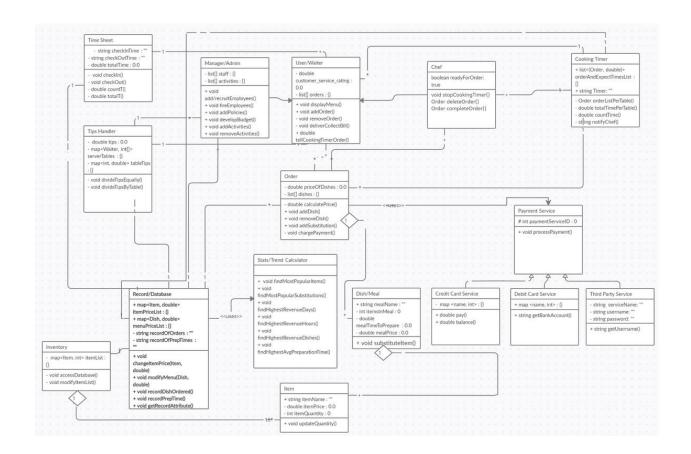
### Milestone 5 - Elaborated Component & Class Diagrams

**Team Name: Foodie Fighters** 

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### 1. Elaborated design classes



- 2. Elaborated Component Diagram
- 2.1. User

### addOrder()

### tellCookingTimerOrder()

addActivites()

### User/Waiter

- double
- customer\_service\_rating : 0.0
- list[] orders : {}
- + void displayMenu()
- + void addOrder()
- void removeOrder()
- void deliverCollectBill()
- + double
- tellCookingTimerOrder()

### Time Sheet

- string checkInTime: ""
- string checkOutTime : ""
- double totalTime : 0.0
- void checkln()
- void checkOut()
- double countT()
- double totalT()

## Cooking Timer

- + list<(Order, double)>
  orderAndExpectTimesList:
- + string Timer: ""
- Order orderListPerTable()
- double totalTimePerTable()
- double countTime()
- string notifyChef()

#### Order

- double priceOfDishes : 0.0
- list[] dishes : {}
- double calculatePrice()
- + void addDish()
- + void removeDish()
- + void addSubstitution()
- void chargePayment()

### Manager/Admin

- list[] staff : {}
- list[] activities : {}
- + void
- add/recruitEmployees()
- + void fireEmployees()
- + void addPolicies()
- + void developBudget()
- + void addActivities()
- + void removeActivities()

#### 2.2. Payment Service

processPayment()

getBankAccount()

getUsername()

pay()

Payment Service
# int paymentServiceID : 0
+ void processPayment()

### Credit Card Service

- map <name, int> : {}
- + double pay()
- + double balance()

### Debit Card Service

- + map <name, int> : {}
- + string getBankAccount()

### Third Party Service

- string serviceName: ""
- string username: ""
- string password: ""
- + string getUsername()

### Order

- double priceOfDishes: 0.0
- list[] dishes : {}
- double calculatePrice()
- + void addDish()
- + void removeDish()
- + void addSubstitution()
- void chargePayment()

accessDatabase()

findMostPopularItems()

### Record/Database

- + map<ltem, double> itemPriceList : {}
- + map<Dish, double> menuPriceList : {}
- string recordOfOrders: ""
- string recordOfPrepTimes:

\*\*\*\*

- + void changeItemPrice(Item, double)
- + void modifyMenu(Dish, double)
- + void recordDishOrdered()
- + void recordPrepTime()
- + void getRecordAttribute()

### Inventory

- map<Item, int> itemList :
  {}
- void accessDatabase()
- void modifyltemList()

### Stats/Trend Calculator

- + void findMostPopularItems()
- + void

findMostPopularSubstitutions()

+ void

findHighestRevenueDays()

+ void

findHighestRevenueHours()

+ void

findHighestRevenueDishes()

+ void

findHighestAvgPreparationTime()

accessDatabase()

updateQuantity()

### Inventory

- map<ltem, int> itemList : {}
- void accessDatabase()
- void modifyItemList()

### ltem

- + string itemName : ""
- double itemPrice : 0.0
- int itemQuantity: 0
- + void updateQuantity()

### Record/Database

- + map<ltem, double>
- itemPriceList: {}
- + map<Dish, double>
- menuPriceList: {}
- string recordOfOrders: ""
- string recordOfPrepTimes:

- + void
- changeItemPrice(Item, double)
- + void modifyMenu(Dish, double)
- + void recordDishOrdered()
- + void recordPrepTime()
- + void getRecordAttribute()

calculatePrice()

processPayment()

substituteItem()

modifyMenu(double Dish)

Order

- double priceOfDishes : 0.0
- list[] dishes : {}

- double calculatePrice()
+ void addDish()
+ void removeDish()
+ void addSubstitution()
- void chargePayment()

#### Dish/Meal

- + string mealName : ""
- int itemsInMeal: 0
- double

 $meal Time To Prepare \ : 0.0$ 

- double mealPrice : 0.0

+ void substituteItem()

## Payment Service

# int paymentServiceID: 0

+ void processPayment()

### Record/Database

+ map<ltem, double>

itemPriceList: {}

+ map<Dish, double>

menuPriceList: {}

- string recordOfOrders: ""

- string recordOfPrepTimes :

\*\*\*\*

+ void changeItemPrice(Item,

double)

+ void modifyMenu(Dish,

double)

- + void recordDishOrdered()
- + void recordPrepTime()
- + void getRecordAttribute()

#### 2.6. Manager/Admin

addOrder()
addActivities()
getDatabase()
divideTipsEqually()

### Manager/Admin

- list[] staff : {}
- list[] activities : {}
- + void

add/recruitEmployees()

- + void fireEmployees()
- + void addPolicies()
- + void developBudget()
- + void addActivities()
- + void removeActivities()

### User/Waiter

- double customer\_service\_rating : 0.0
- list[] orders : {}
- + void displayMenu()
- + void addOrder()
- void removeOrder()
- void deliverCollectBill()
- + double
- tellCookingTimerOrder()

### Tips Handler

- double tips : 0.0
- map<Waiter, int[]>
  serverTables : {}
- map<int, double> tableTips
- : {}
- void divideTipsEqually()
- void divideTipsByTable()

### Record/Database

- + map<ltem, double>
- itemPriceList: {}
- + map<Dish, double>
- menuPriceList: {}
- string recordOfOrders: ""
- string recordOfPrepTimes :
- \*\*\*\*
- + void
- changeItemPrice(Item,
- double)
- + void modifyMenu(Dish, double)
- + void recordDishOrdered()
- + void recordPrepTime()
- + void getRecordAttribute()