Delivery Driver logs into portal to start shift
Main Success Scenario: <ol style="list-style-type: none">1. Driver logs into portal to start shift2. Driver sees daily route schedule and assigned costume3. Driver updates portal to confirm schedule and costume4. Driver delivers pizza using GPS system5. Driver clicks "end of shift" button6. Driver leaves feedback about costume, vehicle, and route
Extensions: <ol style="list-style-type: none">1. Delivery schedule or route data fails to load due to a system error.<ol style="list-style-type: none">a. System will store a cached version of the driver's last known schedule and route, allowing deliveries to continue while the issue is being resolved.b. An automatic notification will be sent to management to correct the data error.

2. The assigned Ninja Turtle costume is unavailable or damaged.
 - a. The system will provide the driver with an alternate costume assignment
 - b. The system will notify management to arrange a backup
3. GPS or route optimization fails, leading to delivery delays.
 - a. The system will integrate multiple GPS services to provide an alternative if the primary one fails.
 - b. If all GPS services are unavailable, a manually-created route will be provided with adjusted delivery times for the customer.



Employee Human Resource Management (Anlu Thamm: 1-4 and Isaac Braegelmann: 5)

User Story #1 : As the head of HR, I want to be able to access employee information through the company HRIS.

Acceptance Criteria:

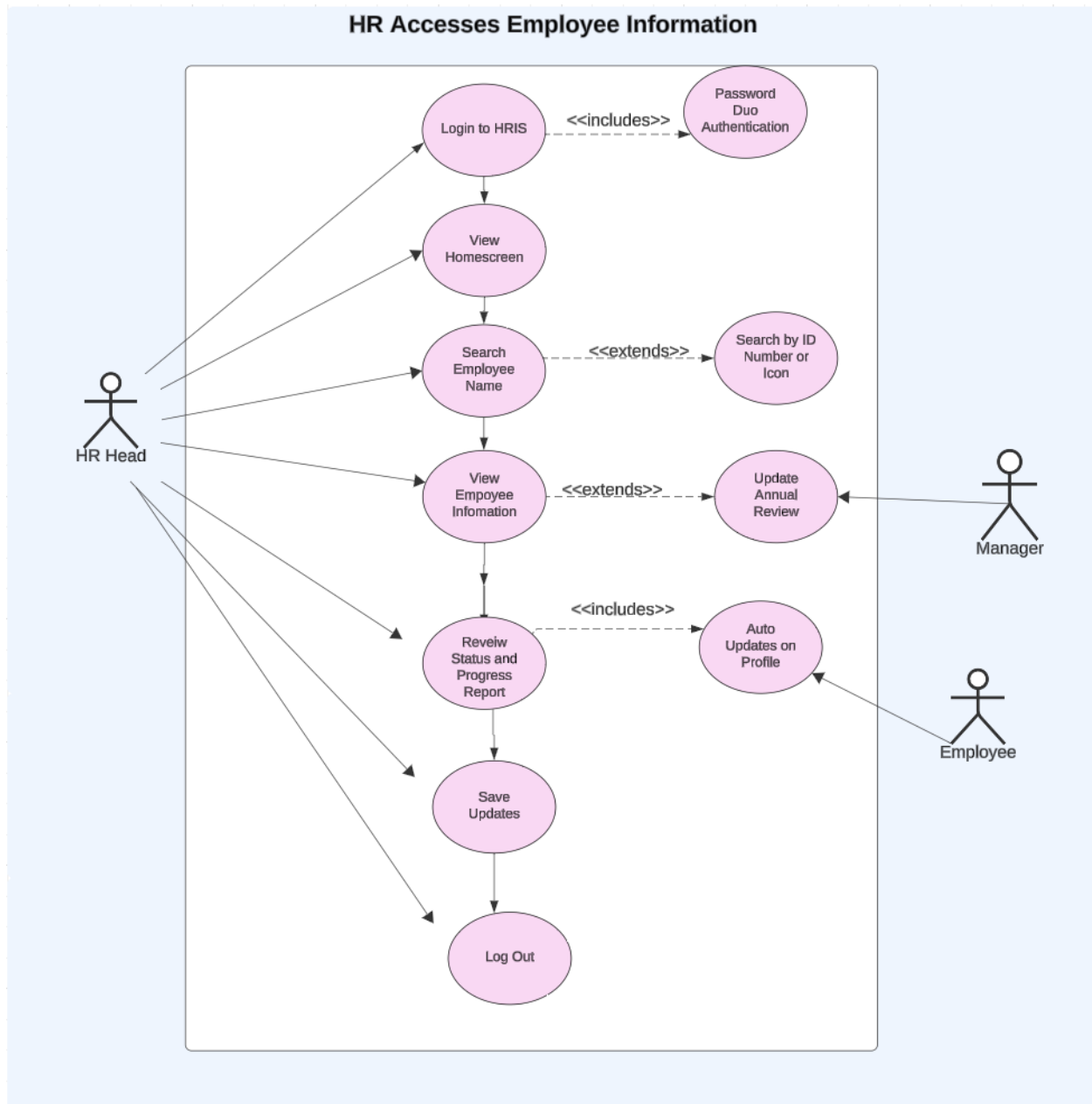
1. HR Clicks login to HRIS with a password encrypted login
2. HR verifies account with duo authentication app on google app or other application
3. Once logged in, the home screen will display a set of tabs for “employee record, status reports, company policy etc.”
4. HR can search employee records using search bar on top right corner
5. Employee names are be listed in alphabetical at the dropdown of the search bar
6. HR Head can search by ID number, name or Icon that indicate the employee picture through the profile list
7. The database will present employee personal information collected by the company includes, but is not limited to, job title, work history, contact information, addresses, medical information, social security numbers etc.
8. Employee information is password protected but overridden by HR authority until employee termination.
9. HR can not access employee information under special circumstances.

Use Case Title: HR Head Accesses Employee Records through HRIS
Primary Actor: HR Head
Stakeholders: HR Head, IT Head, Employees, Managers
Precondition: HR Head access DBMS with employee records
Minimal Guarantee: Web Page is directed to IT staff to resolve error
Success Guarantee: HR Head logged in and employee records accessed
Trigger: HR Head logs in DBMS on Website
Main Success Scenario: <ol style="list-style-type: none">1. HR accesses website through NTPP for HRIS through login screen2. HR activates login with password and authenticator3. HR browses information options4. HR search employee name in search bar

5. HR selects employee based on ID number or name
6. HR see employees informations (job title, contact info, address, history etc)
7. Display will show status of year employed and flight risk factors
8. HR can directly see employee pay grades and progress reports.

Extensions:

1. HR authentication is not working
 - a. Two authentication is required when creating an account. Authentication through HR iphone text will send security code as back up.
 - b. HR will message IT support from its service provider.
2. Employee Name not found
 - a. HR can message the hiring manager to check if an employee has been uploaded to the system.
 - b. HR can reload the system incase of loading error



User Story #2 : As a manager I want to be able to assign shifts two weeks in advance for my employees. This would consist of scheduling, canceling or updating shifts for that day or week, also creating a schedule block for employees on maternity leave or vacation.

Acceptance Criteria:

1. **Manager Schedule Access**
2. Manager accesses scheduling website through NTPP main website through “Admin Login”
3. Manager signs in using password and username along with duo authentication to verify identity.
4. Once access has been granted to the dashboard, the manager selects the “Scheduling” displayed from the menu.
5. Once selected a calendar will appear on one side with options ranging from current day-bi-weekly views.

6. The manager can view requests for time off through notifications inbox as well as they will be presented on the calendar as a faded block of color in which a manager can accept or deny.
7. At the edge of the calendar screen with a button with a plus sign indicates a new shift can be created.
8. Manager clicks plus sign and list of details are displayed including: “desired date, select employee, position, details”
9. Once the manager selects the employee, date, position, with “Repeat” option for future days, (*Ex: MWF at 9:00am-5:00pm*).
10. At the bottom left of the box will have a “Assign” in green and a “Cancel Shift” in red.
11. Once set into the calendar a manager can update a shift's details by hovering over block or right click twice to pull up edit to adjust details.
- 12. Publishing Schedule**
13. Manager will review schedule one last time before clicking, “Publish Schedule”
14. Once clicked this will activate an employee wide notification to the app that will say “New shifts have been assigned!”
15. A manager can verify the schedule has been sent through a confirmation email receipt automatically sent to their inbox confirming schedule has been set.
- 16. Maternity Leave/ Vacation**
17. If the manager wants to assign employee leave blocks, the manager will select “Employee Management” from the menu.
18. Manager elects employees through a search bar where a calendar icon below general contact info can be found.
19. By selecting the start and end dates for Maternity Leave/ Vacation, the manager will click “Save Block” which will automatically prevent this employee from being assigned shifts.

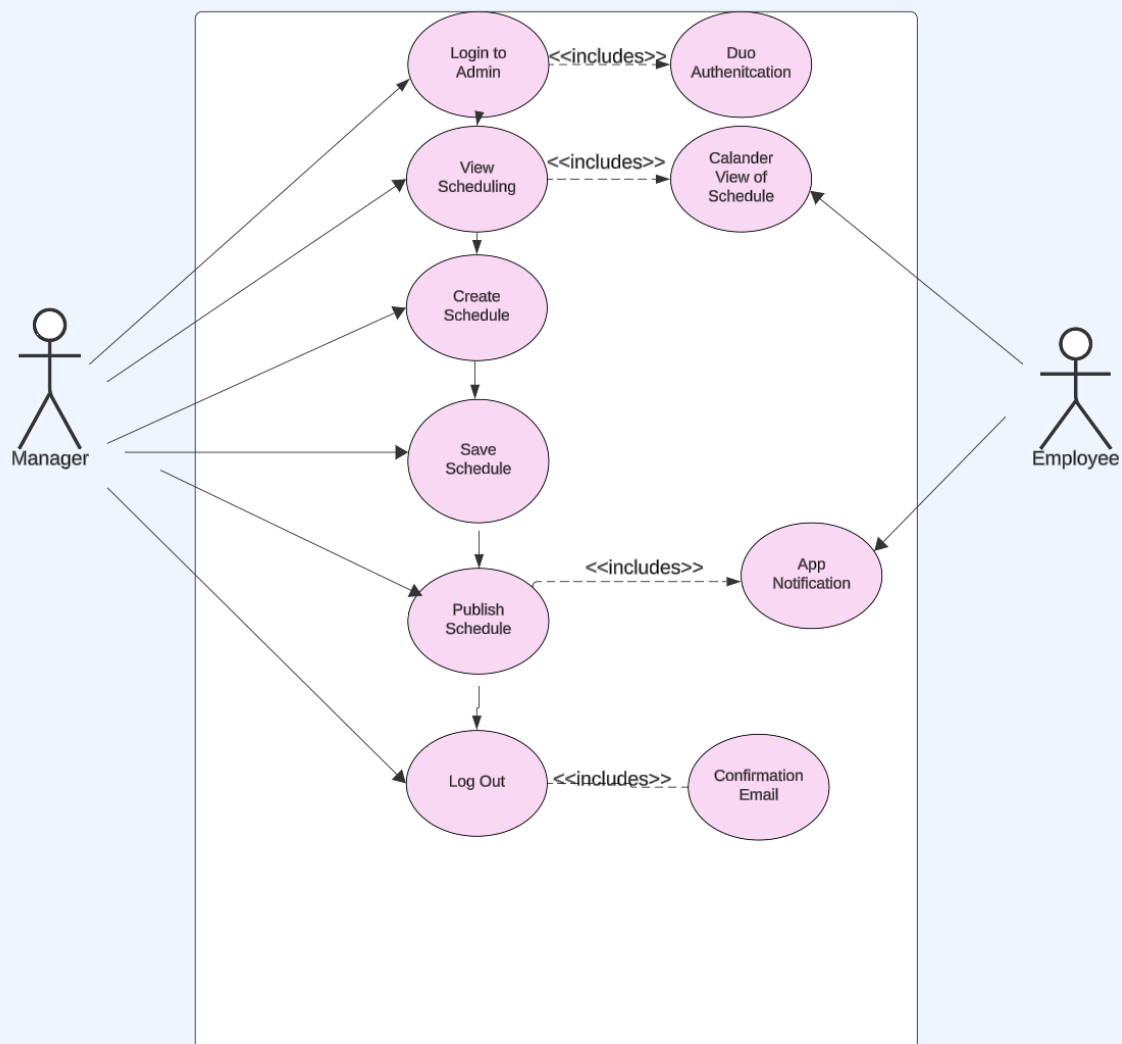
Use Case Title: Use case description: Manager Creates Employee Schedule and Notifies Employees
Primary Actor: Manager
Stakeholders: Managers, Part time and full time Employees
Precondition: Manager logs in website admin account and schedules employees
Minimal Guarantee: ensures that the schedule is saved in draft mode, even if the "Publish Schedule" process fails.
Success Guarantee: all active employees are assigned shifts, a notification of published schedule is sent out employee wide, an update in employee availability, and a confirmation receipt received.
Trigger: Manager clicks on the “Publish Schedule” button
Main Success Scenario: <ol style="list-style-type: none"> 1. Manager signs in to “Admins login” 2. Manager views schedule and selects scheduling options 3. Manager selects employee and assigns shift with dates, times, and details 4. Manager selects “Repeat” to set for both weeks 5. Manager selects “Assign” to confirm shift 6. Manager hovers over shift block incase of scheduling conflict

