ChefItUp: Restaurant Management & Order Delivery System Design Report

CSc 322
Software Engineering
Fall 2020
Section P

November 17th, 2020

Team G

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Instructor

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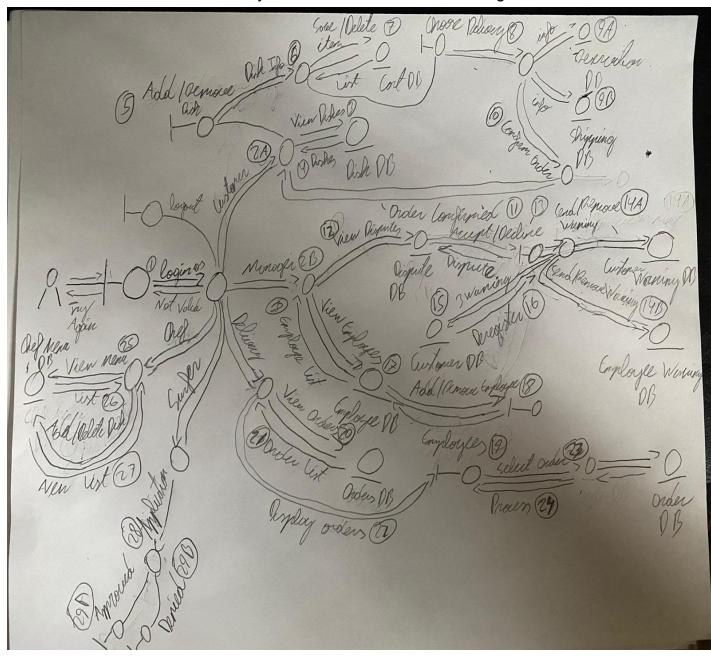
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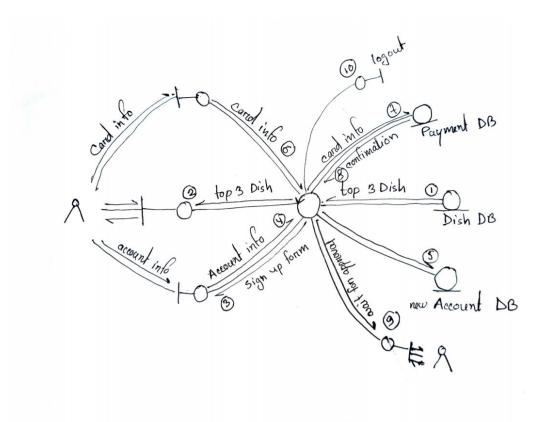
Introduction

Below is an overview of the whole system as a collaboration class diagram.

