

Delicious Lunch

Partial Information System Requirements Document

Group 5

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1 Business Description

1.1 Briefly describe what business you would like to pursue.

We would like to pursue Delicious Lunch, a company looking to provide convenient and reliable lunch service for elementary school students in the GTA area. The company facilitates an intuitive online ordering and payment system for parents to order regular lunches for their children while offering flexibility plans and a variety of lunch options.

2 Proposed Information System

The information system for Delicious Lunch will be an online system that primarily manages lunch scheduling, payments, user accounts and user information, and food materials inventory.

	Project Scope Statement
Project Title	Delicious Lunch Information System
Project Management Team	Anureet Sohi, Maryam Abou El Nasr, Harold Cuellar Vargas, Mitchel Chanthaseng
Project Opportunities	<ul style="list-style-type: none"> Streamline the lunch ordering process for parents from choosing lunch options to the payment process Make food inventory management easier with inventory tracking, adding, and removing
Project Objectives	<ul style="list-style-type: none"> Create a user-friendly interface that can be used by a broad audience of users (parents, kitchen chefs, food purchasers, etc.) Optimize lunch ordering in a way that priorities parent convenience Integrate paper order processing into the information system Create a secure storage of user accounts and user information such as children, school, lunch preference, payment method
Benefits	<ul style="list-style-type: none"> Build clientele as information system developers Support the growth of elementary schools and communities in the GTA area
Major Deliverable	<ul style="list-style-type: none"> An online information system that will be used by all stakeholders while satisfying all functional requirements for lunch ordering

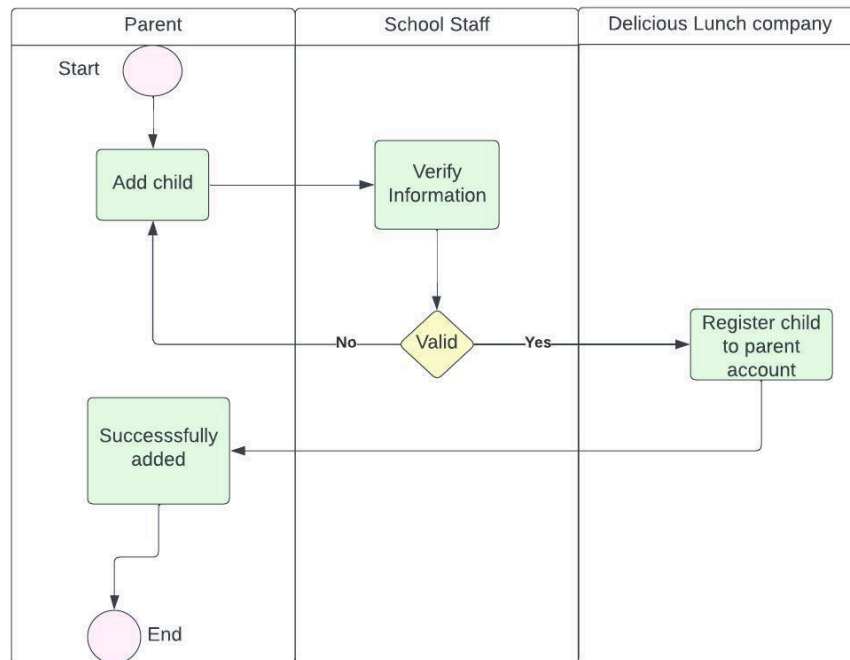
3 Stakeholder Analysis of the Proposed Information System

Satisfy (High Influence, Low Interest)	Manage (High Influence, High Interest)
<ul style="list-style-type: none"> • The Government/Law • Food Safety Regulation 	<ul style="list-style-type: none"> • CEO • COO • CFO • Kitchen Chef
Inform (Low Influence, Low Interest)	Monitor (Low Influence, High Interest)
<ul style="list-style-type: none"> • Delivery Team • Company Office Staff • Students 	<ul style="list-style-type: none"> • Payment Processor • School Administrators • School Board • Student's parents • Food Material Purchaser • System Developers

4 Business Processes (one business process per student)

4.1 Business Process 1: Adding Child to Parent Account by Anureet Sohi

4.1.1 Business process activity diagram

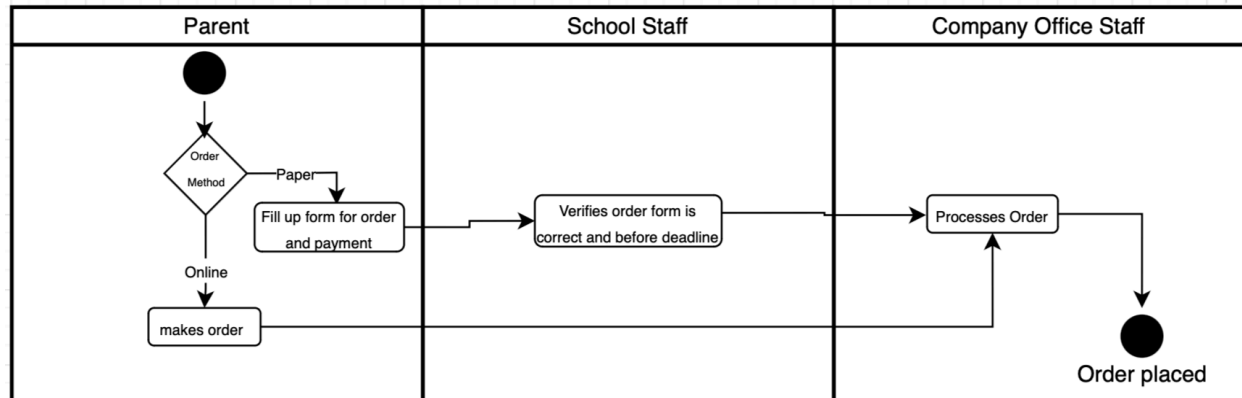


4.1.2 User stories from this business process

- As a parent, I would like to add my child so I can order lunches directly to their classroom
- As a parent, I would like a success message so that I know I am able to order lunch for my child
- As the school staff, I would like to verify student classrooms so I can ensure lunches get delivered to the right student
- As the Delicious Lunch Company I want to confirm registration so I can successfully register the child