7. Manager clicks "Publish Schedule"
8. An employee wide notification is sent to scheduling app
9. Manager is sent a confirmation email to inbox notifying schedule is set

Extensions:

3. Manager cannot schedule employee
 - a. a manual entry can be used, filling out details with employee account number, automatically sending a direct notification separate from employee wide.
4. Schedule cannot update
 - a. Manager can also choose to send the schedule directly through employee wide email instead.
 - b. A manager can reload page and access unpublished schedule from drafts.

Manager Creates Employee Schedule



User Story #3 : As an employee I want to clock in and out of my shifts and request time off through the employee scheduling app to record my hours and manage my availability.

Acceptance Criteria:

1. Employee login and Time Card

2. Employee arrives at work and opens the app on a mobile device and enters username and password.
3. The login will ask to verify identity with fingerprint or face ID on phone
4. Employee will click “Schedule” tab on main screen to show scheduled shifts
5. A list of shift will be displayed, employee will click on the shift they are working
6. There will be a clock icon at the top right corner and a small drop down with “Clock In” and “Clock Out” options.
7. Employee selects “Clock In” and a short bubble will appear showing a small time stamp has been recorded.
8. If an employee comes in to cover another employee, an employee can select “Schedule” and “more options”.
9. Once clicked the employee will select “Cover Shift” which will ask for the name of the employee they are covering for and the shift’s duration.
10. Once the employee completes this, an automatic notification will be sent to the manager to make sure the employee’s time card accurately reflects hours worked.
11. Employees clock outs through the “more options” tab but won't have to fill out any information.

12. Employee vacation request

13. Employees will log into the app with username, password, and authentication option.
14. Employee selects the “Time Off” section taking them to the calendar tool.
15. Employee will select and verify the dates of requested time off and click “Save”
16. The employee will received a confirmation email reporting the status of requesting starting off as “Request has been sent for review”
17. Employees will receive a notification on the app when the manager reviews the schedule and confirms dates off.

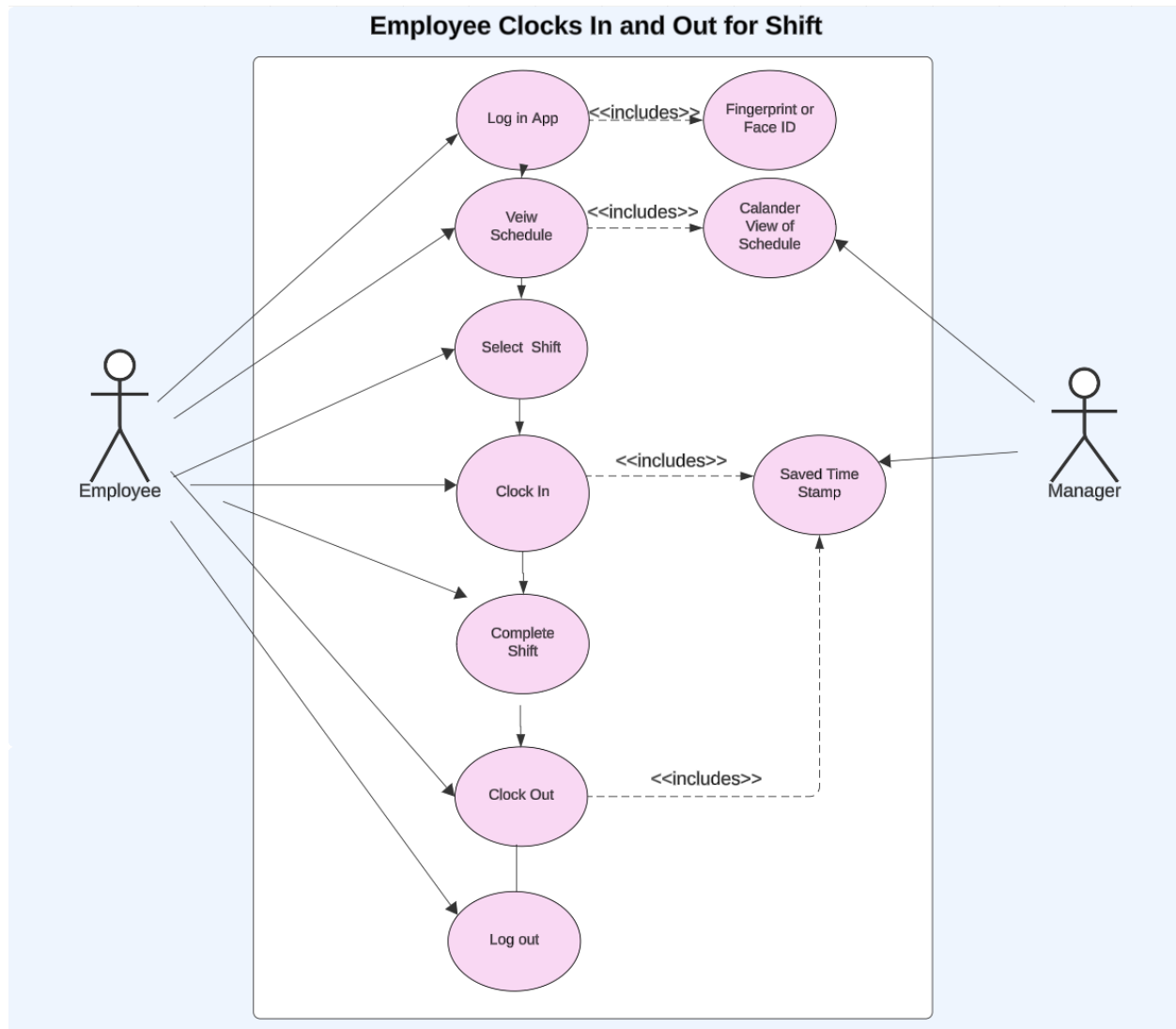
Use Case Title: Employee Clocks In and Out for Scheduled Shift
Primary Actor: Employee
Stakeholders: Managers, Employees
Precondition: Employee records hour worked through app and requests time off.
Minimal Guarantee: If an employee cannot clock in or clock out, the app will record the attempt and allow for manual input later.
Success Guarantee: Employee hours are recorded, vacation requested is sent, notifications on request automatically update, shifts blocked upon request confirmation.
Trigger: Employee clicks “Clock In” and “Clock out”

Main Success Scenario:

1. Employee logs in through app with account information
2. Employee can view schedule showing current and all upcoming shifts
3. Employee clicks “Clock In” and “Clock out” button recording hours worked
4. Employee record shifts covering by submitting hours worked to manager
5. Employee submits request with dates for vacation time off
6. Employee can see updates and status on the time off request
7. Employee is automatically blocked from scheduling once the time off request is confirmed

Extensions:

5. Employee cannot verify identity
 - a. If manual login also fails, the employee is given the option to reset their password or contact support.
6. Employee cannot record hours
 - a. The app notifies the employee of the error and prompts them to try again.
 - b. The employee is given the option to submit a manual clock-in request with the time and reason for the failure.



User Story #4 :

As a recruiter, I want to integrate an application form to the website's "Now Hiring!" page, the application will include key candidate qualifications, to streamline the application process of applying for open positions.

Acceptance Criteria:

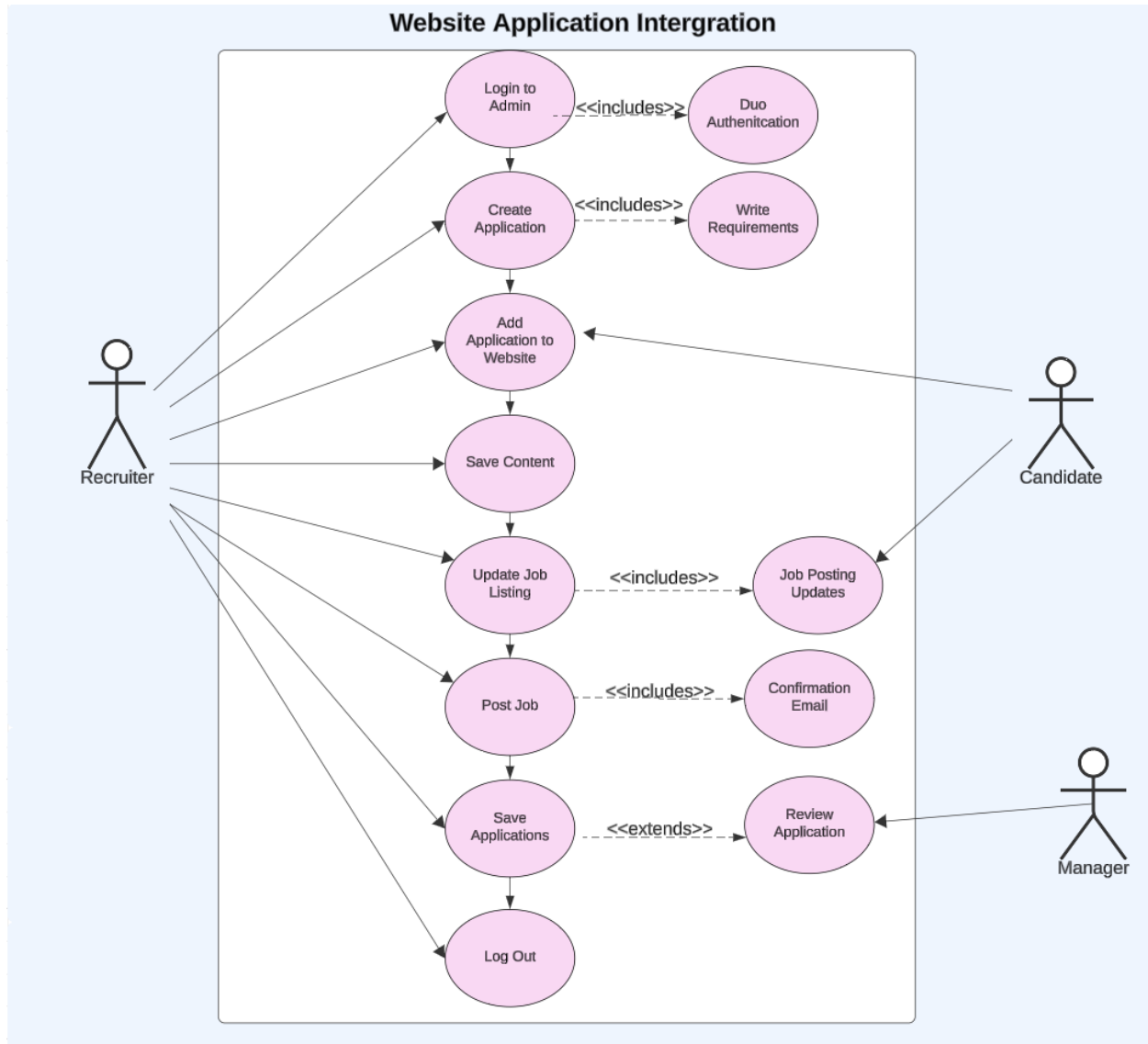
1. Application form via Website

2. Recruiter will sign into NTPP Admin site using username and password with a duo authentication
3. Once Recruiter is logged into admin website Recruiter clicks on website editing
4. Then clicks on "Create" on the top right corner of website editing
5. Recruiter writes up an application form with the following fields: Name, contacts, work history, resume, etc.
6. Recruiter puts the contents into NTPP "Now Hiring" tab on website
7. Recruiter clicks "Save" on the created form and update application forum for public view
8. The recruiter clicks on the "Hiring" section and updates the jobs listing on the website.

9. Job Posting

10. Recruiter will click “Post Job” and the job will be visible to all website viewers.
11. Recruiter receives a confirmation email sent to the recruiter admin email after saving the job information to NTPP.

Use Case Title: Recruiter Integrates Website Application and Job Post
Primary Actor: Recruiter
Stakeholders: Recruiters, Job Candidates
Precondition: Recruiter logs into the website admin account and creates application
Minimal Guarantee: The system saves submitted application forums in draft mode even if the submission process fails.
Success Guarantee: Recruiter posts application form to website
Trigger: Recruiter Logs in to NTPP Website Admin Account
<p>Main Success Scenario:</p> <ol style="list-style-type: none">1. Recruiter creates application form, including job description (Name, contact information, work history etc)2. Recruiter integrates application form into the “Now Hiring!” webpage with job openings which directly links to form.3. Recruiter updates online job openings and copies the contents into the website’s job listings.4. Recruiter saves and updates job listings and descriptions for all website viewers
<p>Extensions:</p> <ol style="list-style-type: none">1. Incomplete application forum<ol style="list-style-type: none">a. System will block the applicant from submitting the application and redirect to unfinished fields to ensure a complete job application.2. Application failed to send<ol style="list-style-type: none">a. System will automatically save completed progress allowing for the submission at a later time.



User Story #5:

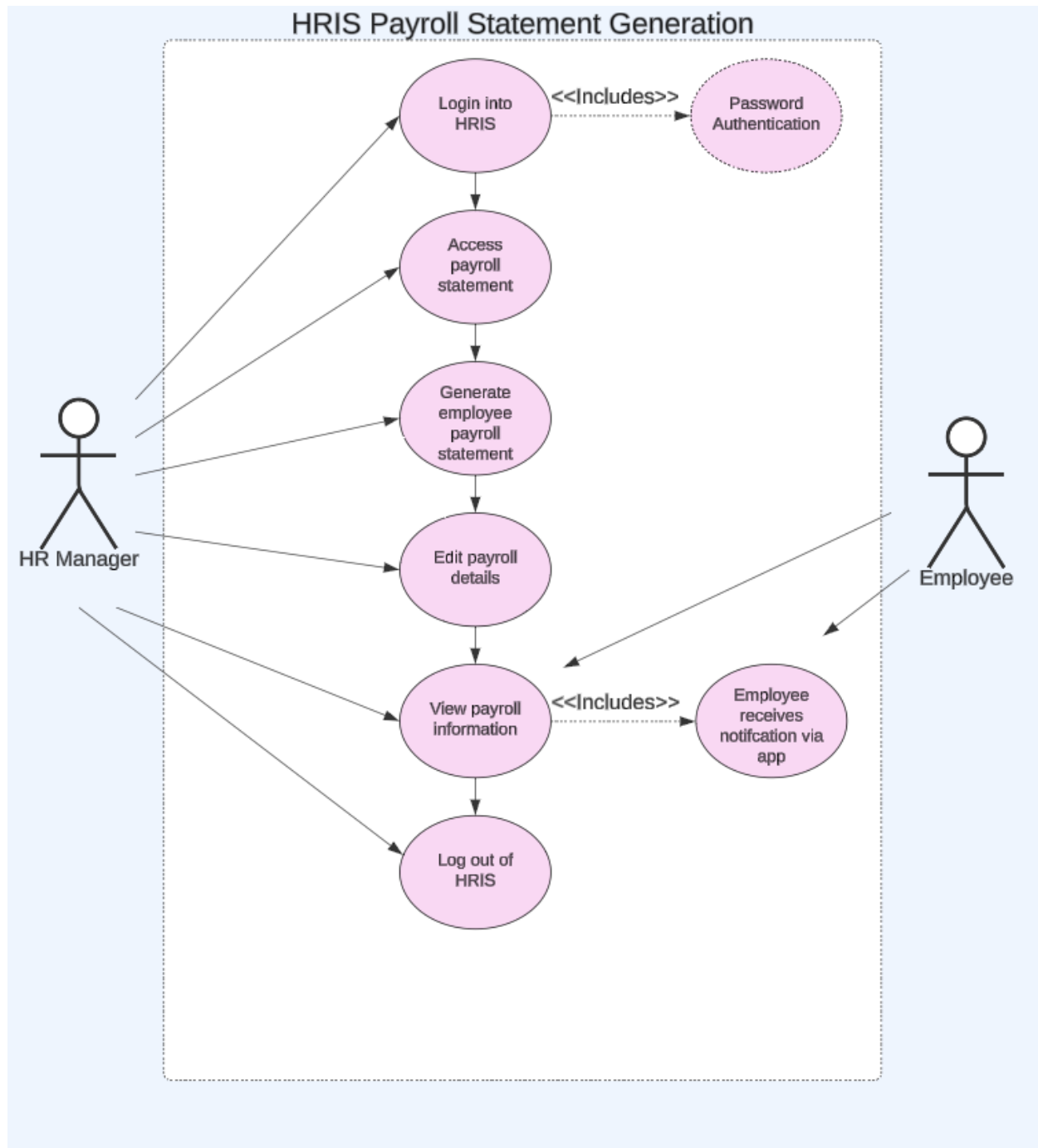
As the HR Manager, I want to be able to generate and organize employee payroll statements efficiently within the HRIS.

Acceptance Criteria:

1. **Payroll Statement Generation in HRIS**
2. HR manager logs into HRIS using a username and password using a secure encryption
3. HR manager should access the payroll statement generation module within the HRIS
4. HR managers can edit and generate payroll statements for specific employees
5. HR manager clicks "Employee Overview" on the top menu options
6. HR manager reviews employee details regarding hours worked, salary, taxes, and deductions through
7. HR managers can edit payroll data and financial information
8. Manager customizes the format of payroll statements to meet company requirements

9. Once edits are final, HR manager clicks “Send”
10. HR manager see’s confirmation message at top right corner “Saved & Sent”
11. HRIS data automatically saves and secures all stored data using encryption
12. Employees is automatically notified via mobile device and can view personal payroll information along with any important information concerning their pay
13. HR manager logs out of HRIS

Use Case Title: HRIS Payroll Generation
Primary Actor: HR Manager
Stakeholders: HR Manager, Employees
Precondition: HR Manager is logged into the system with payroll permissions
Minimal Guarantee: Payroll data is saved even if errors occur
Success Guarantee: Payroll is generated successfully, data is stored securely, and employees and managers are able to access their payroll information.
Trigger: HR Manager initiates the payroll process for an employee
<p>Main Success Scenario:</p> <ol style="list-style-type: none"> 1. HR managers select an employee for payroll generation 2. System retrieves payroll information 3. HR manager reviews necessary payroll details 4. System securely protects data 5. Employee receives notification via mobile device 6. Data is updated and stored for tax filing
<p>Extensions:</p> <ol style="list-style-type: none"> 1. HRIS fails to retrieve payroll data for the selected employee <ol style="list-style-type: none"> a. HRIS notifies the manager of data retrieval failure b. HR manager checks system or manually enters data 2. Data Security Breach <ol style="list-style-type: none"> a. System halts payroll process and notifies HR manager or system administrator 3. Employee fails to receive payroll notifications <ol style="list-style-type: none"> a. System tries to resend notification b. Employees can access payroll via the Website portal



Customer Relations Management (MaKayla Oscar: 1-3 and Jakob Kessler: 4-5)

User Story #1:

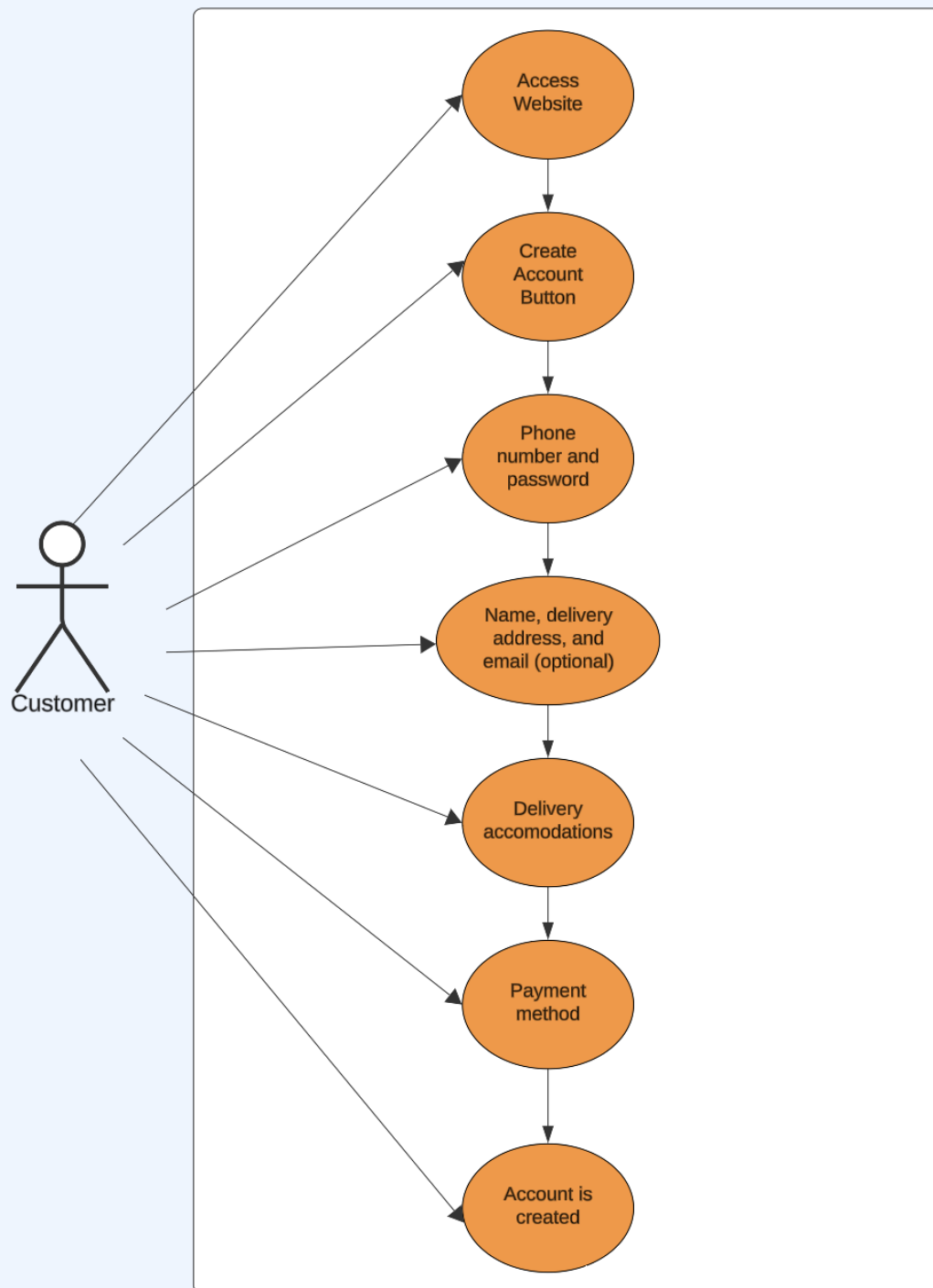
- As a customer, I want to create an account to place an order at NTPP

Acceptance Criteria:

1. App or Website is available through the app store or Google search
2. NTPP website/app displays a “Login” button
3. Login button takes customer to a login page
4. Customer is prompted to enter their phone number and password or create an account
5. Customer account is created
6. Customer is prompted to enter their name, email address (optional), and delivery address
7. Email verification is sent to customer
8. Customer is prompted to choose delivery limitations (physical, audial, and visual)
9. Limitations will be added to the description on future orders
10. Customer is prompted to choose a preferred payment method (Card, ApplePay, Google Pay, PayPal, etc)
11. Customer is prompted to input card information (if chosen payment method)
12. Payment method is saved to account for future orders
13. Customer can edit account information with password verification

Use Case Title: Customer Creates an Account
Primary Actor: Customer
Stakeholders: Customer
Precondition: Access to the NTPP Website/App
Minimal Guarantee: Order can be placed without an account
Success Guarantee: An account is created and an order is placed
Trigger: Customer accesses the Website/App homepage
Main Success Scenario: <ol style="list-style-type: none">1. Customer can access the website/app2. Customer can create an account with password encryption3. Customer can input account information4. Customer can edit account information
Extensions: <ol style="list-style-type: none">1. Account Creation is not available<ol style="list-style-type: none">a. Customer places an order without account2. Email cannot be verified<ol style="list-style-type: none">a. Customer does not sign up for email communicationsb. Customer takes action to verify email

Customer Creates Account



User Story #2:

- As a customer, I want to leave a review for the NTPP quality of food and delivery service

Acceptance Criteria:

1. Customer has a completed order from NTPP
2. App or Website is available through the app store or Google search
3. Icon for previous orders accesses review portal
4. Customer is prompted to enter the phone number linked to the account (if preexisting account) or to create an account (if no account)
5. Customer Account is not required for reviewing services
6. Customer is prompted to either enter the code found on their receipt (from in-store), or their order number (from online), or they will be prompted to select the order they want to review from their previous orders after logging into their account
7. Customer can view their order
8. Customer is prompted to review each food item purchased with a 5-point scale
9. Customer is prompted to provide optional written feedback up to 200 words
- 10. For Delivery**
11. Customer is prompted to review the quality of the delivery with a 5-point scale
12. Customer is prompted to provide optional written feedback up to 200 words
13. Customer is prompted to leave any general comments/feedback for NTPP up to 300 words

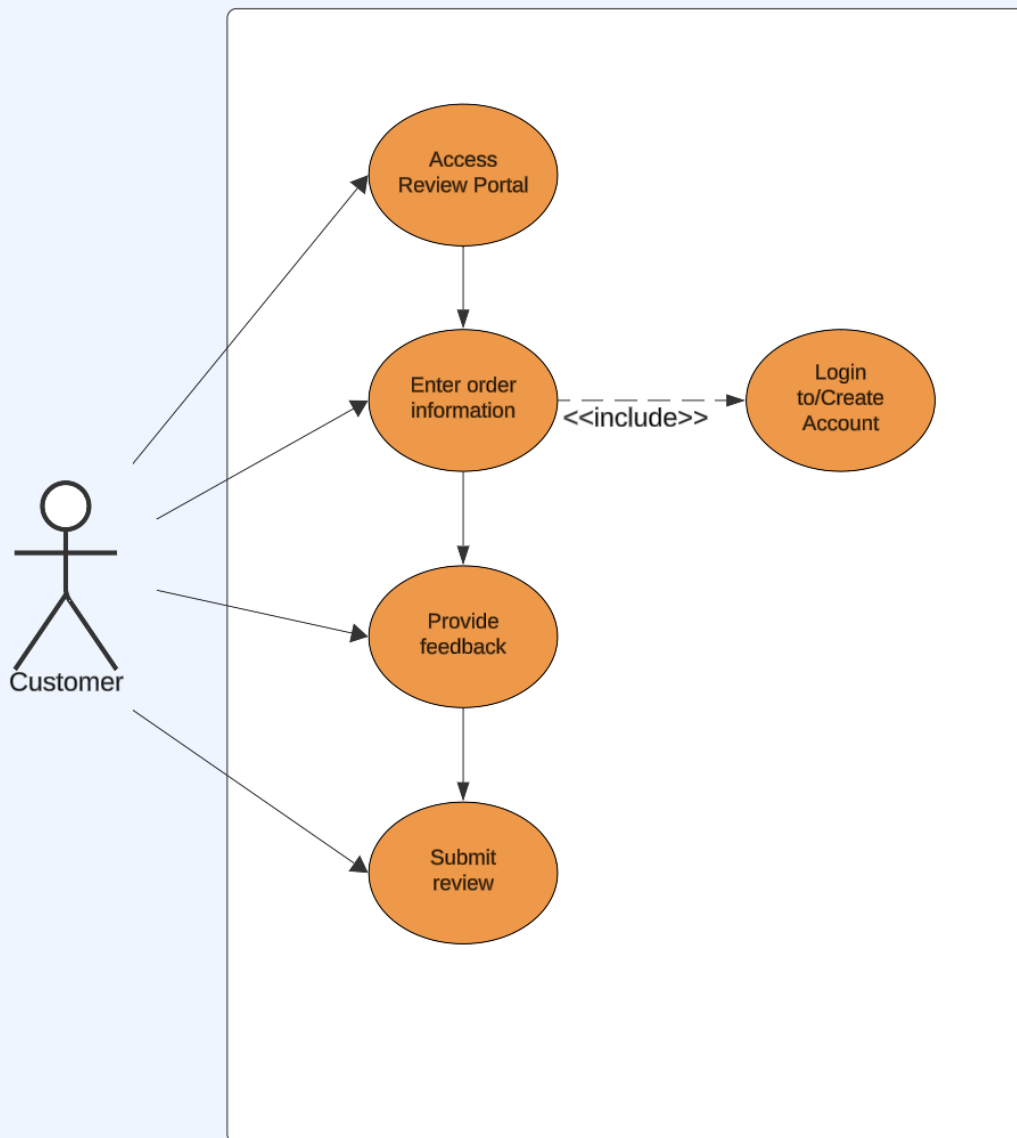
Use Case Title: Leave a Review
Primary Actor: Customer
Stakeholders: Customer
Precondition: An order was completed
Minimal Guarantee: Refresh and Please try again later message will pop up
Success Guarantee: Customer can submit a review is submitted
Trigger: Customer receives their order from NTPP
Main Success Scenario: <ol style="list-style-type: none"> 1. Customer accesses the Review Portal 2. Customer uses order information (receipt or order number) to view their order 3. Customer gives feedback on the food ordered 4. Customer gives feedback on the delivery service 5. Customer gives feedback on the general functionality of the website/app
Extensions: <ol style="list-style-type: none"> 1. Review Portal is not available

- a. Review page will populate an error message
- b. Review page will refresh
- c. Customer is prompted to contact customer service to review

2. The order information fails to bring up receipt

- a. Error message
- b. Page reloads
- c. Customer is prompted to try again later

Customer Leaves a Review



User Story#3 :

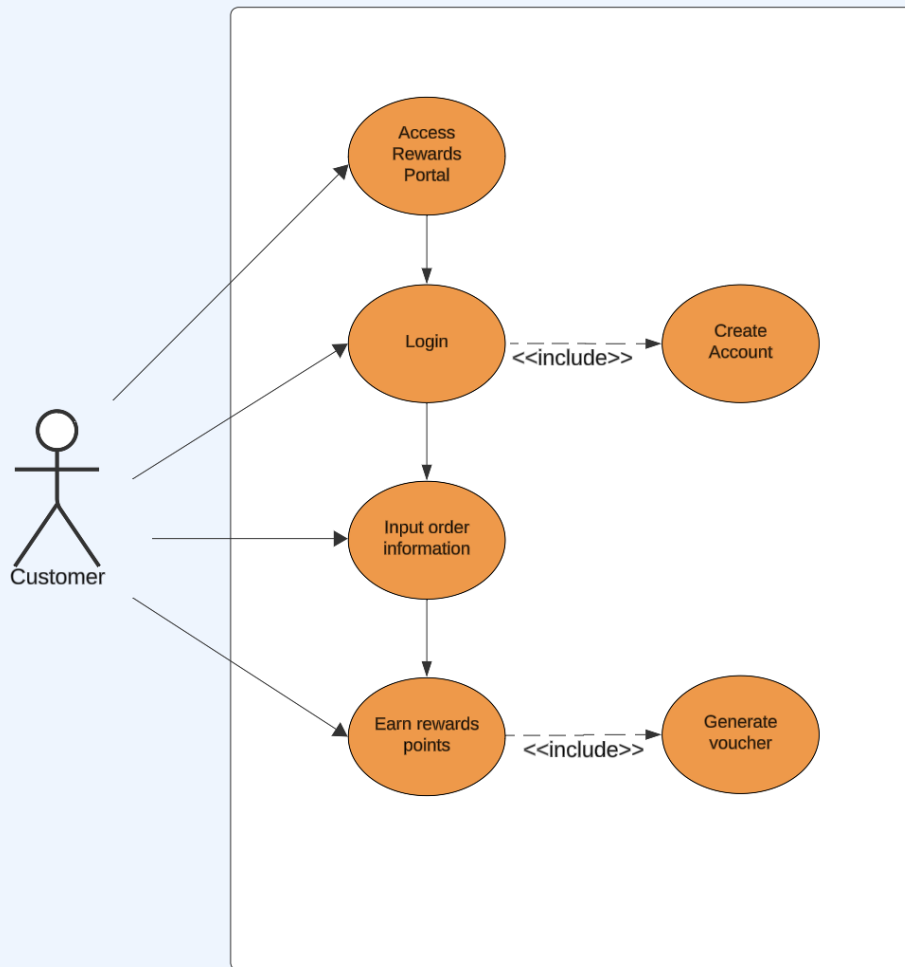
- As a customer, I want to earn reward points on my orders for the \$10 voucher for every 70 points earned