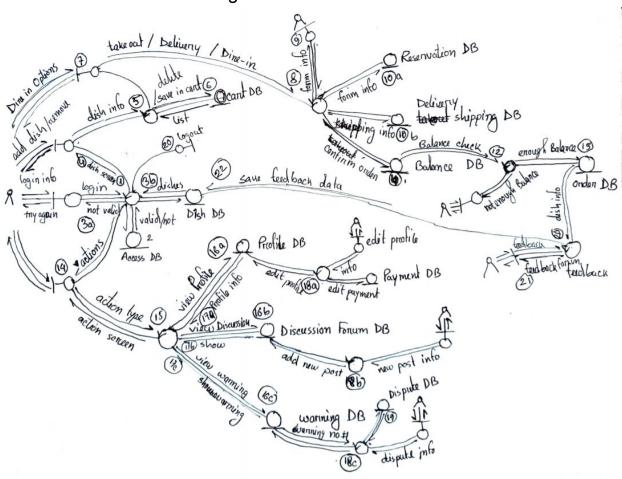


Use Cases

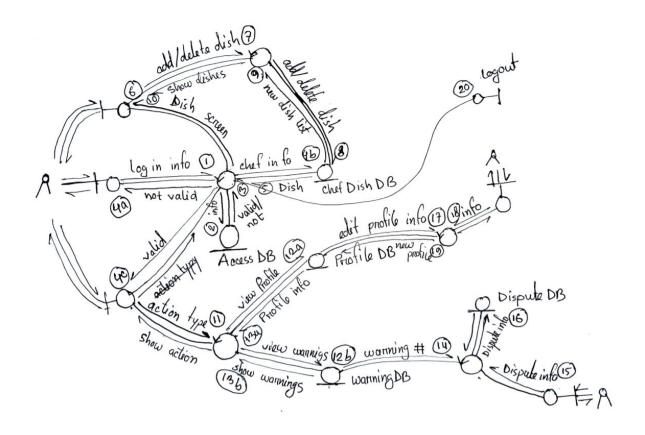
Surfer Collaboration Diagram



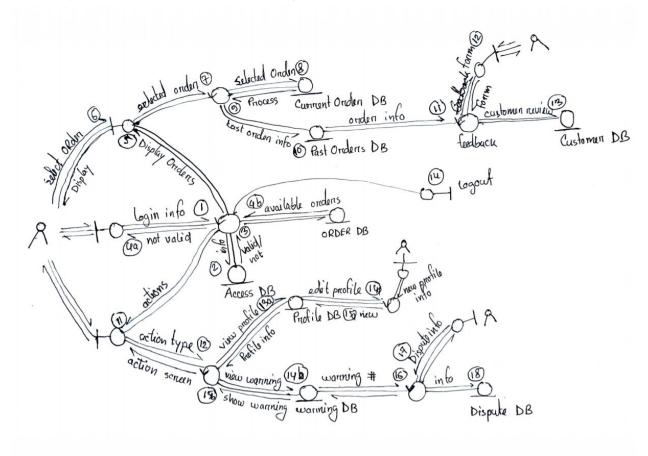
Customer Collaboration Diagram



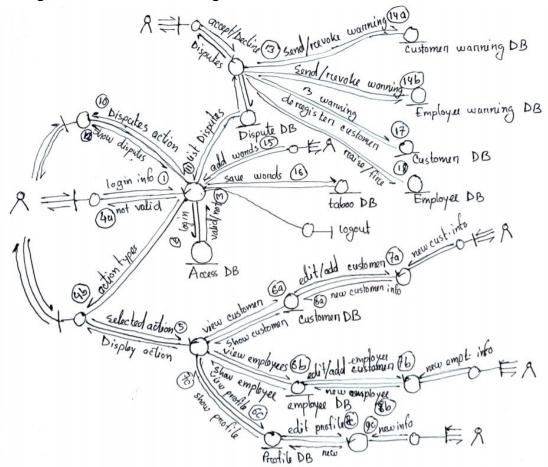
Chef Collaboration Diagram



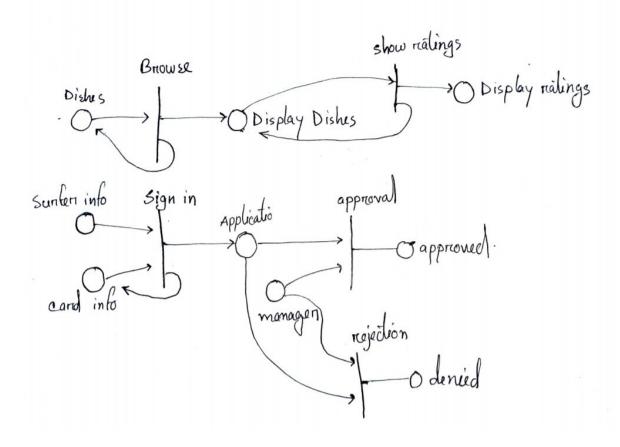
Delivery Person Collaboration Diagram



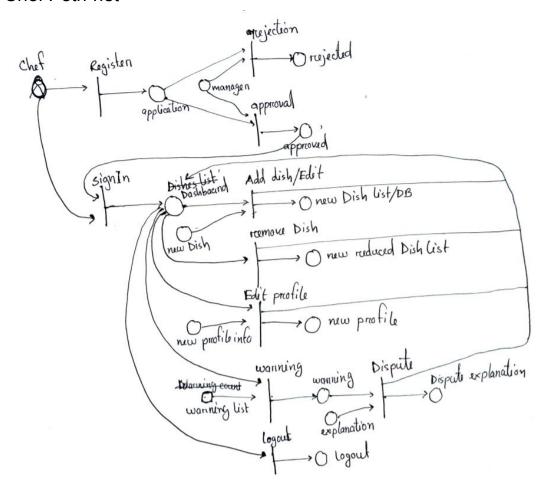
Manager Collaboration Diagram



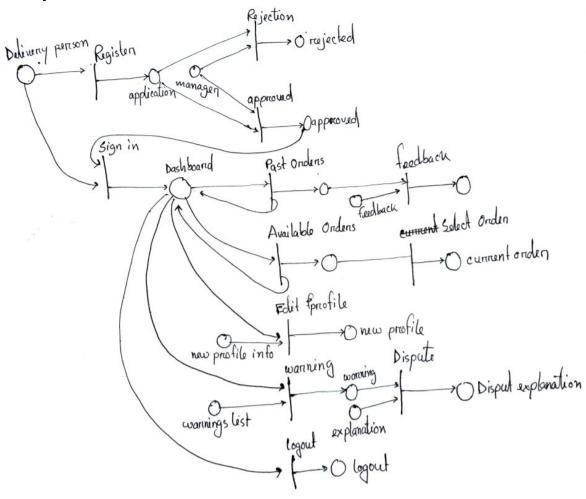
Surfer Petri-net



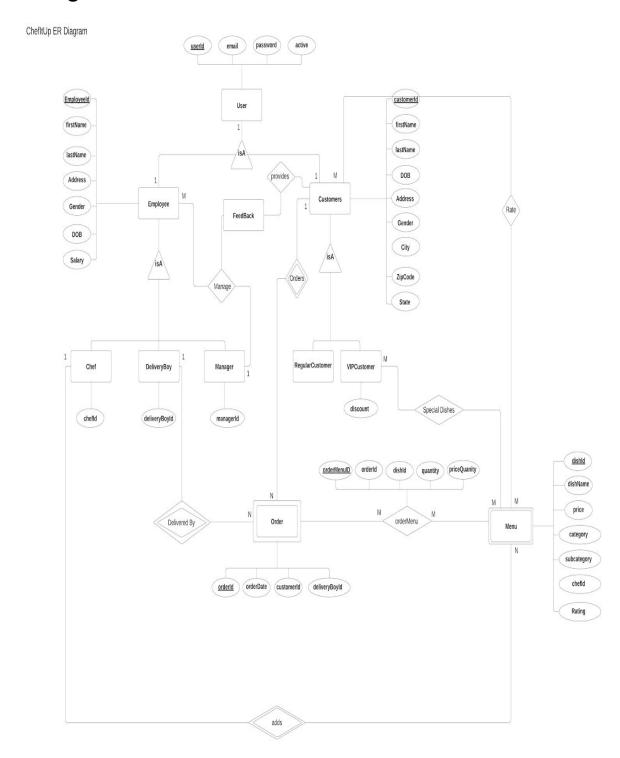
Chef Petri-net



Delivery Person Petri-net



ER Diagram



Detailed Design

- User
 - verifyLogin()
 - Input
 - userID:String
 - password:String
 - loginStatus:String
 - registerDate:String
 - Output
 - Return True if user is logged in, and change page menu to display that of the respective user logged in
 - Return False if user is not logged in, and page stays the same
- Surfer
 - viewMenu()
 - Input
 - None
 - Output
 - Displays the 3 top dishes
 - seeRatings()
 - Input
 - None
 - Output
 - Displays the ratings on the 3 top dishes
 - searchDish()
 - Input
 - plateName:string
 - Output
 - Displays top 3 dishes only since surfer is not yet a customer
 - applyToBecomeCustomer()
 - Input
 - surferName:string
 - surferEmail:string
 - surferPassword:string
 - Output
 - Display the status of the application until the manager accepts/denies the application.