4.2 Business Process 2: Order Creation by Harold Cuellar Vargas

4.2.1 Business process activity diagram

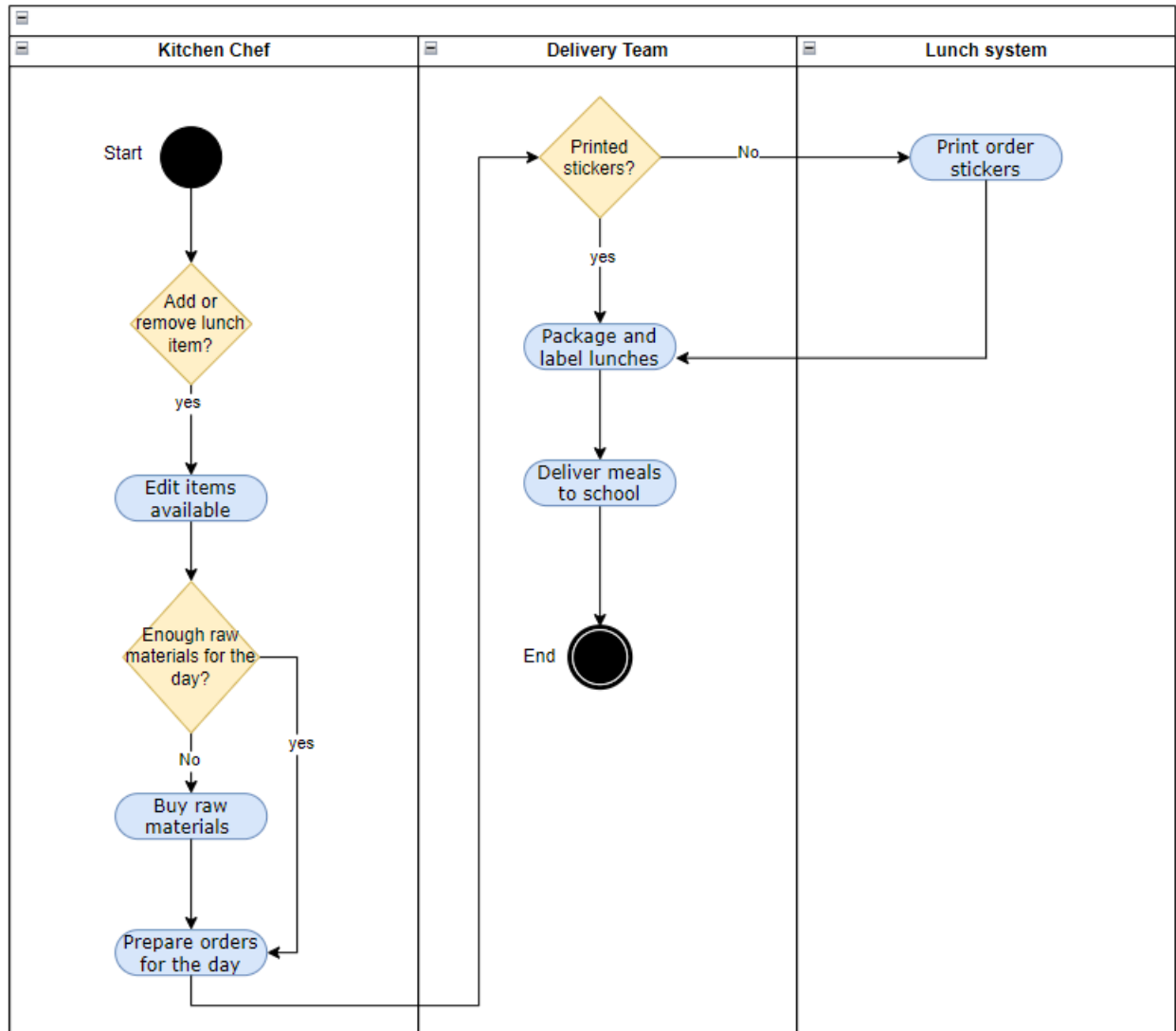


4.2.2 User stories from this business process

- As a parent I would like to have the ability to replicate an order so I can manage my 20 children's dinner orders easily.
- As a parent I would like to get order confirmations via email so I can manage easily.
- As a Company Office Staff I would like to receive paper orders the Friday of the previous month so I can make sure the dinner order is correctly processed.
- As a School Staff I would like to easily verify that the form is currently filed and before the deadline so I can maintain accurate records.

4.3 Business Process 3: Order Preparation by Maryam Abou El Nasr

4.3.1 Business process activity diagram

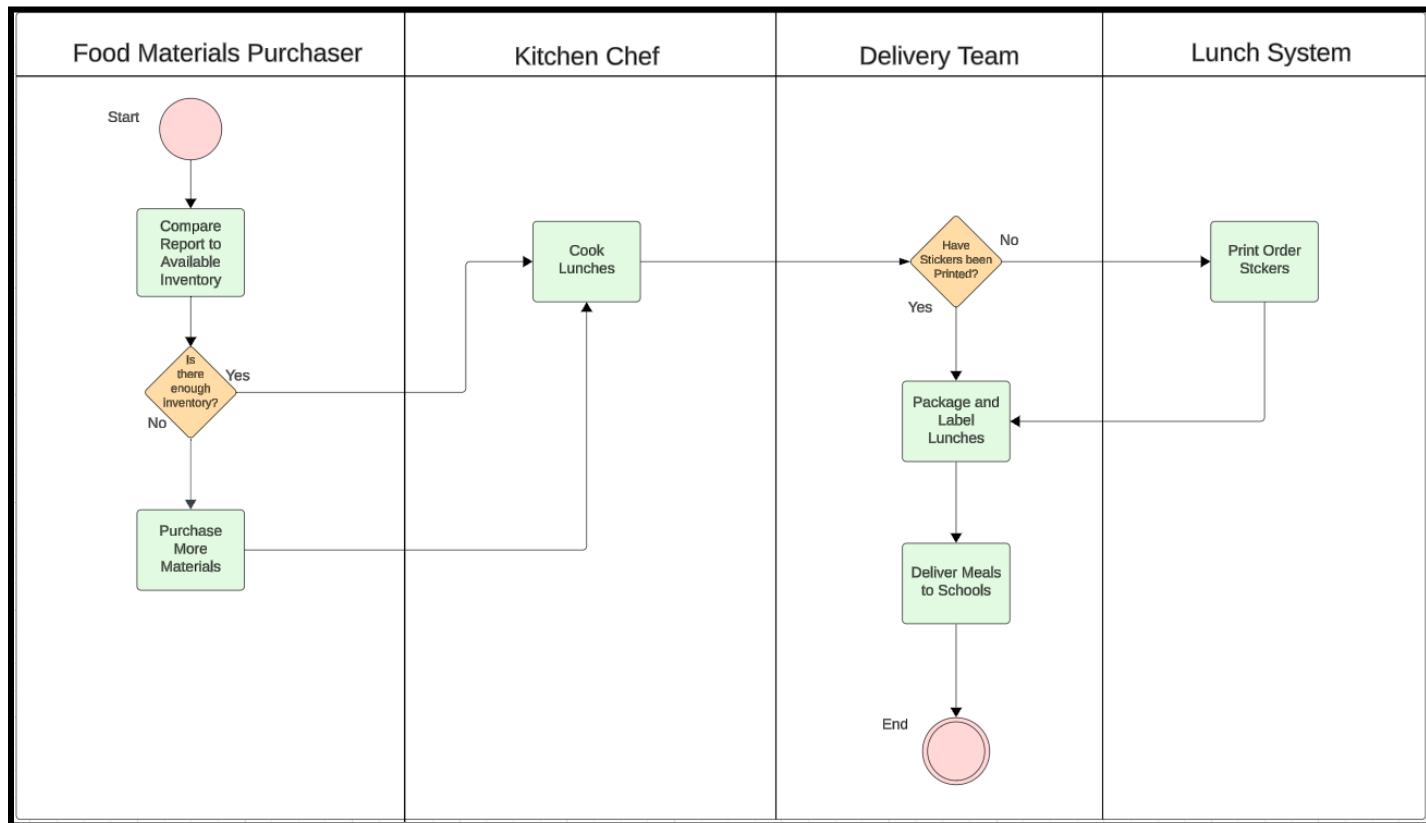


4.3.2 User stories from this business process

- As a chef, I want to edit the inventory to either add new lunch items or remove lunch items so that I know what types of raw materials will be needed for that day
- As part of the delivery team, I want to know if the stickers were printed so that the delivery can reach the correct student in the correct classroom
- As someone who works in the lunch system, I want to print the stickers to the lunches that don't have stickers so that there isn't any confusion between student orders.