Acceptance Criteria:

1. The website/app displays a rewards icon
2. Rewards Icon brings customer to rewards login
3. Customer is prompted to enter a phone number (if existing, account) or to create an account
4. Customer is prompted to choose if they have a physical receipt or an online order number
5. Customer is prompted to enter the receipt code or choose an online order from their account
6. The order is no longer eligible for points in the system
7. The system adds points to the customer's account
8. When there are 70 point the system generates a \$10 voucher, linked to the account

Use Case Title: Earn Rewards Points
Primary Actor: Customer
Stakeholders: Customer
Precondition: An order was completed at NTPP
Minimal Guarantee: Refresh and Please try again later message will pop up
Success Guarantee: Customer can receive points for their order
Trigger: Customer Accesses the website/app home page
Main Success Scenario: <ol style="list-style-type: none"> 1. Customer can enter their account information 2. Customer can enter the receipt code or select their order number 3. Customer can receive points for their order
Extensions: <ol style="list-style-type: none"> 1. Rewards Portal is not available <ol style="list-style-type: none"> a. Rewards Portal will populate an error message b. The page will refresh c. Customer is prompted to try again later 2. Receipt Code has expired <ol style="list-style-type: none"> a. Error Message: Invalid receipt code – exceeds 7-day redemption period 3. The voucher is not generated at 70 points <ol style="list-style-type: none"> a. Customer is prompted to contact customer service

Customer Earns Rewards Points



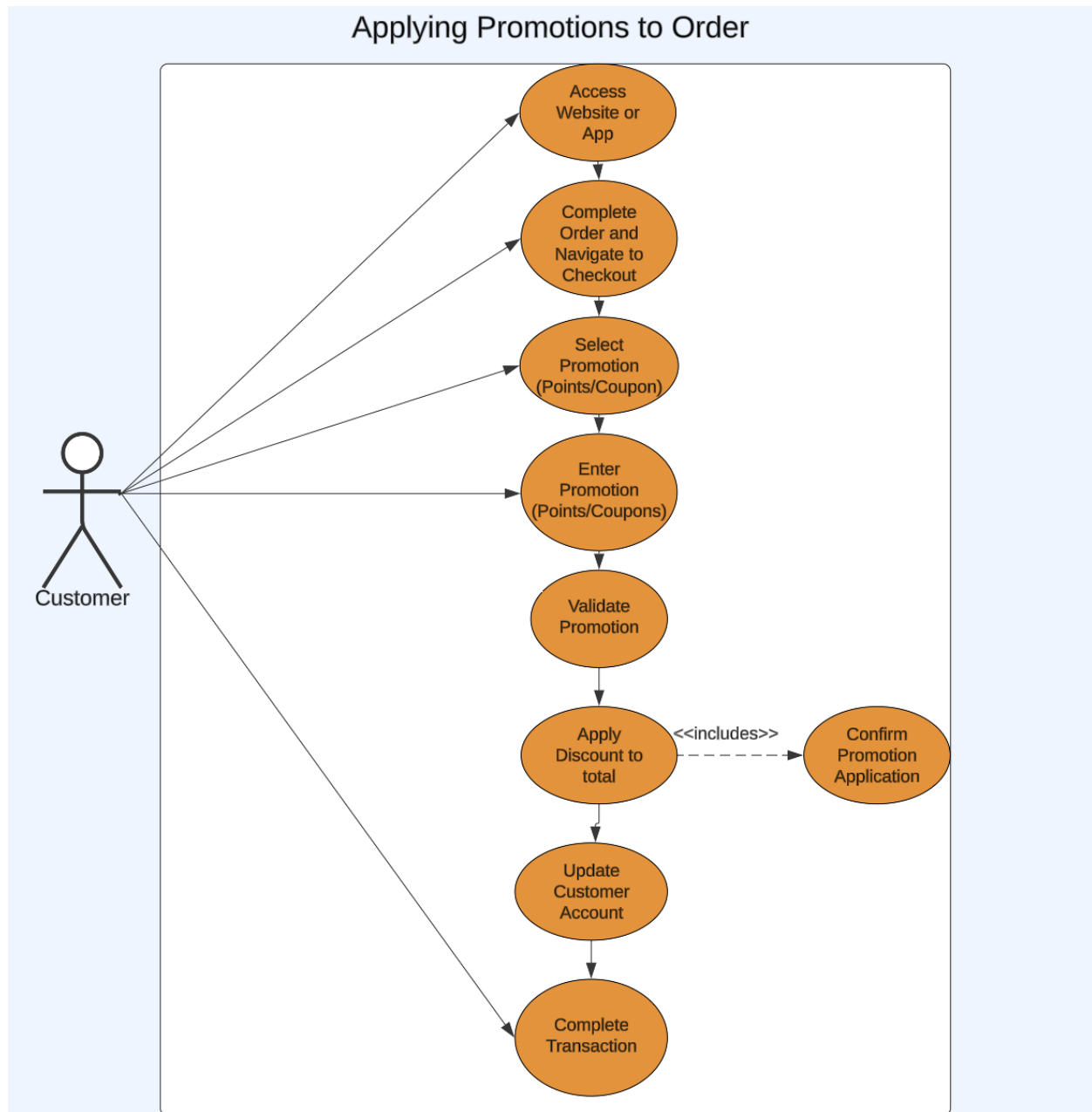
User Story#4:

- As a customer, I want to redeem my promotions (coupons or rewards points) during checkout so that I can save money on my purchase.

Acceptance Criteria:

1. The website/app displays a field for entering coupon codes or selecting reward points during checkout.
2. The system validates the coupon code and reward points, applying them only if they are valid.
3. The total cost is updated to reflect the applied promotion.
4. The system displays an error message if the promotion is invalid or cannot be used.
5. The customer receives a confirmation that the promotion was successfully applied to their order.

Use Case Title: Customer Redeems Promotions (Coupons/Rewards Points)
Primary Actor: Customer
Stakeholders: Customer, Marketing Team
Precondition: <ul style="list-style-type: none"> • Access to the website/app. • Customer has an active account (if required for rewards points). • The promotion (coupon or rewards points) is valid and available.
Minimal Guarantee: The customer is informed if the promotion cannot be redeemed.
Success Guarantee: The customer successfully redeems the promotion and applies it to their purchase.
Trigger: The customer initiates a purchase or views the promotions section on the website/app.
Main Success Scenario: <ol style="list-style-type: none"> 1. The customer accesses the website/app and navigates to the checkout page or promotions section. 2. The customer selects an available promotion (coupon or reward points). 3. The system displays a field for entering a coupon code (if applicable) or selecting reward points. 4. The customer enters the coupon code or selects a rewards voucher. 5. The system validates the coupon code or checks the availability of reward points. <ol style="list-style-type: none"> 1. If the promotion is valid, the system displays the updated total with the discount applied. 2. The customer confirms the application of the promotion. 3. The system updates the customer's account (e.g., deducts points or marks the coupon as used). 4. The customer proceeds to complete the transaction with the promotion applied
Extensions: <ol style="list-style-type: none"> 1. If the promotion is invalid or expired <ol style="list-style-type: none"> a. the system displays an error message b. prompts the customer to enter a valid code or choose a different promotion. 2. If the customer does not have enough reward points <ol style="list-style-type: none"> a. the system notifies them of the points deficit.



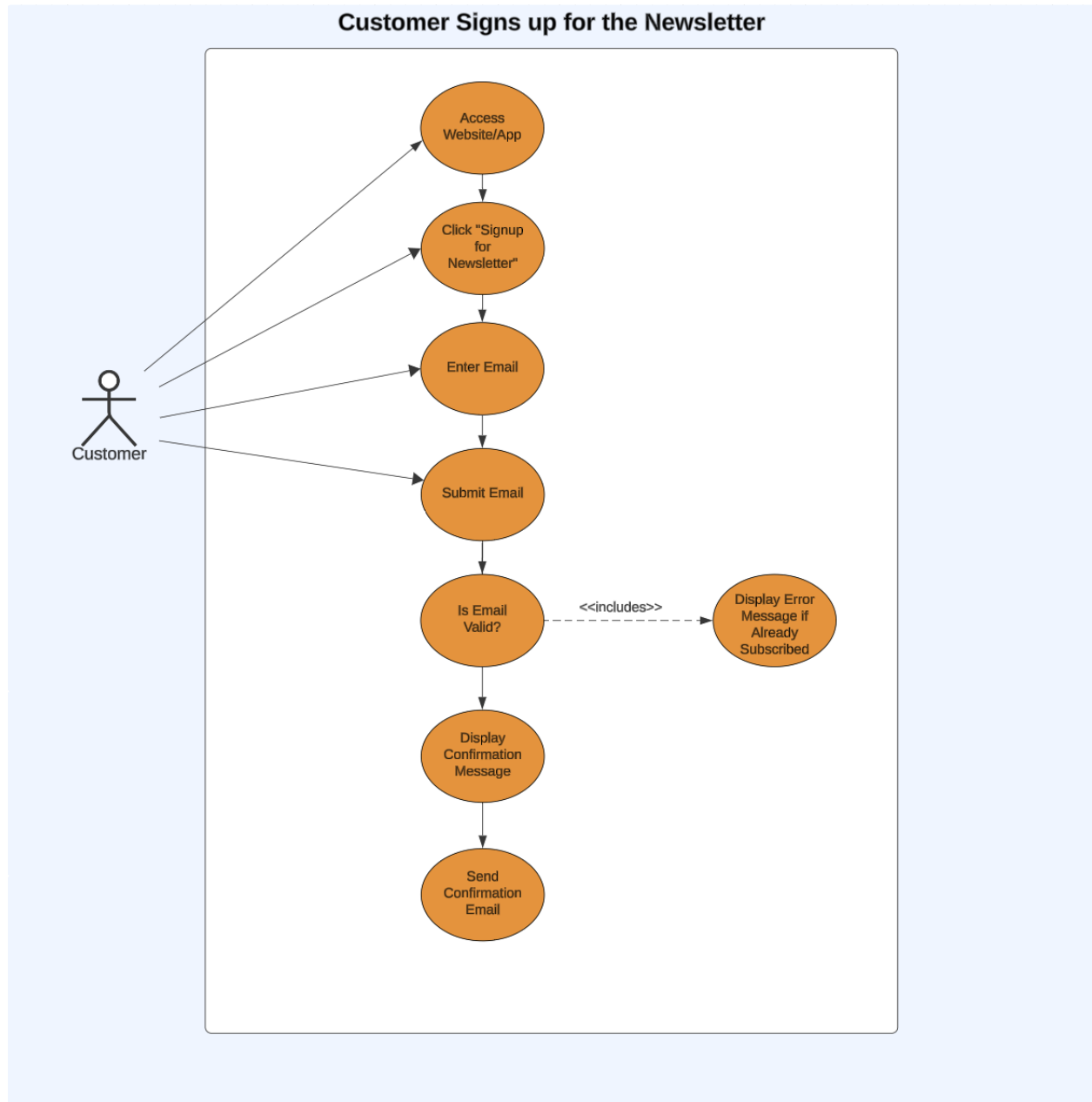
User Story#5:

- As a customer, I want to sign up for the newsletter so that I can receive updates and promotions.