- Customer
 - login()
 - Input
 - userID:String
 - password:String
 - Output
 - Logs in the user, stores user information as cookies on the webpage so the user is persistently kept logged in
 - updateProfile()
 - Input
 - userID:String
 - userFullName:String
 - userEmail:String
 - userAddress:String
 - userPayment:Int
 - userBalance:Float
 - Output
 - Updates the user information on the database with the given values passed as the function parameters
 - searchMenu()
 - Input
 - searchItem:String
 - Output
 - Searches on the database of dishes or chefs that most closely match the given search item string, and returns an array that displays these items on the webpage
 - addltem()
 - Input
 - dishName:String
 - dishID:Int
 - dishPrice:Float
 - dishQuantity:Int
 - chefName:String
 - chefID:Int
 - Output:
 - Inserts the selected dish into the user's shopping cart
 - addEmployeeReview()
 - Input

- employeeType:String
- employeeName:String
- employeeID:Int
- feedbackType:String
- feedbackCommentary:String
- serviceRating:Int
- Output
 - Provides a feedback for the employee, whether that is a delivery person or chef, which includes a rating for the service (delivery or dish preparation) of 1-5 stars, a direct feedback commentary, and the feedback type (complaint or compliment)
- disputeReview()
 - Input
 - orderID:Int
 - disputeExplanation:String
 - Output
 - Returns a dispute for the feedback left by the delivery person for the user, making it available for the manager to review
- depositMoney()
 - Input
 - userID:Int
 - depositAmount:Float
 - Output
 - Returns the new balance of the user, with the additional money added into it
- openDiscussion()
 - Input
 - None
 - Output
 - Displays the discussion forum topics
- commentDiscussion()
 - Input
 - date:String
 - userID:Int
 - userName:String
 - postID:Int
 - commentary:String
 - Output

- Inserts comment into the post thread
- viewCartDetails()
 - Input
 - None
 - Output
 - Displays the cart details, including the items currently on the cart, the total price, coupons added, and recently viewed + suggested items
- checkOut()
 - Input
 - diningOption:String
 - totalAmount:Float
 - itemsBought:Array[String]
 - itemsQuantities:Array[Int]
 - Output
 - Successfully places an order for the itemsBought and itemQuantities arrays, and deducts totalAmount from the deposit balance OR from payment method
- Manager
 - viewEmployees()
 - Input
 - None
 - Output
 - Displays all the employees for the manager to view
 - addEmployees()
 - Input
 - employeelD:int
 - employeeName:string
 - employeeEmail:string
 - employeeAddress:string
 - employeeSalary:float
 - Output
 - Adds a new employee to the list of current employees
 - removeEmployees()
 - Input
 - employeeID:int
 - Output
 - Removes an employee from the list of current employees
 - viewCases()

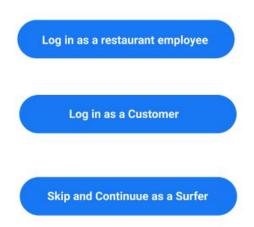
- Input
 - None
- Output
 - Displays all the cases for the manager to view
- manageCase()
 - Input
 - caseID:int
 - Output
- viewReviews()
 - Input
 - None
 - Output
 - Displays all the reviews that all employees have received
- changeEmployeeSalary()
 - Input
 - employeeSalary:float
 - employeeID:int
 - Output
 - Assigns a new salary to the employee.
- Delivery Person
 - viewOrders()
 - Input
 - None
 - Output
 - Displays all the currently available orders for the delivery person to pick up
 - acceptOrder()
 - Input
 - orderID:Int
 - userID:Int
 - deliveryAddress:String
 - Output
 - Adds the order to the list of orders that the delivery person ought to deliver
 - viewReviews()
 - Input
 - None
 - Output
 - Displays all the reviews for the delivery person to view

- disputeReview()
 - Input
 - orderID:Int
 - disputeExplanation:String
 - Output
 - Returns a dispute for the feedback left by the customer for the delivery person, making it available for the manager to review
- addCustomerReview()
 - Input
 - customerName:String
 - customerID:Int
 - feedbackType:String
 - feedbackCommentary:String
 - serviceRating:Int
 - Output
 - Provides a feedback for the customer, which includes a rating of 1-5 stars, a direct feedback commentary, and the feedback type (complaint or compliment)
- Chef
 - addMenuItem()
 - Input
 - itemName:String
 - itemID:int
 - Output
 - A new item will be displayed on the menu.
 - deleteMenuItem()
 - Input
 - itemName:String
 - itemID:int
 - Output
 - The item will not be displayed anymore on the menu.
 - viewReviews()
 - Input
 - None
 - Output
 - Displays all the reviews for the chef to view