4.4 Business Process 4: Lunch Prep and Delivery by Mitchel Chanthaseng

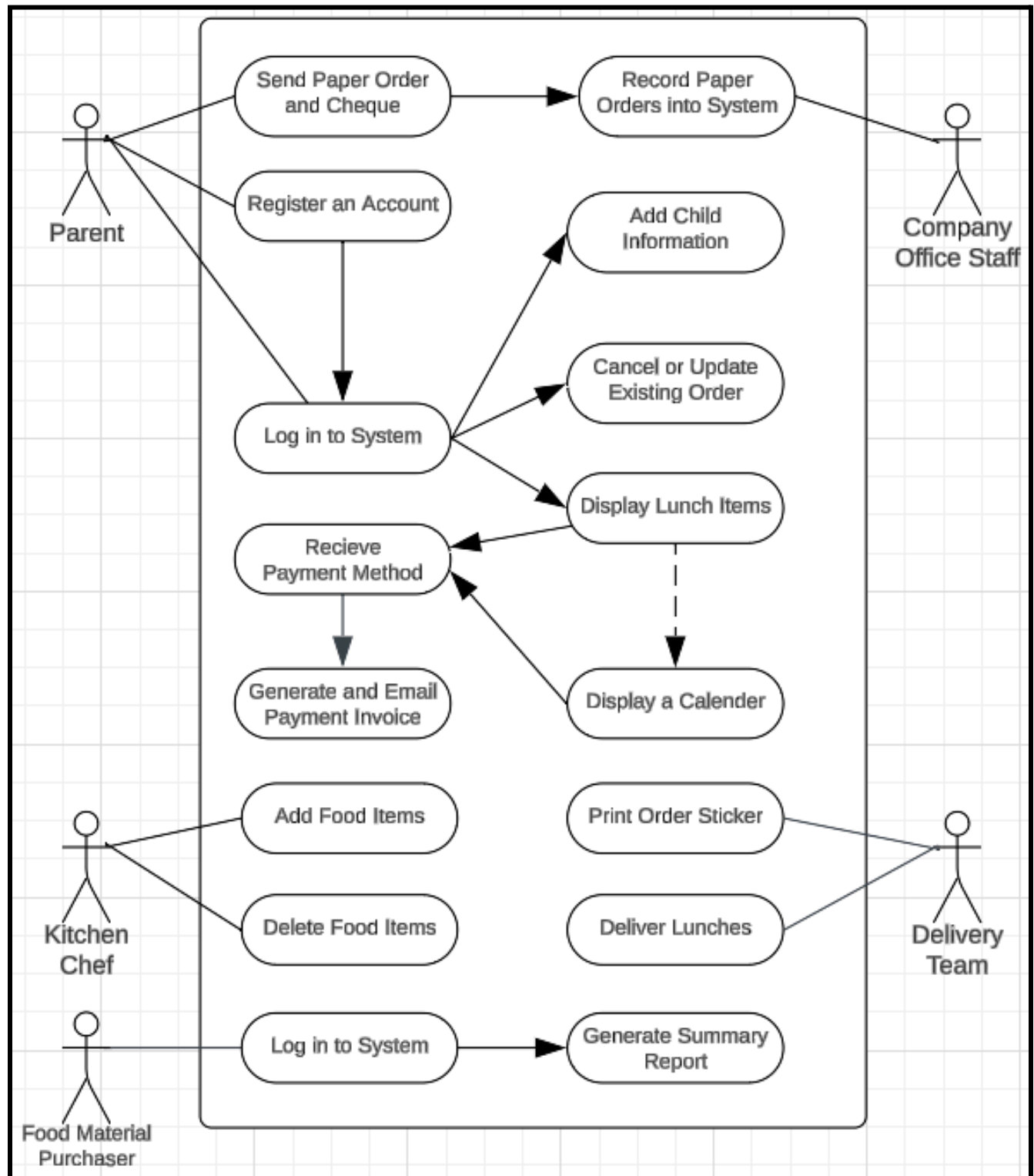
4.4.1 Business process activity diagram



4.4.2 User stories from this business process

- As a Food Materials Purchaser, I would want an easy-to-read summary report so that I can compare it with the available inventory and see if it will be sufficient for the day.
- As someone in the Delivery Team, I would want a simple system to print order stickers so we can avoid confusion and delays in delivery.
- As someone in the Delivery Team, I want to be able to send information to schools so they know when to expect our delivery and receive updates.
- As a Kitchen Chef or Food Materials Purchaser, I would want to know which meals are being served ahead of time so I can prepare for that day.

5 System Use Case Diagram(s)



6 System Use Case Specifications

6.1 Parents Adding Children to Account

6.1.1 Author: Anureet Sohi

6.1.2 Short Description of the System Use Case

Parents must first register themselves and then their children to their accounts. This includes the child's classroom and homeroom teacher for appropriate delivery. Parents must update their child's information each year as it resets to keep up with the academic year.

6.1.3 Actor(s)

- Parent

6.1.4 System Use Case Preconditions

- Parents must have a child to register
- Must have internet access
- Must have valid credentials to log in/be verified as a parent

6.1.5 System Use Case Successful Post Conditions

- Parents and children are successfully added to the accounts and are able to begin ordering

6.1.6 Applicable Business Rules

- A parent account must have at least one child registered
- Each child must be registered under a parent account
- Each child has a classroom and homeroom teacher
- Each homeroom teacher and Classroom can have multiple children

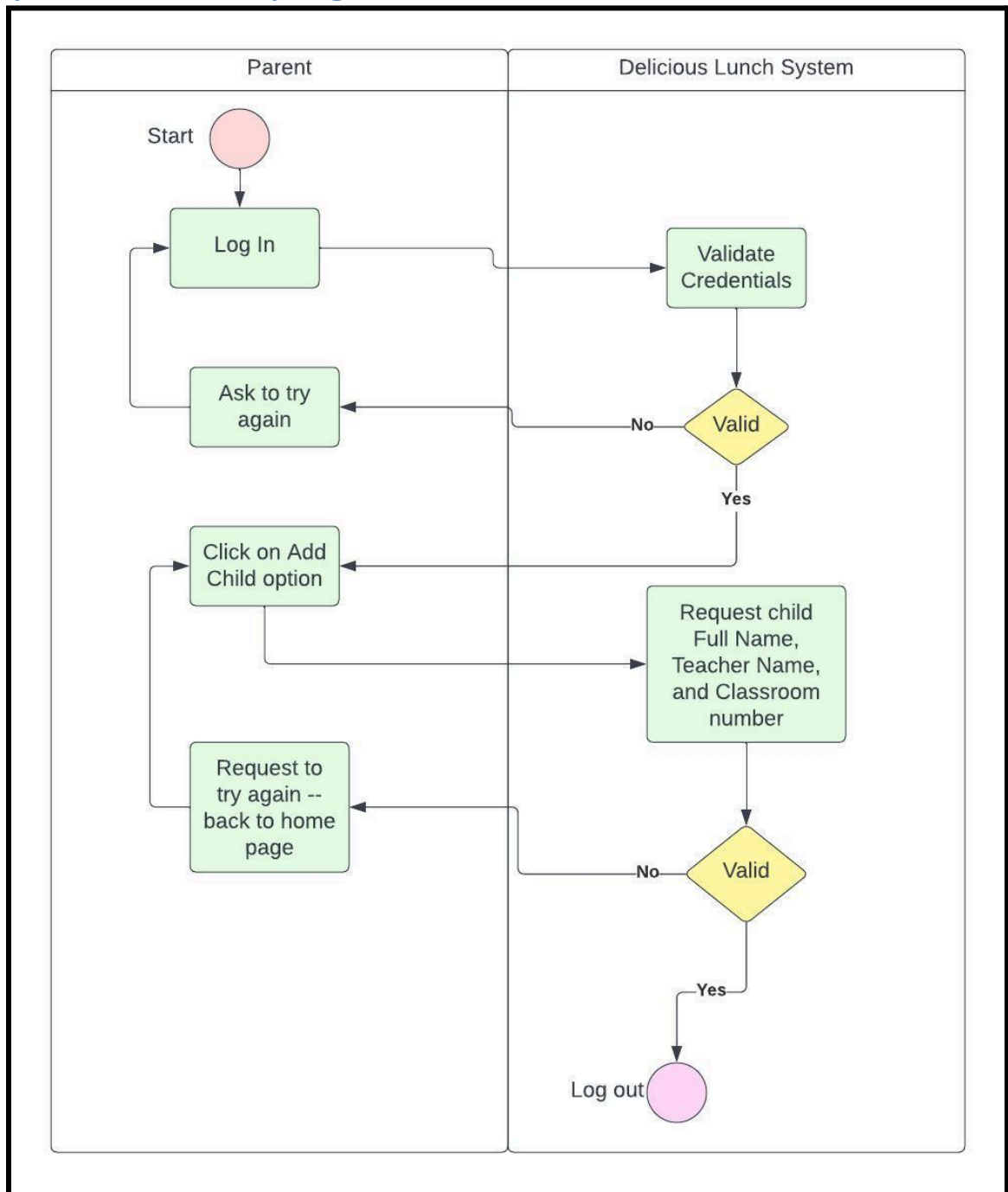
Main Flow:

	Name of actor(s)	System
1	Parent	Logs in to the system
2		Clicks add child button
3		Inputs class information (Teacher, room, etc)
4		The child is successfully added and able to begin order

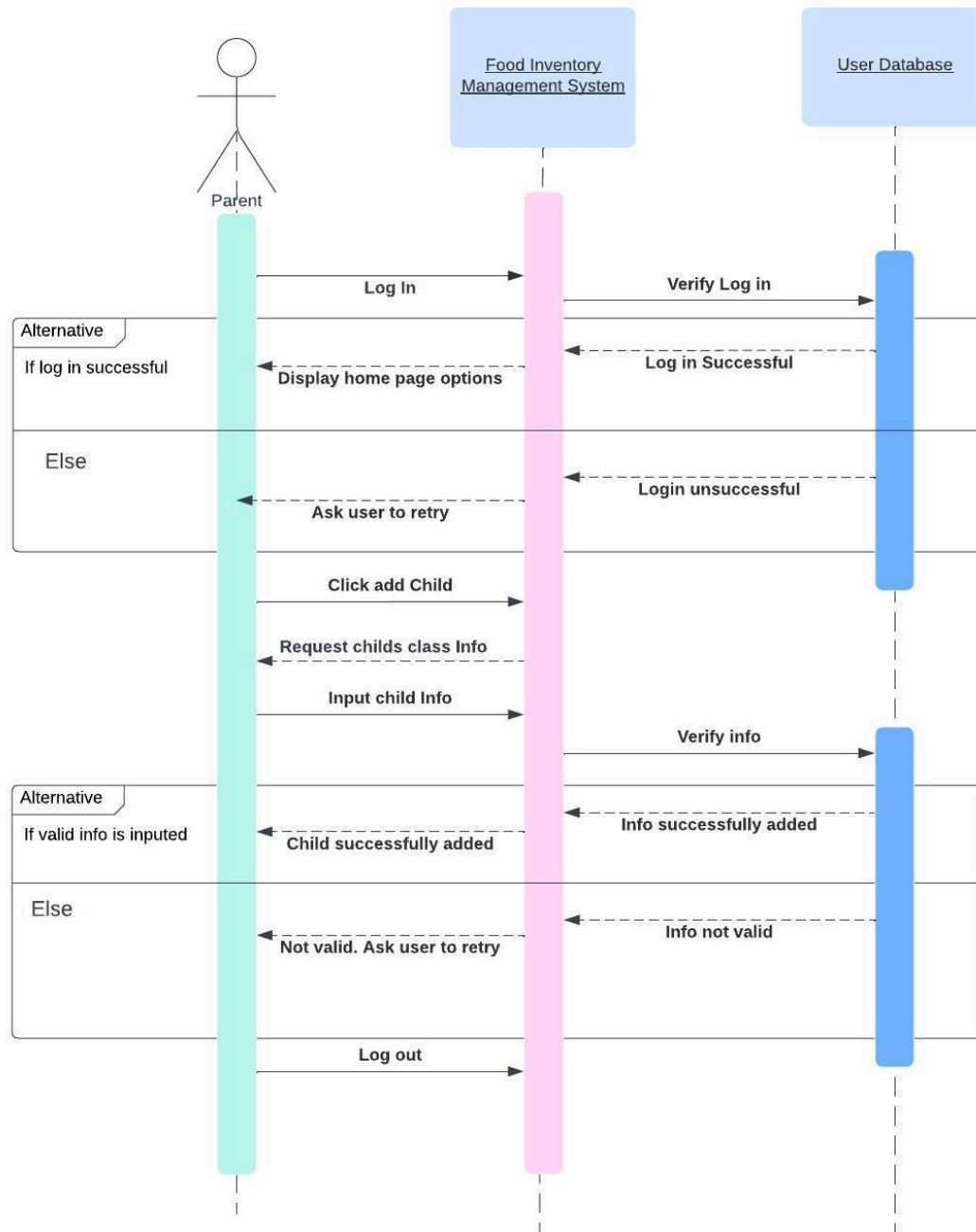
Alternate Flows

	Alternate Flow	Description
A1	Parent	Parent inputs invalid teacher class combo
A2		Teacher class combo is not available message
A3		Parents retries or quits.

6.1.7 System Use Case Activity Diagram



6.1.8 System Sequence Diagram



6.1.9 User Interface Mock-up

1. Sign-in

DELICIOUS LUNCH! 8:04 AM

Login Create Account

Login to your account

Username/Email Password

Login Create a new account

[I forgot my password](#)

DELICIOUS LUNCH!

Home My Account

Add Child Update Child Info Remove Child

DELICIOUS LUNCH!

Add Child

Child's First Name

Child's Last Name

Classroom #

Homeroom Teacher

Submit Clear

6.2 Processing Orders

6.2.1 Author: Harold Cuellar

6.2.2 Short Description of the System Use Case

When parents place an online order before 11:59 pm it is processed for the next day by the company's staff. orders must be made before 11:59 pm the previous day to be processed. Parents first log in and then choose a child and then the date for the order system presents different item categories (main meals, drinks, and snacks). Parents are then asked to add another child to the order by either replicating the order placed or choosing different items for another child. Paper orders can be placed once per month and must be handed in to the School staff and are then forwarded to the company office staff before the last Friday of the orders the previous month once handed in there is no updating or cancellation available.

6.2.3 Actor(s)

The company office Staff, parent, School staff

6.2.4 System Use Case Preconditions

- The school has approved Delicious Lunch as a lunch provider.
- Parents and students have been informed of the paper order process and deadlines.
- The company has provided paper order forms to the schools.
- There are children or parents who want the Dinner service.

6.2.5 System Use Case Successful Post Conditions

- The order is correctly placed.
- The child eats the Dinner.

6.2.6 Applicable Business Rules

- A company office staff must process the orders.
- Parents must choose at least one child when placing orders.
- Parents cannot cancel or edit online orders after 11:59 pm on the deadline date.
- Parents must submit paper orders by the last Friday of the month before the dinner date to ensure processing.