Acceptance Criteria:

1. The website/app displays a "Sign Up for Newsletter" link/button that is accessible from the homepage.
2. The signup form requires the customer to input a valid email address.
3. A confirmation message appears on the screen after successful signup.
4. A welcome email is sent to the customer's email address upon signup.
5. The customer can unsubscribe from the newsletter through the link provided in the email.

Use Case Title: Customer Signs Up for Newsletter
Primary Actor: Customer
Stakeholders: Customer, Marketing Team
Precondition: Access to the NTPP Website/App, Internet Access
Minimal Guarantee: The customer is informed of an error if the signup fails.
Success Guarantee: The customer successfully signs up for the newsletter and receives a confirmation email.
Trigger: The customer accesses the website/app homepage.
Main Success Scenario: <ol style="list-style-type: none"> 1. The customer accesses the website/app. 2. The customer finds and clicks on the "Sign Up for Newsletter" link/button. 3. The customer is prompted to enter their email address. 4. The customer enters a valid email address. 5. The system validates the email format. 6. The customer clicks the "Submit" button. 7. The system displays a confirmation message on the website/app. 8. The system sends a welcome email to the customer's provided email address.
Extensions: <ol style="list-style-type: none"> 3. If the email format is invalid, <ol style="list-style-type: none"> a. the system displays an error message b. prompts the customer to re-enter a valid email. 4. If the email is already registered, <ol style="list-style-type: none"> a. the system notifies the customer that they are already subscribed.



Third-Party Vendor Portal/Inventory Management (Benjamin Zheng 1-2, Jay Goodman 3-5)

User Story #1:

As the business owner, I want to analyze inventory costs and generate different budget and cost reports so I can make informed decisions on product management.

Acceptance Criteria:

1. **Logging in to Inventory Portal:**
2. Owner opens the inventory portal website.

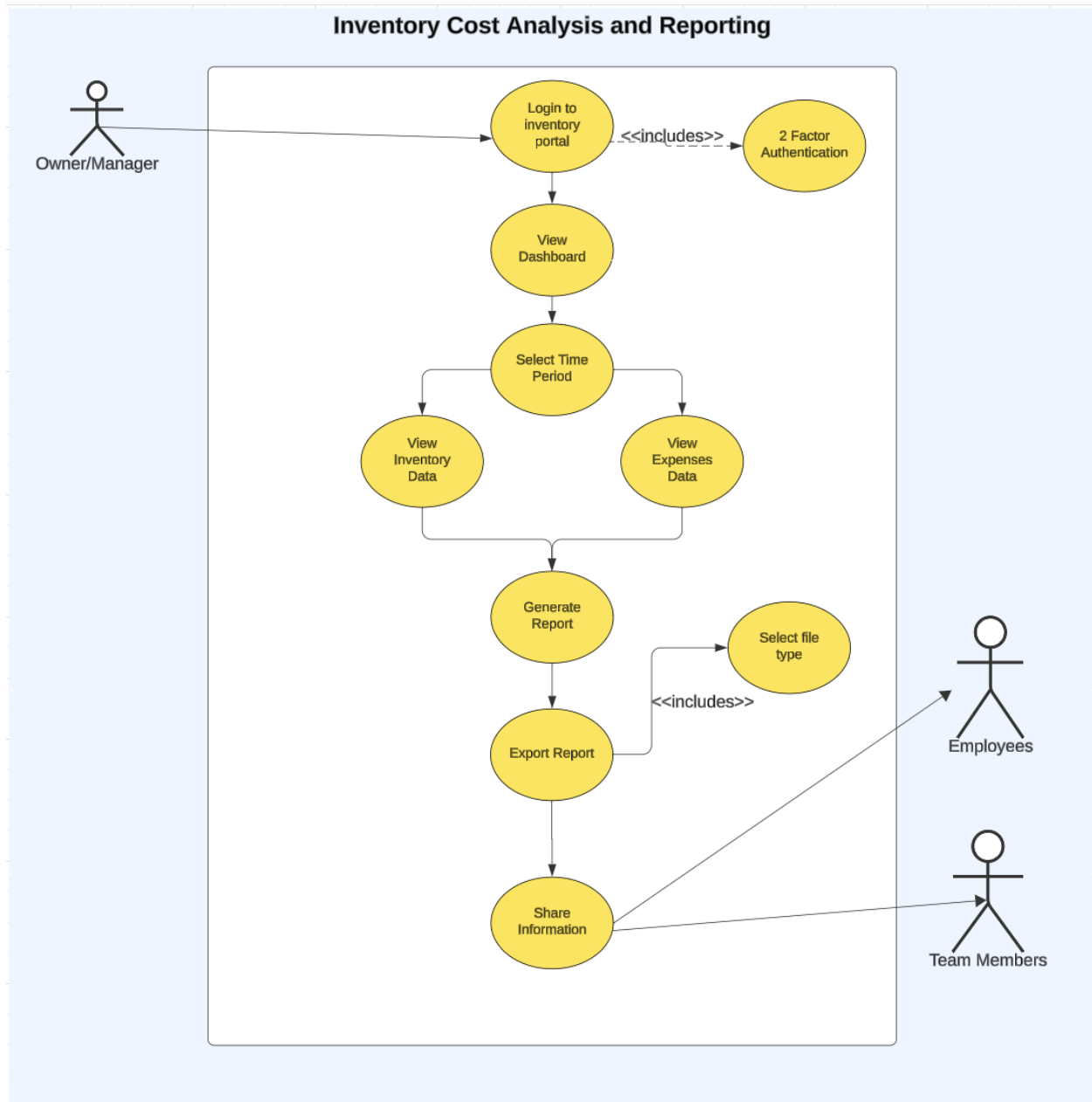
3. Owner logs into the system using correct account credentials.
4. Successful login redirects to dashboard
- 5. Navigating the Dashboard:**
6. The Dashboard displays different information (Inventory, Total Budget, Profits, Expenses, Cash, Assets, Sales).
7. A sidebar is viewable with different options (Overview, Expense Reports, Inventory Analysis).
8. Hovering over Expense Reports displays different reporting periods (Daily, Weekly, Monthly, Yearly).
- 9. Cost Analysis:**
10. Expense Reports page loads when selected and appropriate time period is used.
11. A list of invoices is chronologically listed displaying details (date, category, amount spent, vendor).
12. To view more details, owner clicks on entry.
13. The expense details page opens, displaying a breakdown of the expense, including relevant notes, receipts, or documents.
14. Export options are presented in the top right corner (Print, Save, Email)
- 15. Inventory Analysis:**
16. Inventory reports page loads when selected and appropriate time period is used.
17. Different data about the inventory is displayed (number of items, number of produce orders, average stock levels, number of low stock items and out of stock).
18. List of ingredients/produce is listed and when clicked shows more detailed information (cost per unit, stock levels, vendor, last delivery date, next delivery date)
19. Export options are presented in the top right corner (Print, Save, Email)

Use Case Title: Inventory Cost Analysis and Reporting
Primary Actor: Owner
Stakeholders: Owner, Manager
Precondition: Owner has access to inventory portal
Minimal Guarantee: System saves any incomplete analytic data and reports for future completion or deletion.
Success Guarantee: Owner successfully creates reports on inventory and expenses to analyze for reference on inventory decisions.
Trigger: Owner initiates inventory and expenses data to be analyzed and reported
Main Success Scenario: <ol style="list-style-type: none"> 1. Owner logs in to inventory portal 2. Owner accesses and views inventory and expenses data 3. Owner analyzes data 4. Owner generates customized reports 5. Owner saves and exports reports

6. Reports are shared amongst employees and the team
7. Decisions based off of the reports are enacted

Extensions:

1. Report generation system error
 - a. Owner reloads the website
 - b. Owner tries to generate a report again.
- i.If still not working, contact support
 2. Data is corrupt or wrong
 - a. Edit data
 - b. Reimport data
 - c. Delete data



User Story#2:

As the business owner, I want to be able to update and manage my products/ingredients so vendors can have updated and correct information on stock levels in the restaurant .

Acceptance Criteria:

- 1. Logging in to Inventory Portal:**
2. Owner opens the inventory portal website.
3. Owner logs into the system using correct account credentials.
4. Successful login redirects to dashboard

5. Navigating the Dashboard:

6. The Dashboard displays different information (Inventory, Total Budget, Profits, Expenses, Cash, Assets, Sales).

7. Accessing Inventory:

8. The sidebar menu includes options such as Overview, Update Inventory, Add Products, and Inventory Reports.

9. Current stock levels and alerts for low stock are clearly visible.

10. Updating Inventory:

11. The owner clicks on the "Update Inventory" tab.

12. A list of current products and ingredients appears, showing stock levels and statuses (Available, Low Stock, Out of Stock).

13. The owner selects a specific product/ingredient, and the product details page opens for editing.

14. Stock levels, descriptions, and pricing can be selected and edited.

15. Clicking "Save Changes" confirms the updates, and a success message is displayed.

16. Ordering more product/ingredients:

17. When selecting an ingredient, an option to order more is accessible

18. A popup appears and quantity amount needs to be filled in manually to be ordered

19. A list of vendors also is displayed under and price and distance is shown

20. A "Order" option is at the bottom of the popup, and when clicked, order is sent and a confirmation page is displayed.