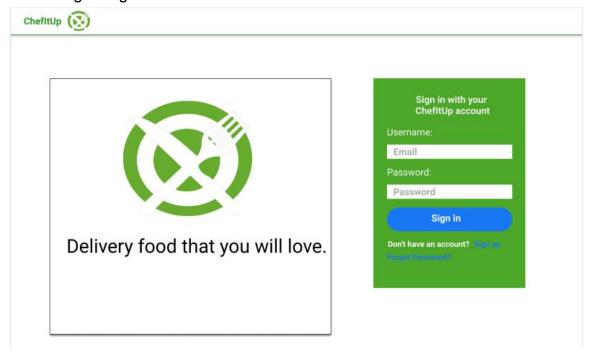
System Screens

- Login Related
 - o Landing Page Guide To Login





o Login Page

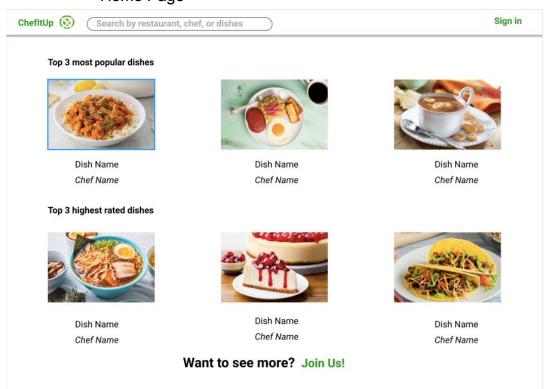


Registration Page





- Surfer-User Related
 - o Home Page

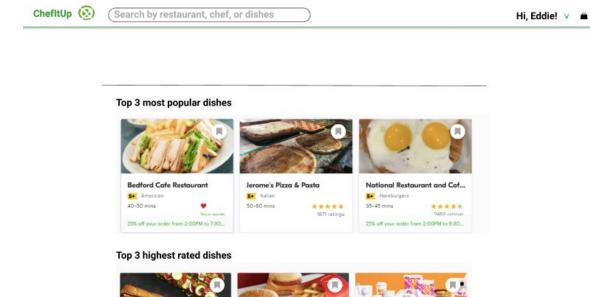


Customer-User Related

SUBWAY®

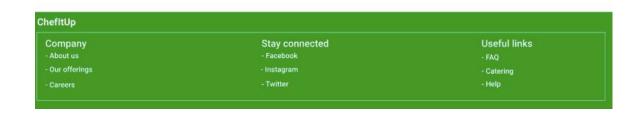
20-30 mins

o Home Page



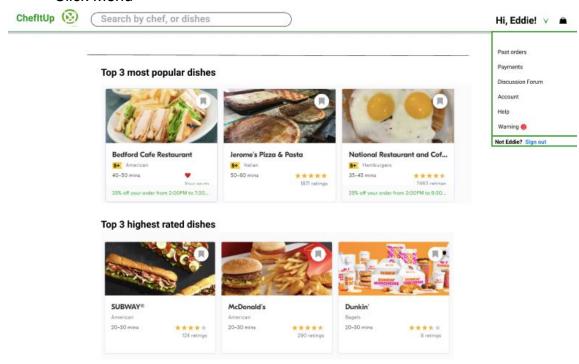
McDonald's

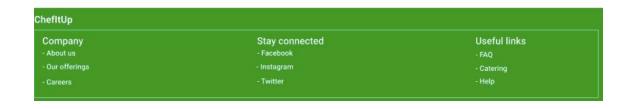
20=30 m/ms



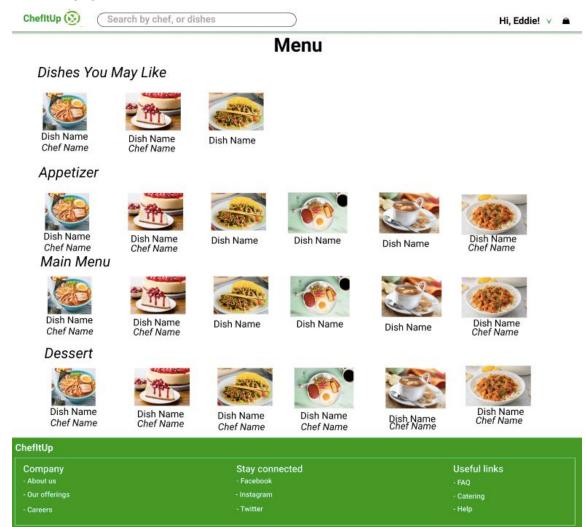
20-30 mins

o Click Menu

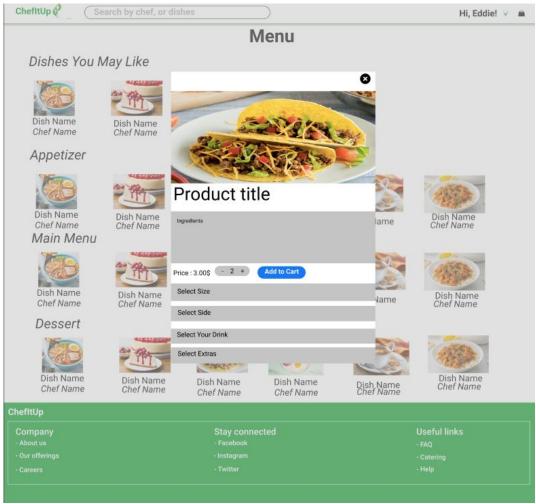




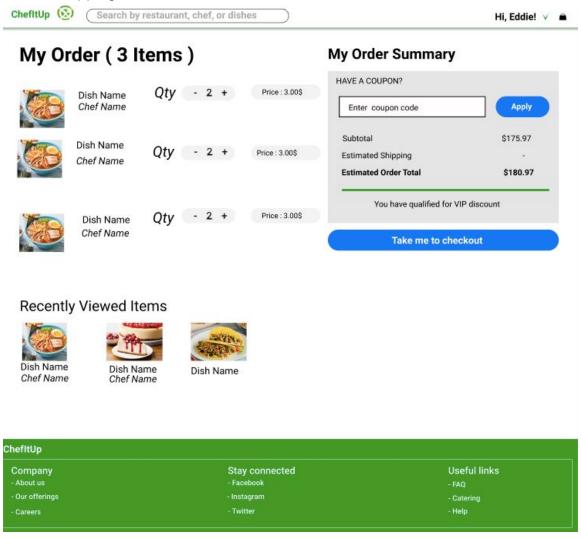