Main Flow:

	Name of actor(s)	System
1	Parent	Logs into system using credentials
2		Choose a child
3		Choose a date for the dinner order
4		Choose the items on dinner
5		choose another child or confirm order (if desired can choose to change items)
6	Company office staff	Pay for the order
7		Process order

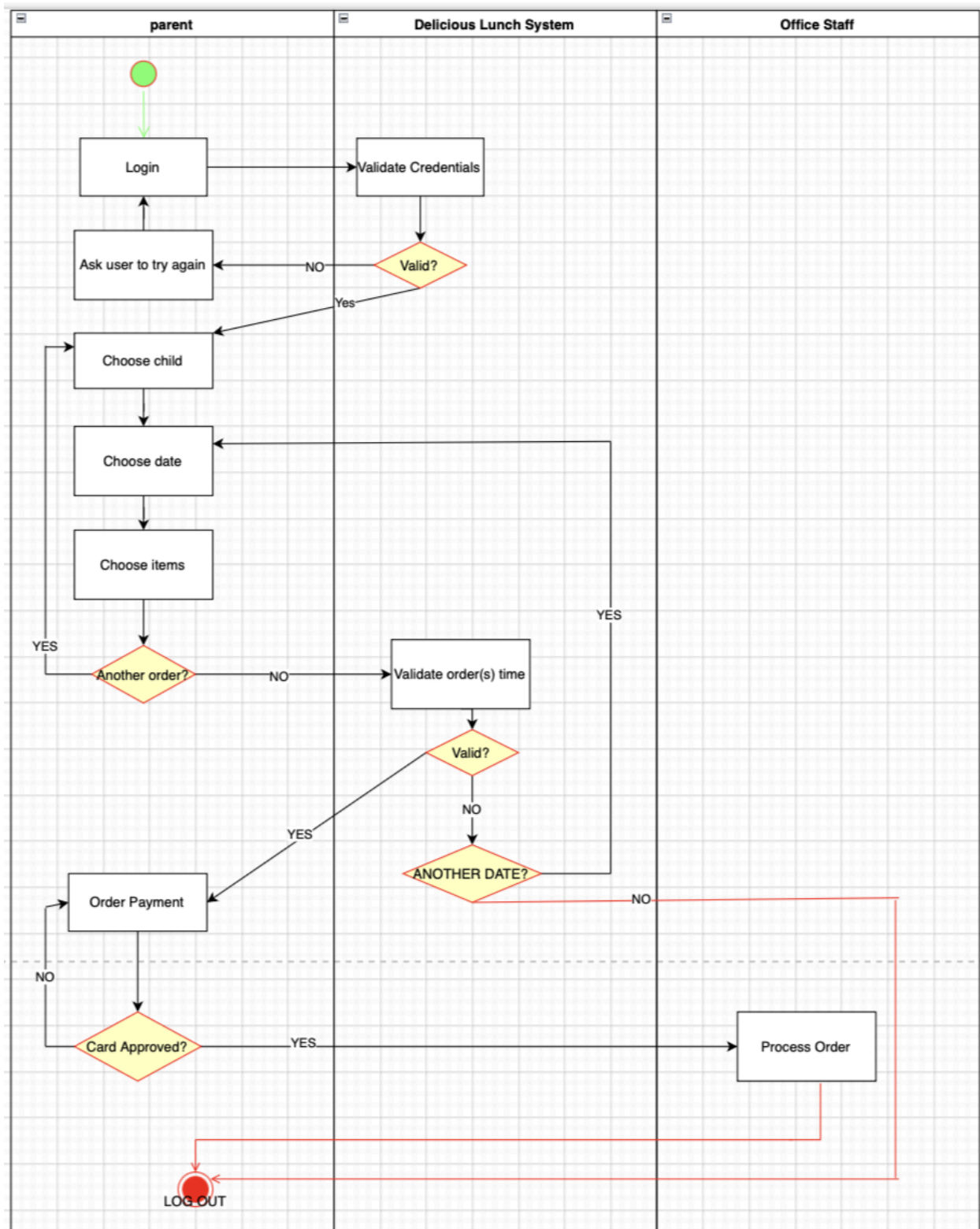
Alternate Flow 1

	paper order	Description
A1	Parent	Fills paper order form
A2		hands in the paper form order to the school staff with payment staff
A3	School staff	forwards the online form order to the Company office staff
A4	Company Office staff	Process order

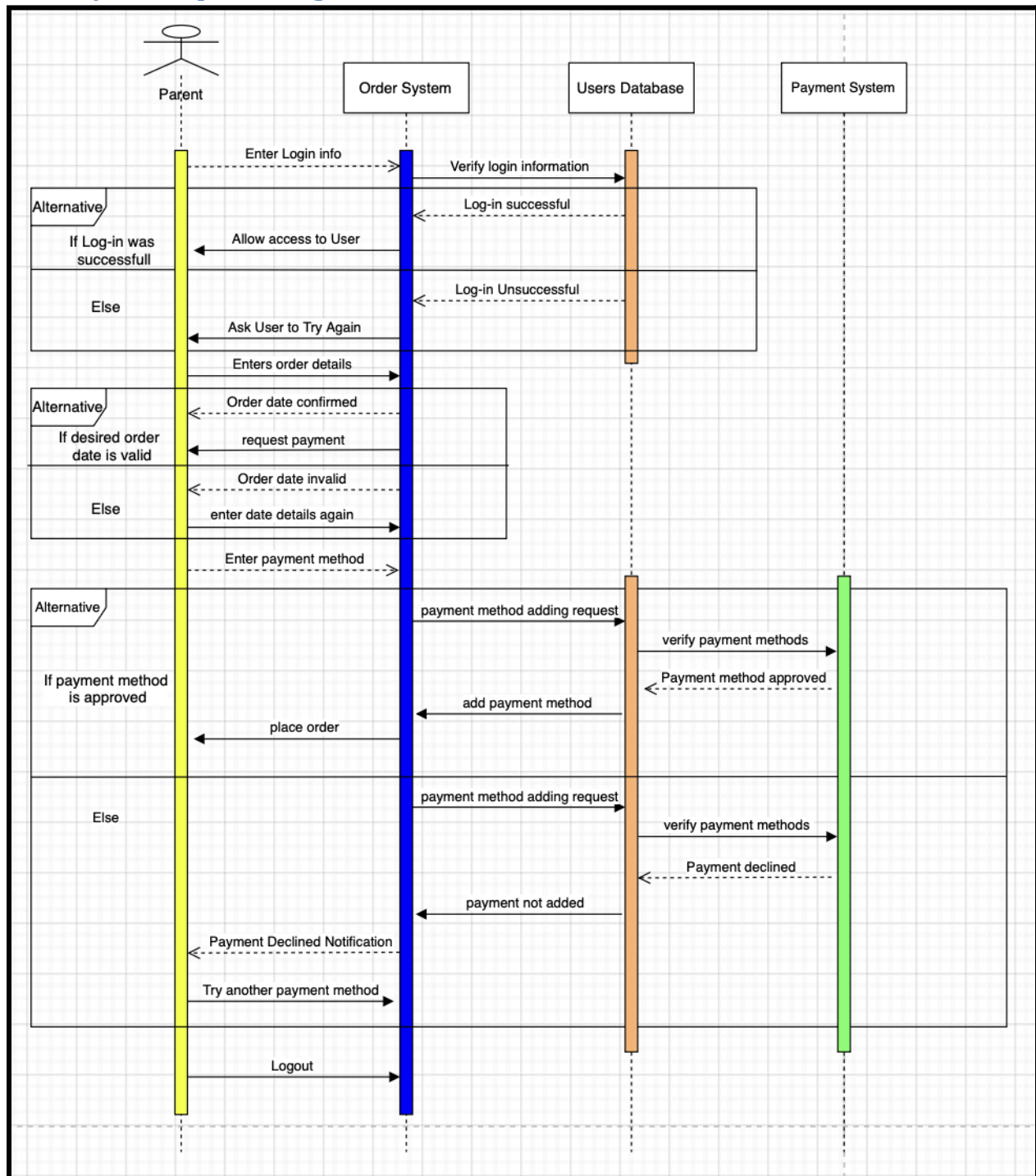
Alternate Flow 2

	declined payment method	Description
A1	Parent	Logs into system using credentials
A2		Choose a child
A3		Choose a date for the dinner order
A4		Choose the items on dinner
A5		choose another child or confirm order (if desired can choose to change items)
A6		Pay for the order
A7		payment declined
A8	Company office staff	Retry payment with another card and approved
A9		Process order

6.2.7 System Use Case Activity Diagram



6.2.8 System Sequence Diagram



6.2.9 User interface mock-up

The mock-up consists of four panels, each representing a different user interface screen for a system called "DELICIOUS LUNCH!".