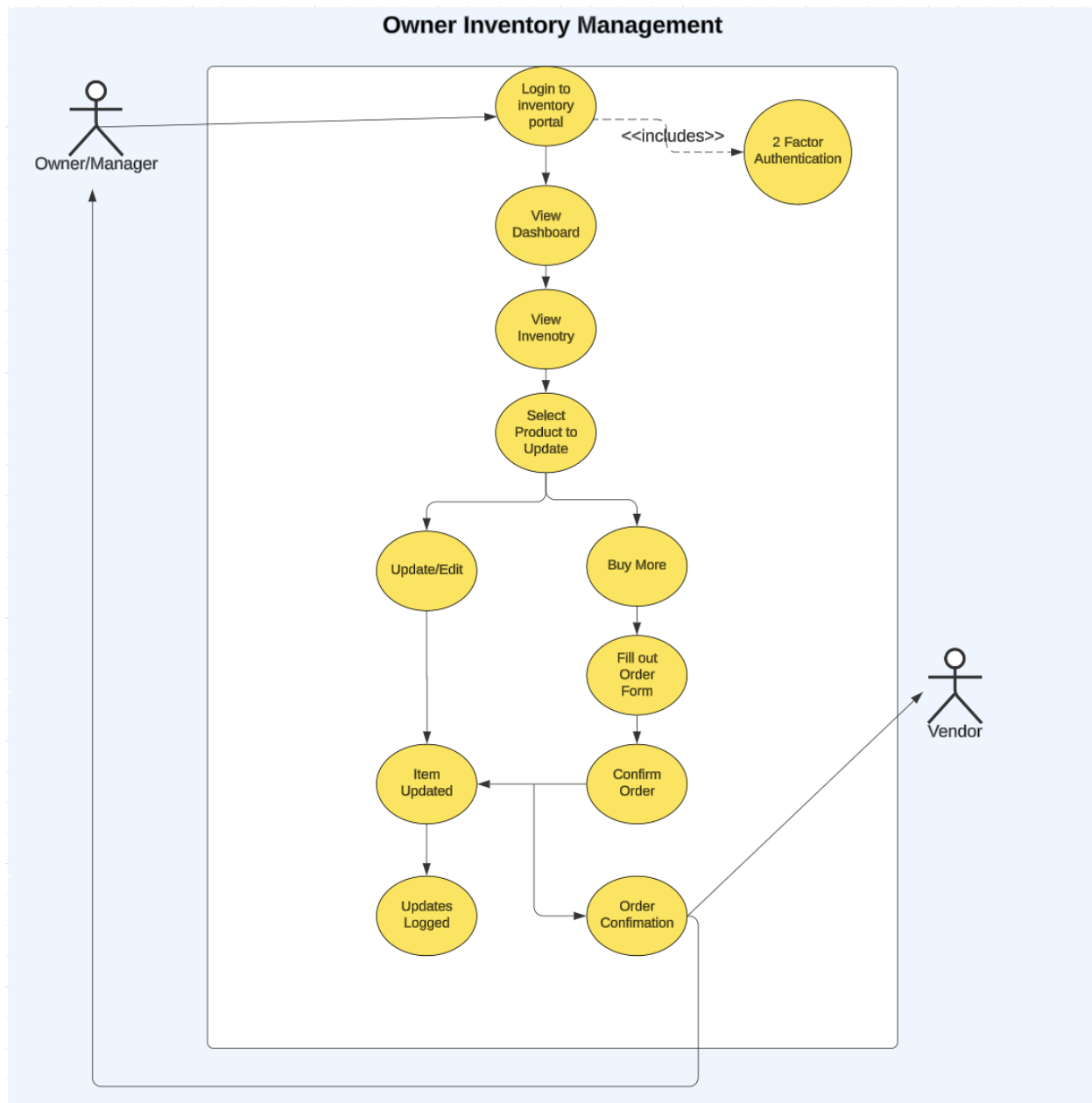
21. Page displays estimated delivery time, total cost, vendor, date, and quantity

Use Case Title: Owner Inventory Management
Primary Actor: Owner, Manager
Stakeholders: Owner, Vendors, Manager, Employees
Precondition: Owner has access to inventory portal
Minimal Guarantee: System saves any incomplete changes and
Success Guarantee: Inventory information is accurately updated to ensure vendors can reflect on correct stock levels
Trigger: Owner initiates an update to product or ingredient information in inventory portal
Main Success Scenario: <ol style="list-style-type: none">1. Owner logs into inventory portal2. Owner accesses product list3. Owner selects product to update4. Owner updates or orders more of product5. Changes are saved6. Changes are logged to keep track and accountability

7. Vendors are able to see updated information

Extensions:

1. Tries to exit without completing data
 - a. Prompts user if they want to leave without completing data
 - i. If yes, exit and revert changes.
 - ii. If no, website scrolls to parts that are unfilled
2. Failed update
 - a. A detailed error message occurs and prompts user to try again
 - b. If still unresponsive, contact support or try again later



User Story#3:

As a vendor, I want to review, track, and manage inventory levels so that I can ensure timely fulfillment of orders.

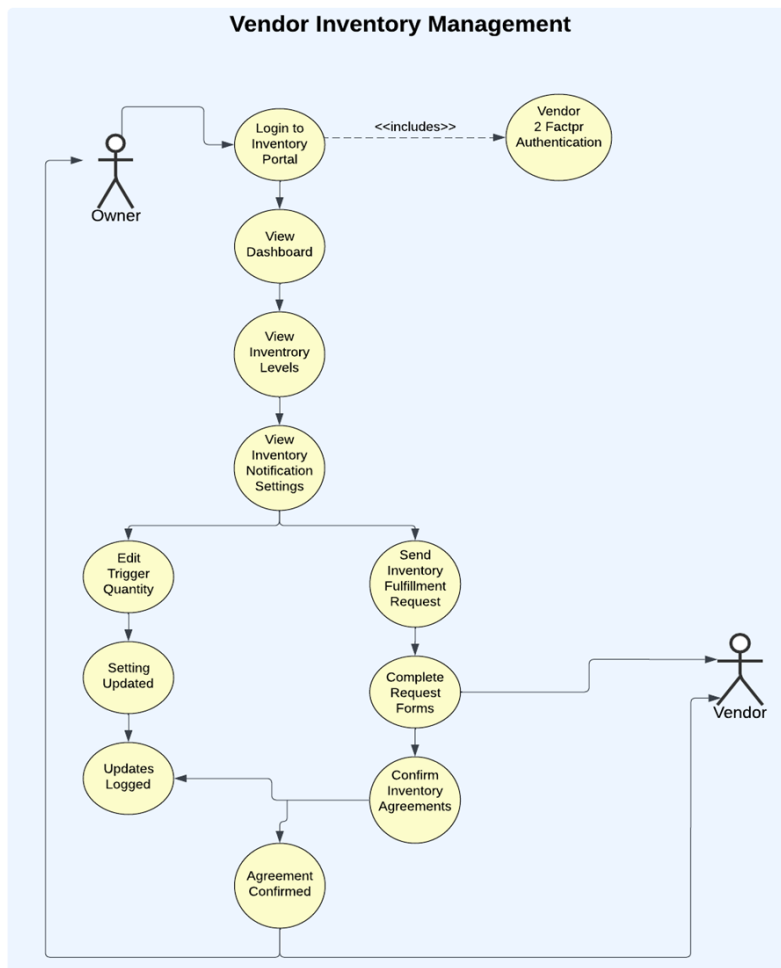
Acceptance Criteria:

1. **Vendor Authentication**
2. The system enforces authentication steps, including username and password verification.
3. The system has a lockout feature implemented after multiple failed logins attempts within a specified period.
4. This ensures only authorized users can access the vendor portal, promoting data integrity and security.

5. **Inventory Visibility**
6. The vendor can view real-time stock levels, product requirement details, and inventory order history.
7. Vendors can monitor the stock inventory, enabling proper inventory management and timely order fulfillment.
8. **Updating Inventory Levels**
9. The system allows vendors to update inventory levels in real time, with changes immediately updated in the system.
10. Automatic updates to sales must be represented accurately.
11. Inventory reflects accurate stock levels, ensuring proper restock and order fulfillment.
12. **Setting Alerts for Low Stock**
13. Vendors can modify and set alert thresholds for low stock levels.
14. Notifications can be sent through email and/or SMS once triggered stock levels are reached.
15. Vendors can accurately and efficiently manage inventory, reducing the risk of running out of stock on important items.
16. **Saving Changes**
17. All changes made by the vendor can be saved and updated by the vendor.
18. Confirmation window provides vendors with verification after a successful change has been saved.
19. **Unapproved Products Handling**
20. The system notifies vendors of any products that do not comply with pizza shop requirements.
21. Details on necessary adjustments to products are included with unapproved product notifications.
22. Vendors can identify products that no longer meet requirements and make necessary adjustments to meet compliance requirements.
23. **Notification for Bid Updates**
24. The system keeps vendors informed of important updates related to bids that could affect their inventory management.
25. Vendors are notified of changes in the bidding process that may affect their inventory levels.
26. **Performance and Response Time**
27. The system performs efficiently. Passing all benchmarks with fast response times for actions
28. A smooth user experience encourages regular use and reduces errors.
29. **Data Consistency:**
30. The system ensures that all authorized users can access the same data at any time.
31. All stakeholders have access to consistent data, ensuring efficient inventory management.
32. **User Support and Documentation**
33. The system provides easy access to user support resources. These resources include a help section with documentation, FAQs, and an option for a direct contact to tech support.
34. Vendors can navigate the system confidently knowing issues are resolved quickly, promoting user productivity.
35. **Documentation Upload Feature**
36. The system enables the vendor to upload required documents and certifications related to the product compliance requirements, inventory orders, and bid approval process.
37. All relevant documents are attached to the bid with proper labeling corresponding to each vendor, ensuring compliance, completeness, and integrity.

Use Case Title: Vendor Inventory Management
Actor: Vendor

Stakeholders: Vendor, Owner, Employees, and Customers
Precondition: Vendor has access to the vendor inventory portal.
Minimal Guarantee: Return of all unapproved products that do not meet requirements.
Success Guarantee: Order received
Trigger: Definition queries that send a notification when an update to inventory and orders are placed.
Main Success Scenario: <ol style="list-style-type: none"> 1. Log In to Vendor Portal: vendors enter their credentials to access the system. 2. View Current: The vendor can view stock levels and product details. 3. Updated Inventory: Vendor can view inventory levels based on automatic updates; quantity of products sold. 4. Set Alerts: Vendors can set notification triggers when products reach a desired level. 5. Save Changes: The vendor saves all updates from Owner/Admin, which are reflected in the main inventory system.
Extensions: <ol style="list-style-type: none"> 1. Failed Vendor Authentication <ol style="list-style-type: none"> 1a1. Vendor attempts to log in with incorrect credentials. Account locked after multiple failed attempts. 1a2. Vendor takes action to receive proper credentials. 2. Updating Inventory Levels Failure <ol style="list-style-type: none"> 2a1. Update fails. Vendor restarts application and starts again. 2a2. Update fails. Vendor reaches out to tech support for further investigation. 3. Alert Settings Failures <ol style="list-style-type: none"> 3a1. Alert setting threshold update fails not saving the setting. Vendor receives a notification of failure and is instructed to try again. 3a2. Vendor sets alerts but does not receive notifications when stock levels reach the desired amount. Vendor checks alert settings and reconfigures to desired thresholds.



User Story#4:

As an owner, I want to be able to review and manage inventory bids from vendors so that I can approve bids and establish contracts with vendors.