o Menu



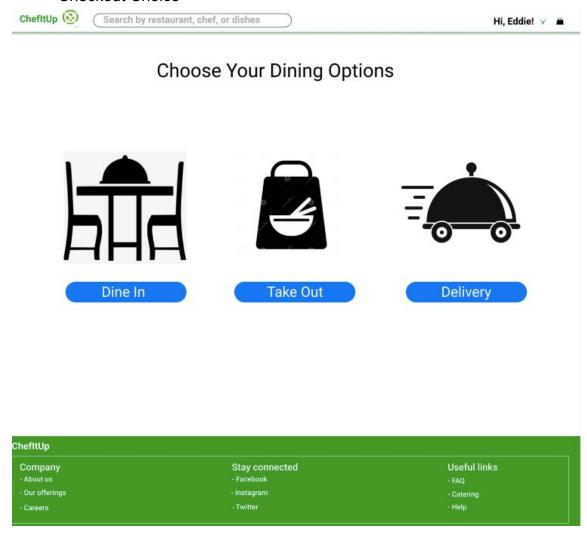
o Dish Popup



Shopping Cart



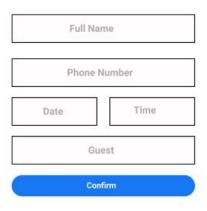
o Checkout Choice



o Checkout Dine-In

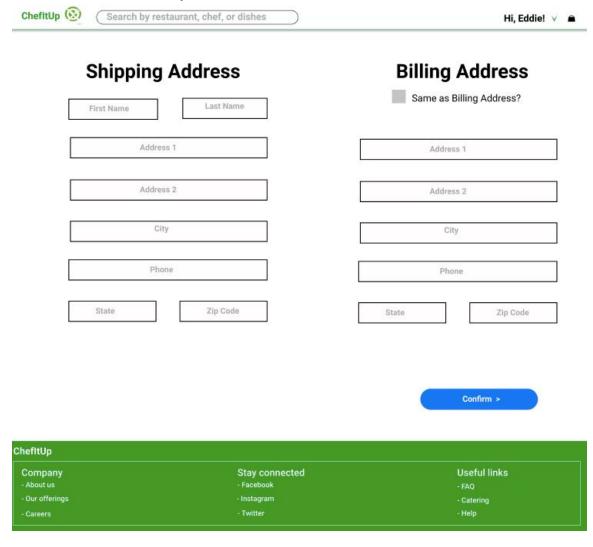


Reservation



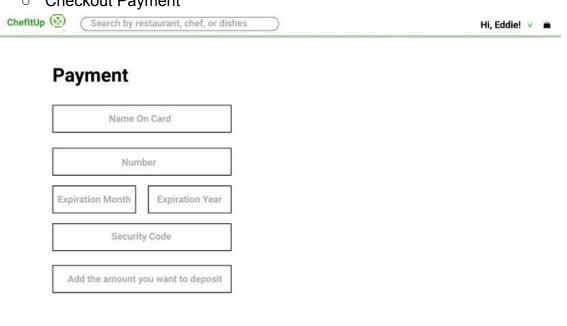


Checkout Delivery Address



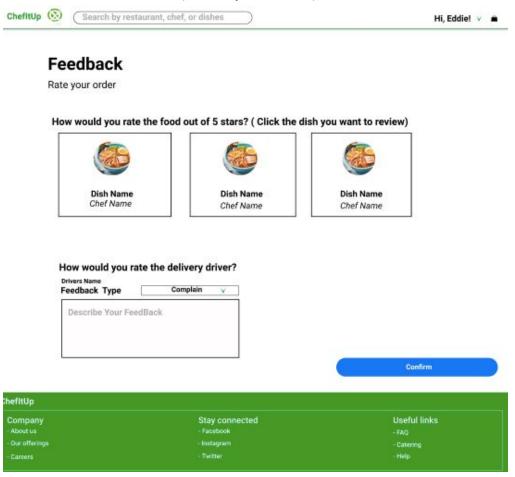
Checkout Payment

Confirm

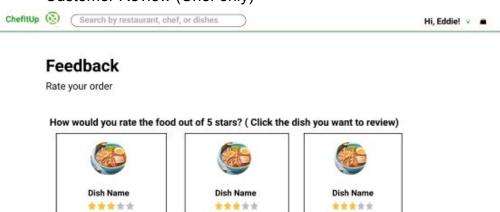


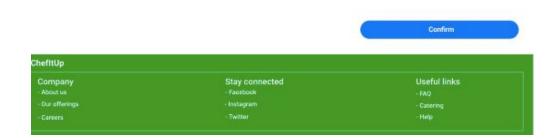


o Customer Review (Delivery and Chef)

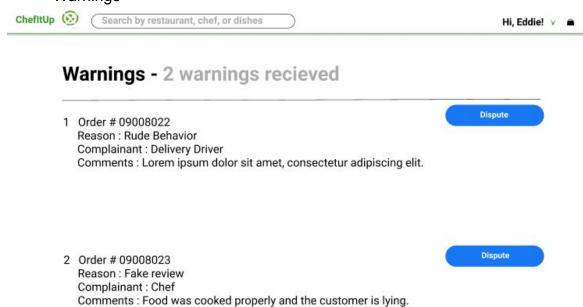


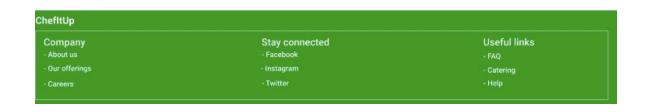
Customer Review (Chef only)