- 1. Sign-in** (8:04 AM): The header shows "DELICIOUS LUNCH!" and the time "8:04 AM". Below the header are two buttons: "Login" and "Create Account". The main content area is titled "Login to your account" and contains two input fields: "Username/Email" and "Password". Below the "Password" field is a red error message: "Wrong password OR Username/Email" and a blue link: "I forgot my password". There are also "Login" and "Create a new account" buttons. A "FOOTER" bar is at the bottom.
- 2. User home page** (8:05 AM): The header shows "DELICIOUS LUNCH!" and the time "8:05 AM". Below the header are two buttons: "My Account" and "Log-out". The main content area is titled "LUNCH CUSTOMER IMAGES SLIDESHOW" and contains three buttons: "Create order", "Edit Order", and "Cancell order". A "FOOTER" bar is at the bottom.
- 3. Create Order** (8:06 AM): The header shows "DELICIOUS LUNCH!" and the time "8:06 AM". Below the header are two buttons: "My Account" and "Log-out". The main content area is titled "Order creation" and contains a "Choose Child" button with a double-headed vertical arrow icon. Below this are two buttons: "Order Date(s)" and "Calendar". At the bottom are "Submit" and "Reset" buttons.
- 4. Order confirmation** (8:09 AM): The header shows "DELICIOUS LUNCH!" and the time "8:09 AM". Below the header are two buttons: "My Account" and "Log-out". The main content area contains a message: "Order #12345 Confirmed. Would you like to order again, manage your orders or log out?". Below this is a red bar with the text "CARD DECLINED." and a button "Try aother card?". At the bottom are three buttons: "Order again", "Manage order(s)", and "Log-out".

6.3 Food Inventory System

6.3.1 Author: Maryam Abou El Nasr

6.3.2 Short Description of the System Use Case

Before the start of a new week, the kitchen chef logs into the system. If there is a new lunch item being provided the kitchen chef will add it to the system including the raw food materials needed to make it with their specified quantities. Then, the chef will estimate a price for the new lunch item and log it into the system. If a lunch item is no longer being provided, the chef will delete the item from the system, which would also remove the price and the raw materials needed to make the item.

6.3.3 Actor(s)

Kitchen chef

6.3.4 System Use Case Preconditions

- There must be lunch items being provided to the school that the parents can order
- Chef must know their log-in credentials
- Current inventory is shown without any technical issues

6.3.5 System Use Case Successful Post Conditions

- The chef has added or removed the current lunch item(s)
- The chef has the correct amount of raw materials to make the orders

6.3.6 Applicable Business Rules

- The inventory of available lunch items needs to be up to date before the beginning of each week

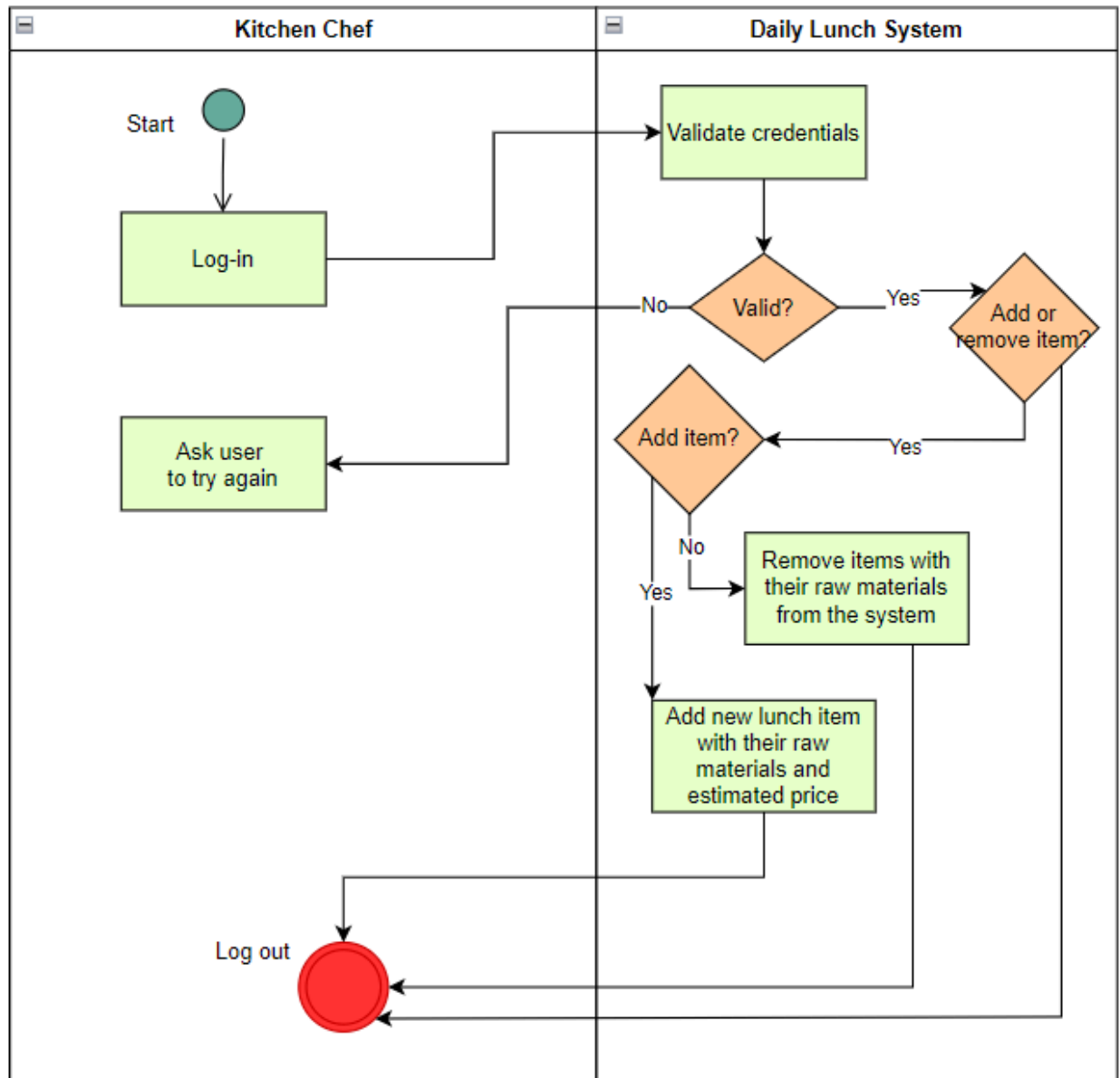
Main Flow:

	Name of actor(s)	System
1	Kitchen chef	Log into the system using the credentials
2		Add new lunch items including their raw ingredients and their estimated price into the system
3		Delete lunch items and the information about their raw materials from the system if the lunch item is no longer provided