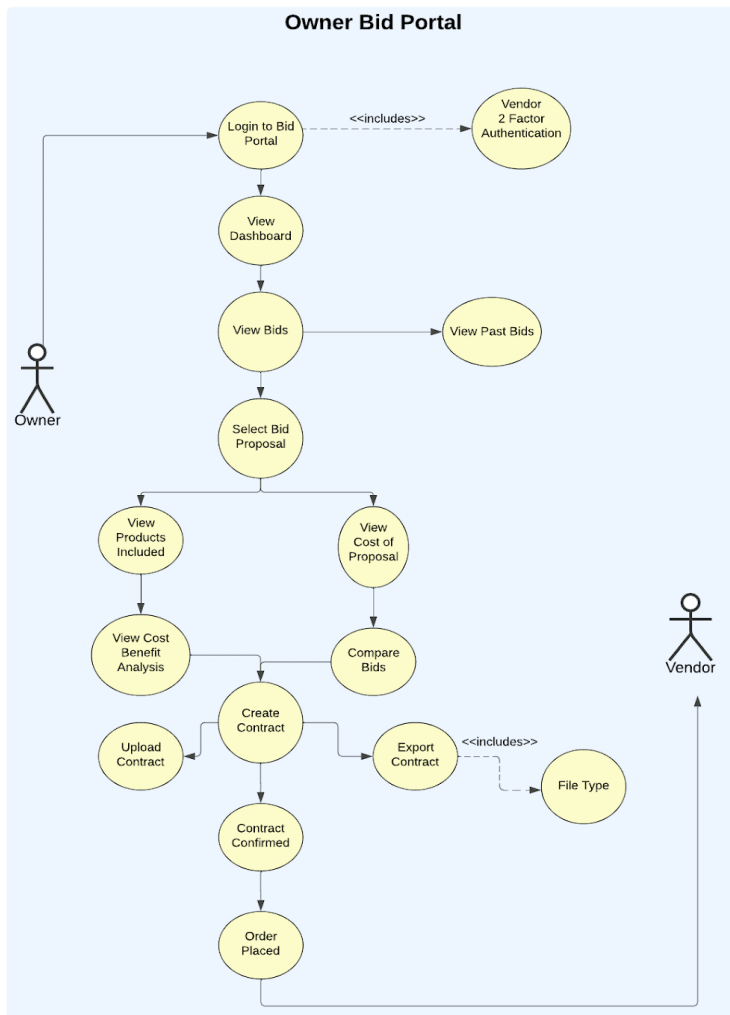
Acceptance Criteria:

1. **User Authentication**
2. The system requires the owner to enter a valid username and password.
3. This allows only authorized users can access the bid portal, ensuring data security.
4. **Bid Portal Access**
5. The owner can navigate the bid portal without tech issues or errors.
6. Reliable access ensures that the owner can review and manage bids in an efficient manner.
7. **Notification System**
8. The system sends automated notifications to the owner for key actions related to bids.
9. The owner receives timely updates, promoting efficiency throughout the bidding process.

10. **Bid History**
11. The system maintains a comprehensive history of all bid activities, including timestamps and user details.
12. The owner can access a complete record for accountability and reference.
13. **Approval and Rejection Workflow**
14. The owner can approve or reject bids through a clear workflow process.
15. Automated prompts help guide the owner for proper action.
16. The process for managing bids is easy to follow, reducing the event of an error.
17. **Bid Submission Review**
18. The owner has access to view all submitted bids. These bids include new, updated, and existing submissions.
19. The user-friendly interface helps sort and filter all stored bids.
20. The owner can efficiently navigate through bids to make informed decisions.
21. **Document Upload Functionality**
22. The system allows the owner to upload documentation with each bid approval or rejection, product specifications and requirements, and contract documents.
23. All necessary documents are stored with the corresponding bid, ensuring organization, compliance, and accuracy.
24. **Integration with Inventory Management**
25. The bid management system must integrate, without error, with existing inventory management tools and databases.
26. The owner can access real-time updated inventory data and navigate the bid management system without errors.
27. **Audit Log for Bid Changes**
28. All updates to bids are recorded in the log with details on what was changed, timestamps, and user information.
29. This ensures accountability and traceability for all updates made to bids.
30. **Help and Support Access**
31. The system provides easy access to support features and resources, including a help portal where the owner can report issues or request immediate assistance.
32. The owner can quickly get help when needed, reducing downtime.
33. **Bid Status Tracking**
34. The owner can track the status of each bid throughout the entirety of the bid process such as “submitted”, “received”, “under review”, “approved” or “rejected”.
35. The owner can monitor the progress of bids in real-time.
36. Ensures that the owner can track the status of each bid throughout the approval process, allowing for representations of what stage the bid is in, promoting transparency and accuracy.
37. **User Access Control**
38. The system implements user access controls to ensure that only authorized personnel can view and manage bids.
39. Sensitive bid information is encrypted and protected, reducing the risk of unauthorized access, data leaks, and errors.

Use Case Title: Owner Bid Management
Primary Actor: Owner
Stakeholders: Owner and Vendor
Precondition: Owner can access the vendor bid portal.
Minimal Guarantee: Return of unapproved bid submission.

Success Guarantee: Accepted bid signed and submitted; orders are placed.
Trigger: Definition queries that send a notification when an update has been submitted to bid .portal
<p>Main Success Scenario:</p> <ol style="list-style-type: none"> 1. Access Bid Portal: Owner navigates to the bid portal. 2. Review Requirements: Owner can review new, updated, and existing bids from vendors. 3. Submit Proposal: Owner fills out contract forms, signs agreements on deliveries, all other legalities, including pricing and terms. 4. Attach Documentation: Necessary documents and certifications can be uploaded. 5. Submit Approved Bid: Owner submits the approved contracts by decision-makers. Owner submits new inventory orders.
<p>Extensions:</p> <ol style="list-style-type: none"> 1. Failed Access to Bid Portal. <ol style="list-style-type: none"> 1a1. Owner exits application. Owner restarts application. 1a2. Owner takes proper action to gain access to Bid Portal. 2. Review Bid and Order Errors <ol style="list-style-type: none"> 2a1. System highlights errors in bid submissions such as missing documents or invalid pricing. 2a2. System provides detailed error messages with suggestions for possible corrections. Owner implements corrections and resubmits. 3. Unsuccessful Bid Approval Submission <ol style="list-style-type: none"> 3a1. System provides error messages indicating missing fields or incorrect formats in the submission. 3a2. Owner revises the bid submission based on feedback and resubmits.



User Story#5:

As a business owner, I want to manage payment and invoicing efficiently so that I can ensure timely payments to vendors and maintain accurate financial records.

Acceptance Criteria:

1. **User Authentication and Access Control**
2. The system enforces strong password policies.
3. The business owner must successfully log into the system with valid credentials
4. Two-factor authentication is optional for added security.
5. The system ensures that only authenticated users can create invoices and process payments to maintain security.
6. **Invoice Creation**
7. The vendor can create an invoice by entering all required fields.
8. Invoice interface must include fields for vendor name, contact information, itemized list of inventory, quantity and price per item, total amount including taxes and discounts, due date.

9. All fields must be clearly marked, and the system will not allow submission until invoice fields are filled correctly.
10. Owner can receive and review invoice information verifying accuracy.
11. Invoices must be completed and accurate before payment is made.
12. **Invoice Summary Confirmation**
13. After an invoice is created and submitted by the vendor, the system displays a summary for the owner to confirm details before proceeding.
14. The owner has options to edit or confirm the invoice.
15. The owner can verify the accuracy of the invoice details before finalization and sending payment.
16. **Payment Method Integration**
17. The system must support multiple payment methods, including credit/debit cards, bank transfers, and third-party payment processors.
18. The owner can select a payment method during the finalization process once invoice details have been confirmed.
19. The owner can choose their preferred payment method, improving payment success rates.
20. **Payment Processing Window**
21. The system securely processes payments, providing real-time feedback on payment status.
22. In case of payment failure, clear instructions must be provided to the owner and vendor for next steps.
23. Payment processing is smooth, and information is easily accessible with feedback and transaction status.
24. **Notification System**
25. The system automatically sends notifications to both the business owner and the vendor once an invoice is uploaded and upon payment confirmation.
26. Notifications include invoice number, amount paid, payment method, date of payment.
27. The system logs payment status.
28. The owner and other vendors involved are informed of the transaction details ensuring clear communication.
29. **Account Integration**
30. The system automatically updates financial records in the invoicing and payment module once payment process is complete.
31. A summary of transactions will be available for review.
32. Transaction summaries will include total income, pending invoices, and payment history.
33. Financial records are accurate and up to date, ensuring efficient and organized invoice and payment data.
34. **Error Handling User Feedback**
35. The system provides clear and descriptive error messages for any issues encountered during the invoice submission or payment processing phase.
36. Errors will not cause the system to crash or freeze, instead users will be guided to resolve issues without losing data.
37. Users experience minimal errors and can quickly resolve issues, ensuring confidence in the system.
38. **Data Validation and Security**
39. Input fields have validation rules to maintain consistent format and numeric values.
40. The system encrypts sensitive information during processes and the storage of sensitive information.
41. Data integrity and security are maintained, reducing the risk of fraud or errors.
42. **User Interface and Experience**
43. The user interface is user friendly and responsive, allowing the owner to navigate easily between creating invoices, processing payments, and accessing records.

44. The system provides toolbars with tips implemented to assist users in understanding features.
45. A user-friendly interface promotes regular use and minimizes training requirements.
46. **Payment History Tracking**
47. The system maintains a history of all processed payments, including date, amount, vendor, and payment method.
48. The owner can review past transactions, promoting efficiency in financial reporting.
49. **Search and Filter Features**
50. The invoicing system includes a search and filter feature option, allowing the owner to locate a specific invoice using date range, vendor name, or amount paid.
51. Easy access to invoice information enables the owner to maintain precise and accurate financial information.
52. **Multi-Currency Support**
53. The system supports transactions in USD and cryptocurrency.
54. The system implements an automatic currency conversion based on current exchange rates.
55. This feature enables the owner to transact with international vendors easily, avoiding discrepancies between foreign monetary units, allowing the use of a currency holding equal value globally.

Use Case Title: Payment and Invoicing Management
Primary Actor: Owner
Stakeholders: Owner, Finance Team, Vendor
Preconditions: The business owner has an active account with the invoicing/payment management systems. Invoices have been received and ready for payment dispatch.
Minimal Guarantee: The system will log the invoice received and provide a status update once vendor process payment.
Success Guarantee: The invoice is received by the vendor, owner prepares payment, payment is processed, and both business owner and vendor receive confirmation of the transaction, updating financial records accordingly.
Trigger: The vendor initiates the payment process by creating an invoice for the business owner and selecting the payment method options available to the owner.
Main Success Scenario: <ol style="list-style-type: none"> 1. The vendor updates a new invoice in the payment and invoicing management system. 2. The business owner logs into the payment and invoicing management system. 3. The owner reviews the new invoice, ensuring all the entered details and information match accordingly. 4. The system displays a summary of the invoice for confirmation. 5. The owner confirms the invoice is accurate and selects a payment method. 6. The owner sends out payment for processing. 7. The system processes the payment sent to the vendor and updates the invoice status to “Paid pending confirmation”, then updated to “Paid” once payment has been deposited into the vendor's account. 8. The owner and vendor receive notification updates confirming the payment processed and invoice details. 9. The transaction is recorded in the Payment and Invoicing Management System for financial reporting.

Extensions:

1. Invalid Payment Information:

1a1. If the owner's payment information is invalid, the system prompts the owner to correct it and retry the payment.

2. Payment Declined:

2a1. If payment is declined, the system alerts the owner and the vendor, allowing them to communicate to choose an alternative payment method or retry.

3. Invoice Not Found:

3a1. If the invoice cannot be retrieved from the system, an error message is displayed, and the vendor is notified to check the invoice details and retry uploading the invoice.

4. System Downtime:

4a1. If the system is down during the process, the owner and vendor are notified of the issue and can save the invoice for future submissions once the system is operational again.

5. Notification Failure:

5a1. If the email notification fails to send, the system logs the error and provides an option to resend notifications manually.