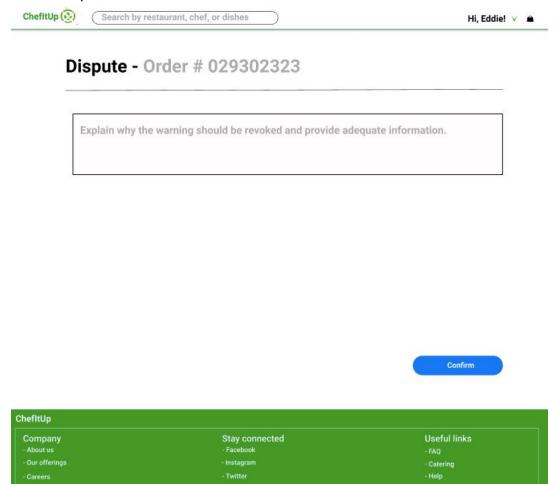


Warnings

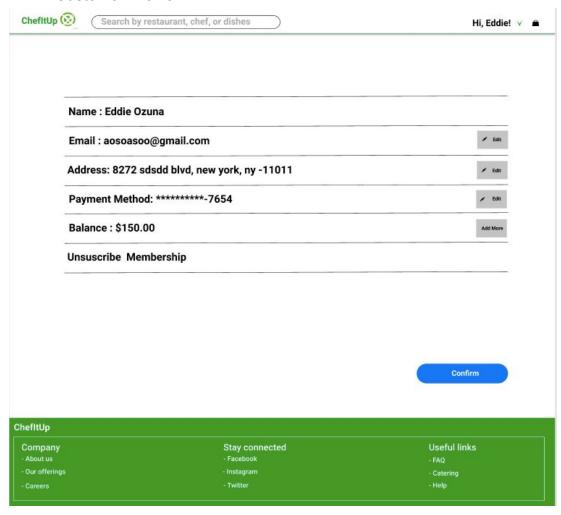




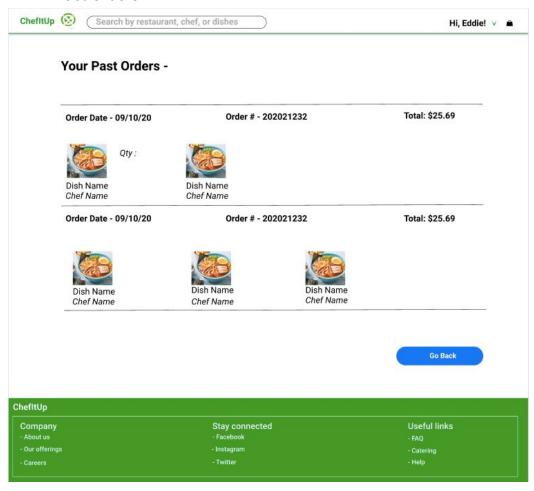
Dispute



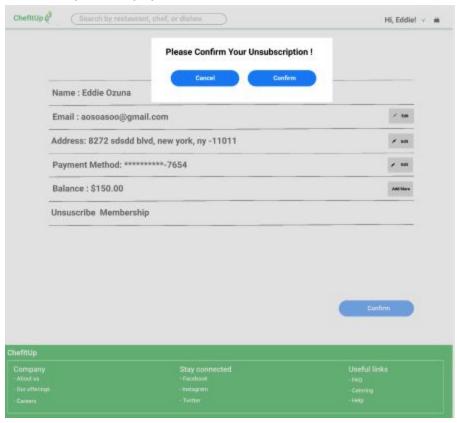
o Customer Profile



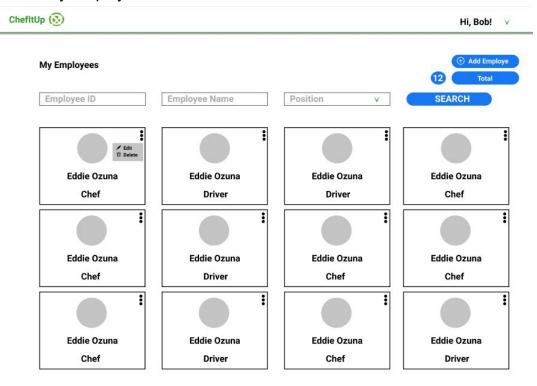
Past Orders



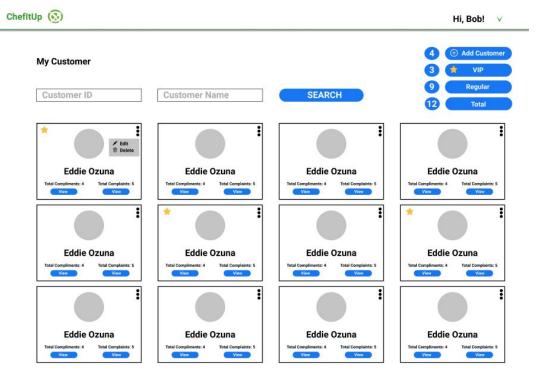
o Unsubscription Popup



- Manager-User Related
 - o My Employees



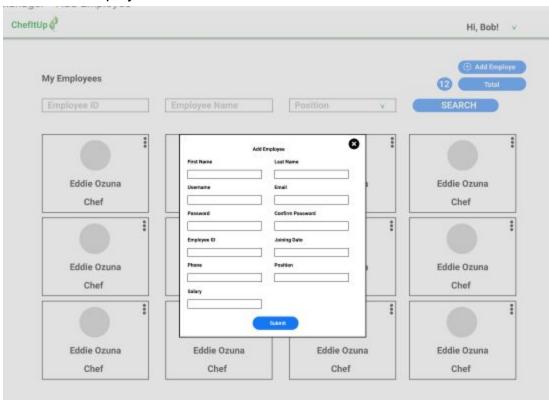
My Customers



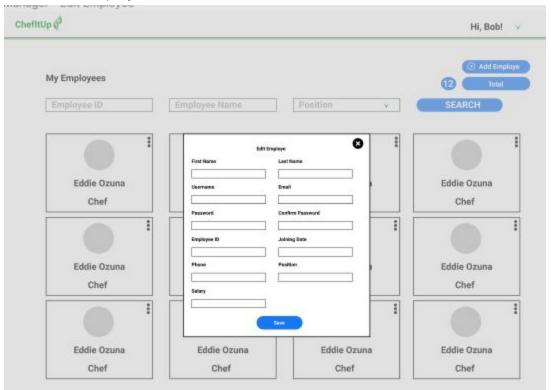
o Click Menu



Add Employee



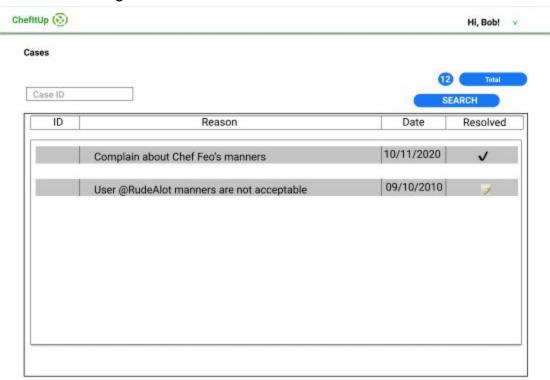
o Edit Employee



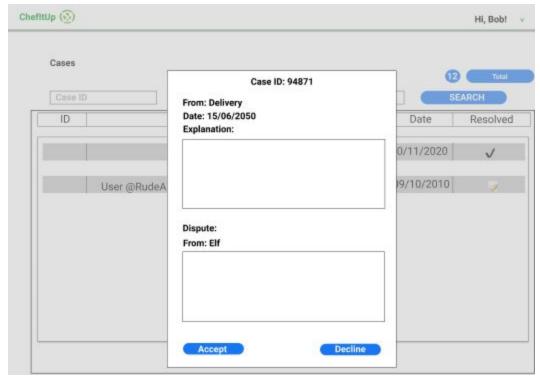
Add Customer



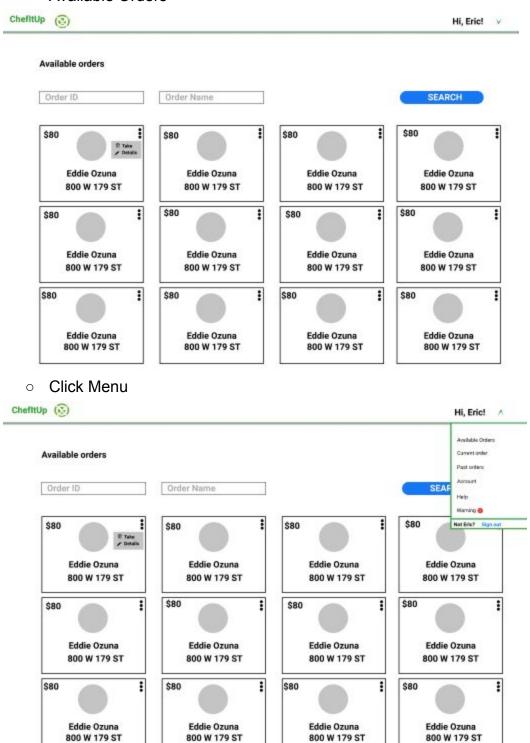
o Cases Page



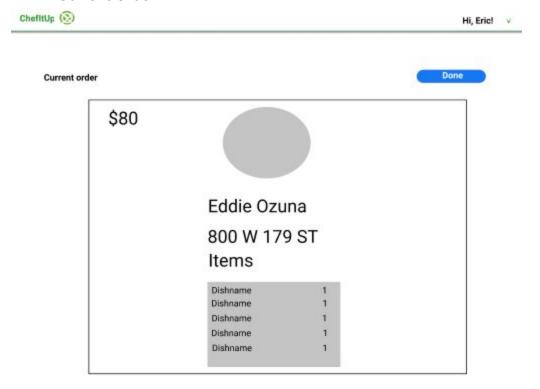
o Case Popup