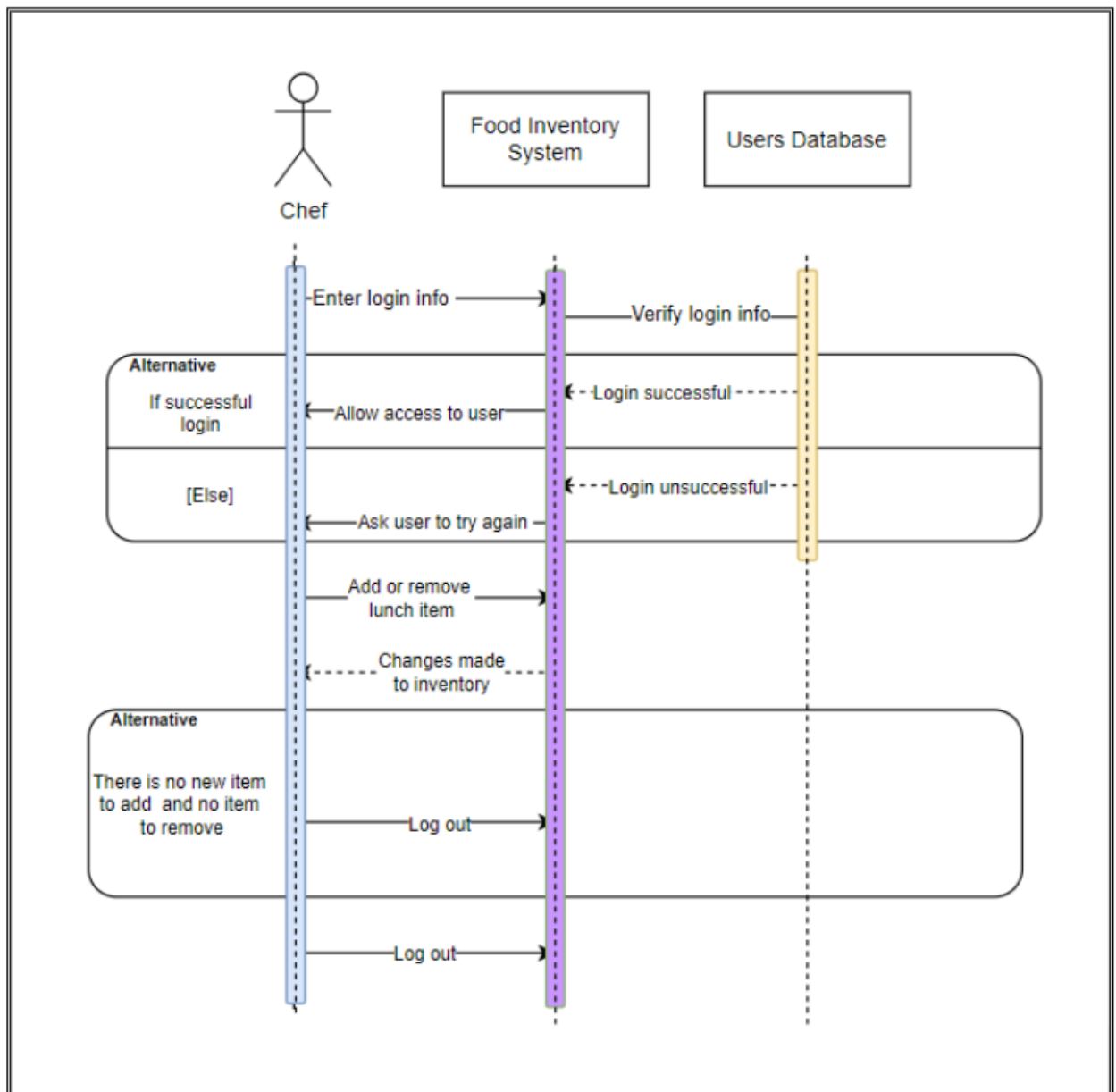
Alternate Flows

	Alternate Flow	Description
A1	Kitchen chef	Log into the system using the credentials
A2		No new lunch item needs to be added to the system
A3		No new lunch item needs to be removed from the system

6.3.7 System Use Case Activity Diagram



6.3.8 System Sequence Diagram



6.3.9 User interface mock-up

1. Sign-in

DELICIOUS LUNCH!

8:04 AM

Login Create Account

Login to your account

Username/Email Password

Login Create a new account

[I forgot my password](#)

Delicious Lunch!

My Account Log out

Add lunch Item Remove Lunch Item

View Inventory

Delicious Lunch!

Add Lunch Item

My Account Log out

Lunch Item name:

Lunch Item Raw Ingredient(s):

Ingredient: [+](#) Add another ingredient Quantity: [↑](#) [↓](#)

Lunch Item Price:

Submit

Delicious Lunch!

Delete Lunch Item

My Account Log out

Lunch item name:

Submit

6.4 Daily Report Generation

6.4.1 Author: Mitchel Chanthaseng

6.4.2 Short Description of the System Use Case

Every morning at 8 am, the company food materials purchaser will log into the system and retrieve a summary report that will list all the required materials and quantities of food for the day. After comparing this report to the current stock, the purchaser determines whether they will be prepared for the lunches to be served or will have to go out and purchase more before service. If they determine that the available inventory won't be enough, they print the report to take with them while buying more and sign out of the system.

6.4.3 Actor(s)

- Company Food Material Purchaser

6.4.4 System Use Case Preconditions

- Purchaser has/knows their log-in credentials
- The summary report will be printed or presented with no technical issues
- Purchaser has transportation to travel to other stores if needed

6.4.5 System Use Case Successful Post Conditions

- The company food material purchaser has sufficient inventory to account for all of the meals being made that day.

6.4.6 Applicable Business Rules

- Each morning, the company food material purchaser must generate at least one summary report

Main Flow:

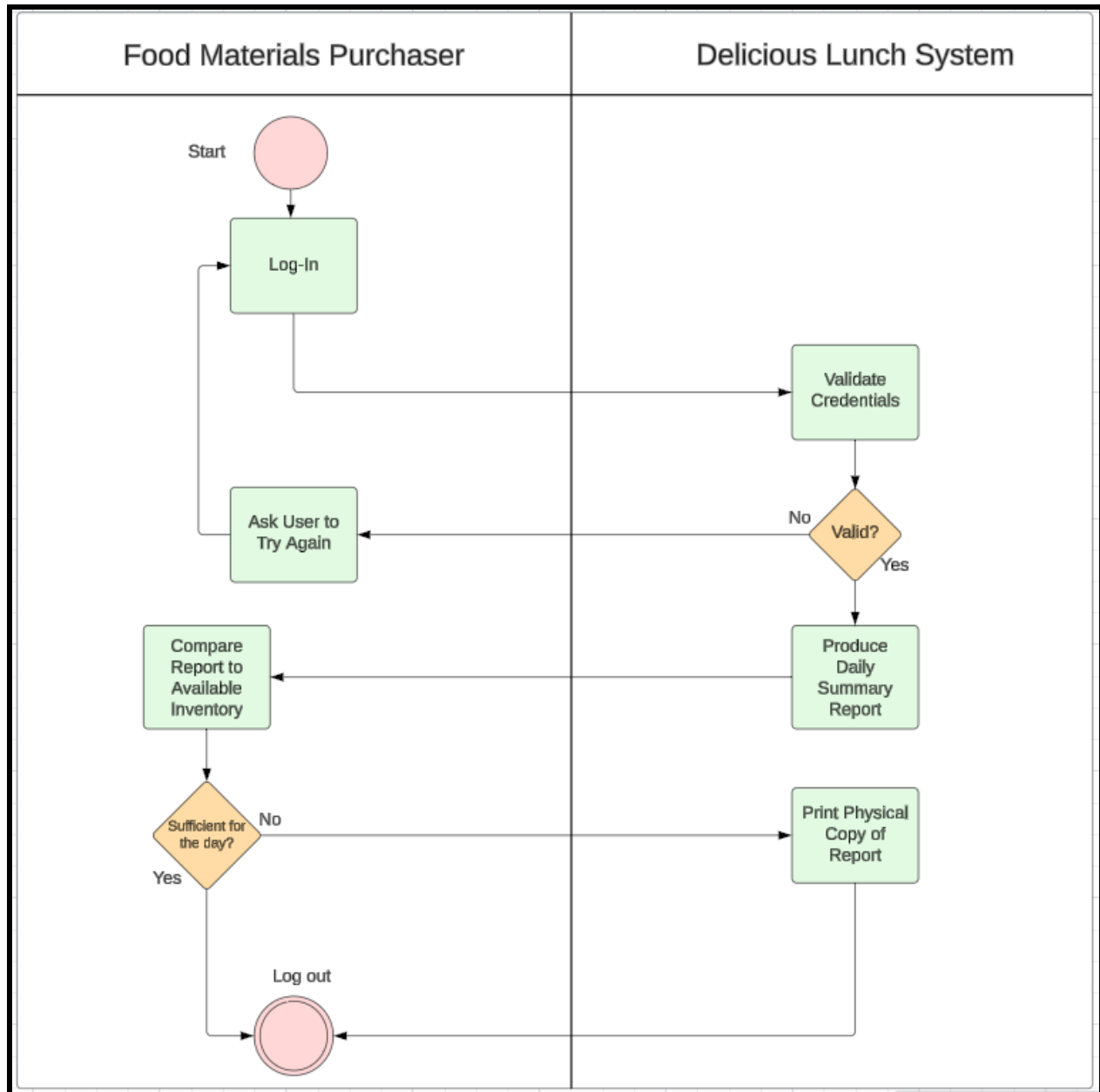
	Name of actor(s)	System
1	Company Food Material Purchaser	Purchaser logs into the system with their credentials
		Purchaser selects "Generate Daily Support Report"
2		The system generates and displays a daily summary report
3		Purchaser compares available inventory to daily summary report
4		Purchaser determines that available inventory will be sufficient for the day's service
5		Purchaser logs out of the system