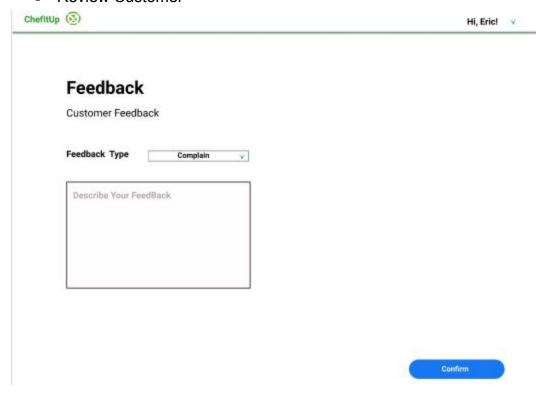
- Delivery-User Related
 - Available Orders



o Current Order



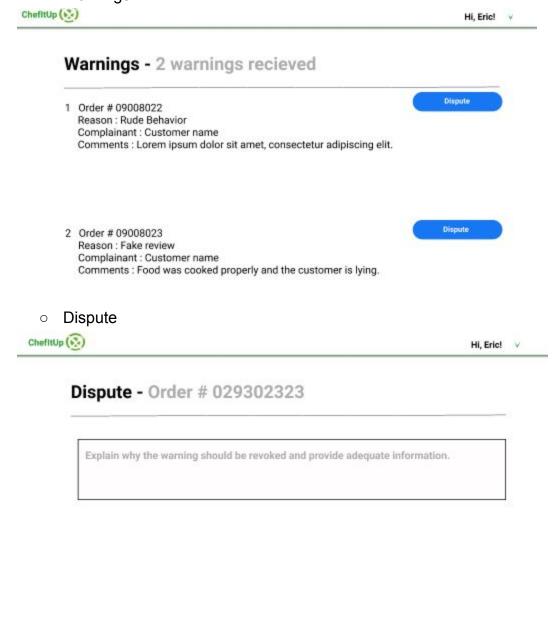
Review Customer



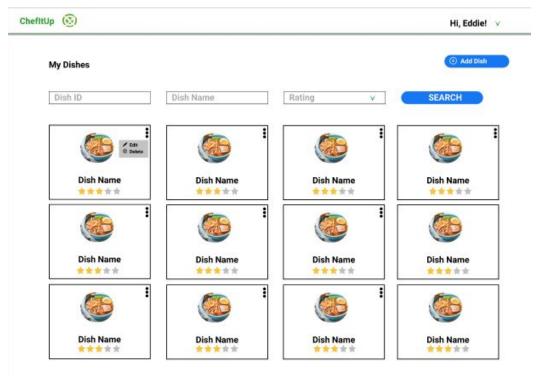
Version 1.0 November 17th, 2020

Confirm

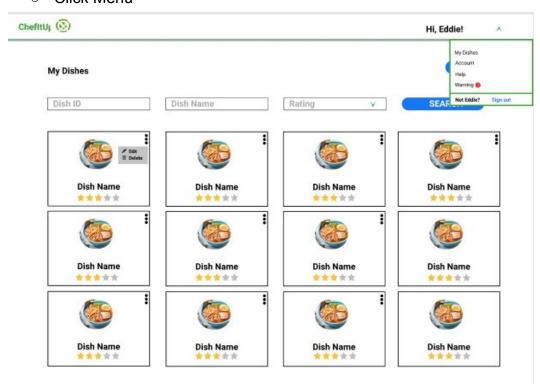
o Warnings



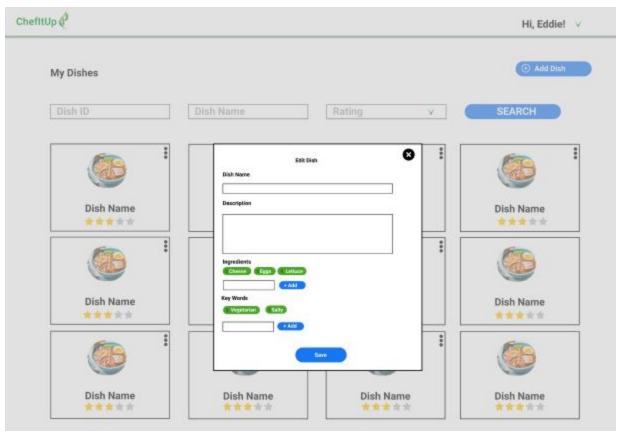
- Chef-User Related
 - o Dashboard



o Click Menu



o Edit Dish



o Warnings



Warnings - 2 warnings recieved

1 Order # 09008022
Reason : Rude Behavior
Complainant : Customer name
Comments : Lorem ipsum dolor sit amet, consectetur adipiscing elit.

2 Order # 09008023
Reason : Fake review
Complainant : Customer name

Comments: Food was cooked properly and the customer is lying.

ChefitU ()

o Dispute



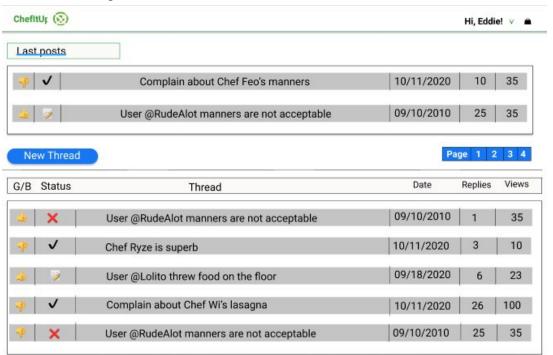
Dispute - Order # 029302323

Explain why the warning should be revoked and provide adequate information.

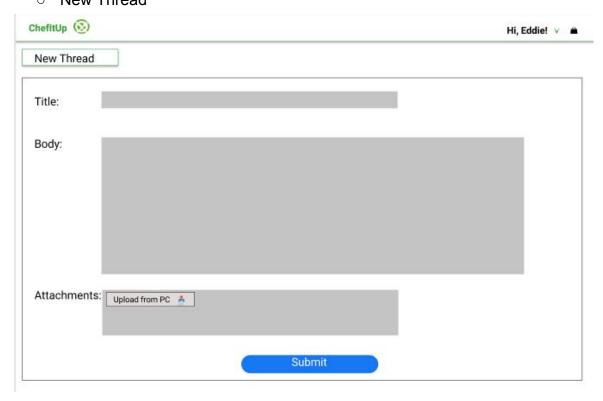
Confirm

Discussion Forum Related

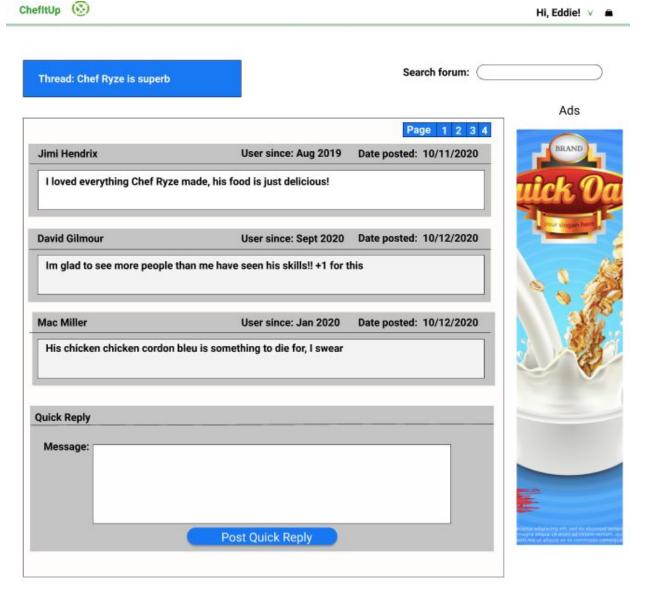
Main Page



New Thread



o Inside Post Page



Note: A complete overview of our web app design can be found in our figma design.

Team Meeting Minutes

Saturday, October 3rd

- This is our first meeting, the first sprint planning. We do sprint planning and retrospective every two weeks. Stand ups will happen every week.
- We started with working on the figma design of the application. We knew that before starting to code out the app, we first needed to know exactly what the application would look like, so we decided to first come up with the overall design of the application so that there wouldn't be any misunderstandings or confusions.
- We divided the figma design between each other: Cristian took the login and discussion forum pages, Eddie took the manager page, Albert took the surfer and delivery user pages, and Nahin took the customer pages.
- In this meeting, we also discussed things like what technologies we wanted to
 use for the application, and what skills we were each strongest and weakest at,
 so that each person could take on a specific role.

Saturday, October 17th

- o This is our second meeting, where we will do our sprint planning.
- After having finalized the overall design of the application on figma, we moved on to working on decomposing all the different components of the different functionalities, and creating stories for them on Jira.
- This would help us work using the Agile methodology, which would make for very efficient collaboration and making sure that we each knew what we were doing. It also helped with making the tasks small enough that they could be achieved in a very short period of time.
- As a team, we also discussed which stories we would do and the reasoning behind the decision. We all decided to first work on the frontend part of the application, so that it would all be ready for when we started working on the backend functionalities for them.
- For this sprint, Eddie decided to take the tasks for setting up the github repository with the different boilerplates for each component, Albert took the design of the landing page for surfers and customers as well as the footer, Cristian took the design for the user access pages (login and registration), and Nahin took the design of the navbar as well as the user popup menu.

Saturday, October 31st

- This is our third meeting, where we will do our spring planning as well as our retrospective.
- As a team, we discussed how everyone's schedule is looking like during the upcoming sprint, wish exams, assignments, etc. This would help us plan for this sprint so we know how many stories each person can take on.
- We also discussed what can be worked on, what is completed for the frontend that the backend could work on. We did a step-by-step run-through of what happens when a user makes an order and how information is obtained.

ChefltUp Version 1.0
System Design Report November 17th, 2020

 This sprint, there were no major struggles except it took a while to design the registration page due to the position of how the container should be placed as well as making it responsive for mobile.

- Some of our team members also struggled a bit with React and JavaScript mainly, as not everyone had a lot of experience with these technologies.
 However, we were all still able to manage to finish our tasks, which gave us a lot of good experience with frontend and allowed us to get familiarized with how things work.
- For the next sprint, we were all assigned with stories that are a part of the frontend groups, which includes creating content for the home page, rendering dishes for the menu, etc.

Saturday, November 7th

- o This is our fourth meeting, where we will do our spring planning.
- This sprint, we started again by discussing how everyone's schedule looks like in the upcoming sprint with exams, classes, and assignments, so that we each knew what every team member could take on.
- Everyone in the team had gained a lot of experience with the frontend technologies by this point, so there were no major struggles. However, it is still taking a little bit of time and effort to make the application responsive across all platforms.
- For the next spring, we decided to take on the remaining frontend tasks and divide them among the entire group, so that we would be finished with the frontend by the next meeting. We also decided to extend this sprint by 1 week to allow for some more extra time.

Git Repo

Our team's work up to date can be found in the ChefltUp GitHub repository.