Alternate Flows

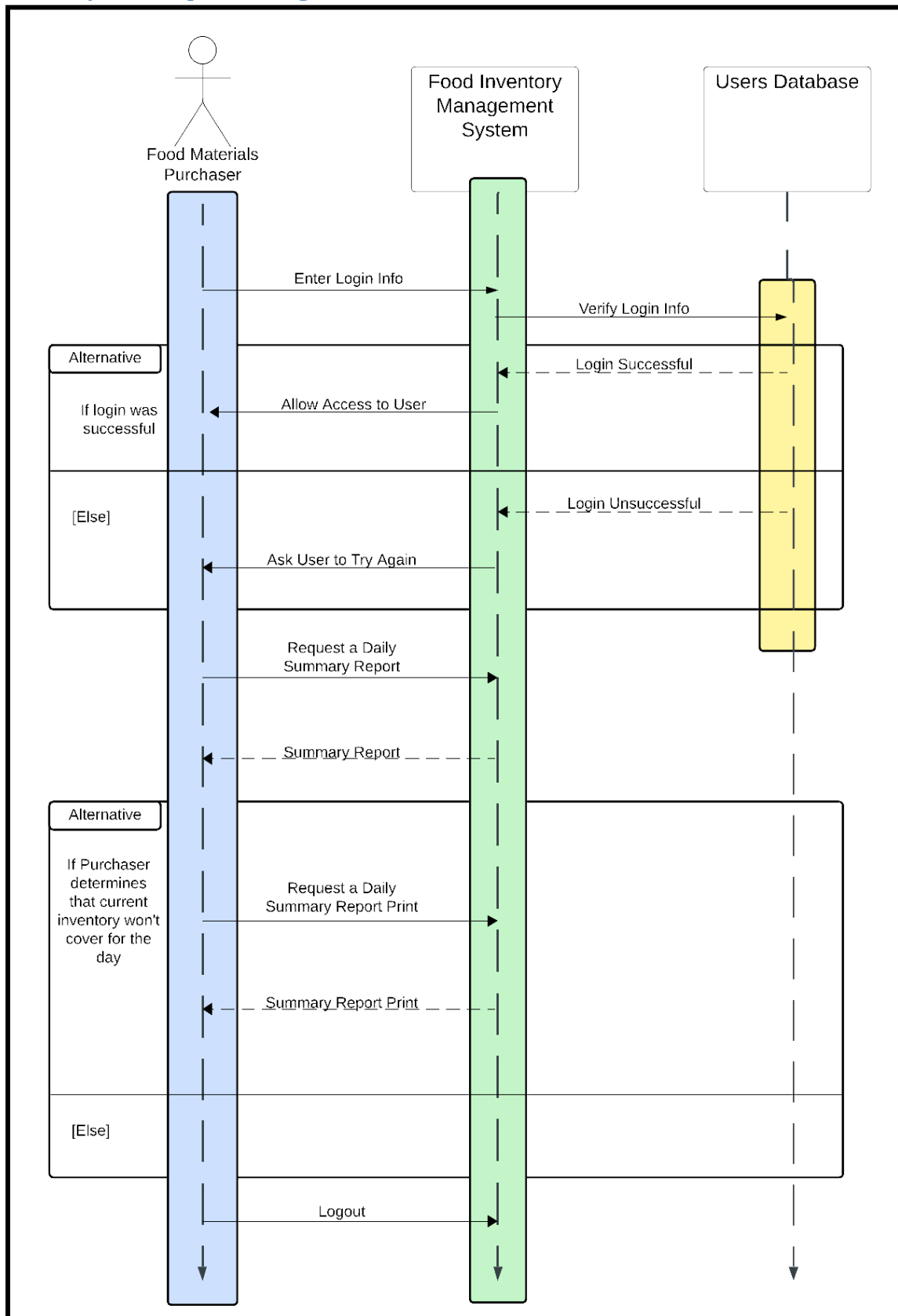
	Alternate Flow	Description
A1	Company Food Material Purchaser	Purchaser logs into the system with their credentials
A2		Purchaser selects "Generate Daily Support Report"
A3		The system generates and displays a daily summary report

A4		Purchaser determines that available inventory will not be sufficient for the day's service
A5		Purchaser prints report
A6		Purchaser logs out of the system

6.4.7 System Use Case Activity Diagram



6.4.8 System Sequence Diagram



6.4.9 User interface mock-up

1. Sign-in
8:04 AM

DELICIOUS LUNCH!

Login
Create Account

Login to your account

Username/Email
Login

Password
Create a new account

[I forgot my password](#)

2. Purchaser User Interface
8:05 AM

DELICIOUS LUNCH!

Log-out

Daily Summary Report
Inventory List

Monthly Summary Report
Food Materials Purchase Logs

3. Generate Summary Report
8:06 AM

DELICIOUS LUNCH!

Daily Summary Report
Log-out

Protein
Meat
Baking

Vegetables
Dairy
Breads

Protein
Meat
Baking

Vegetables
Dairy
Breads

Back

Generate Report

7. Non-Functional Requirements

In the table below you are asked to specify the type of non-functional requirement you have identified and then describe what the requirement is and how you plan to satisfy it.

	Requirement Type	Description and Implementation Plan
1.	Usability	<p>The UI must be user-friendly (parents, school staff, and Kitchen staff)</p> <p>Joint application development will be implemented to involve the users in the design process actively. Testing will be done with random user samples to collect feedback.</p>
2.	Security	<p>User and internal information must be kept safe and private unless authorized.</p> <p>While designing the system, encryption could be used. Do random sample security checks on users to ensure there is no infiltration.</p>
3.	Performance	<p>The system should be able to handle random peaks in usage of the system and its processes like during the last minutes of the day when lots of parents are doing last-minute orders.</p> <p>Using a network infrastructure that is efficient and reliable means a more expensive system or choosing the client's role as a fat client so that the client device does most processing logic reducing processing time from the system.</p>