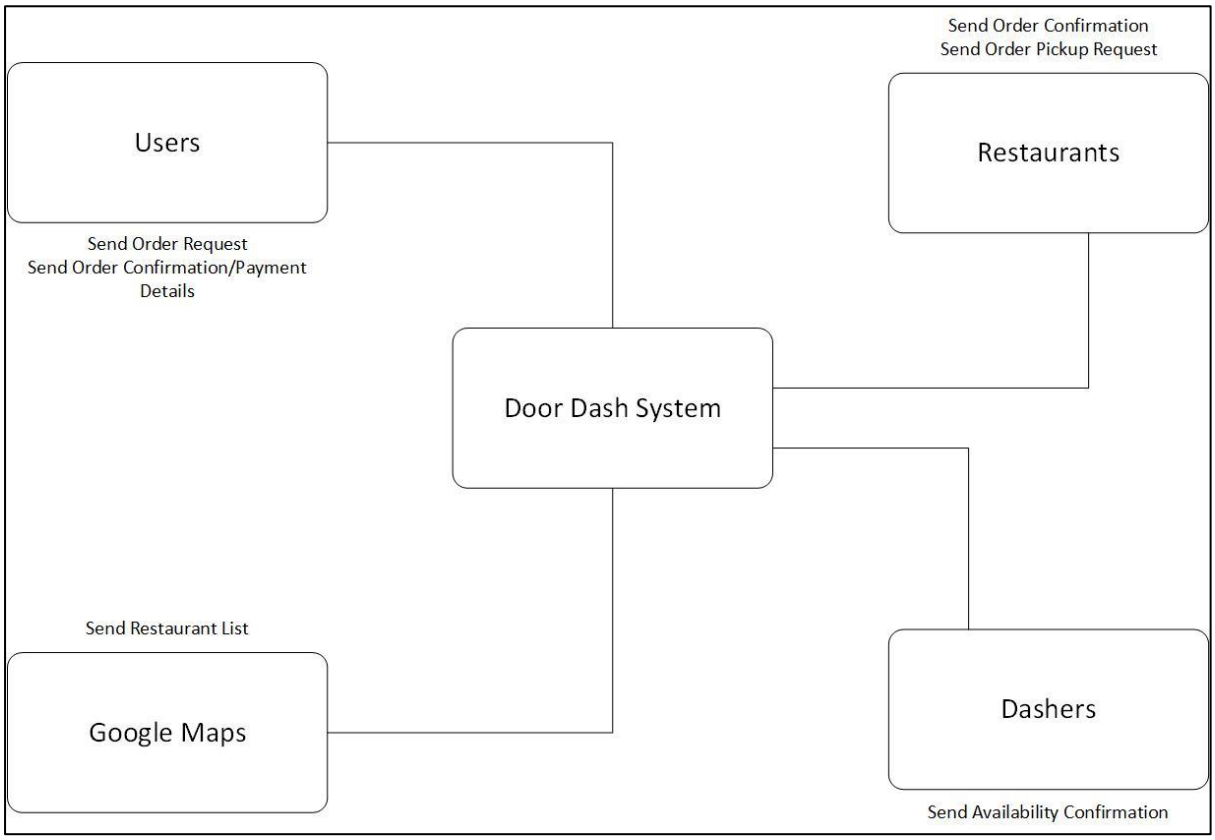
MIS 6308: System Analysis and Project Management

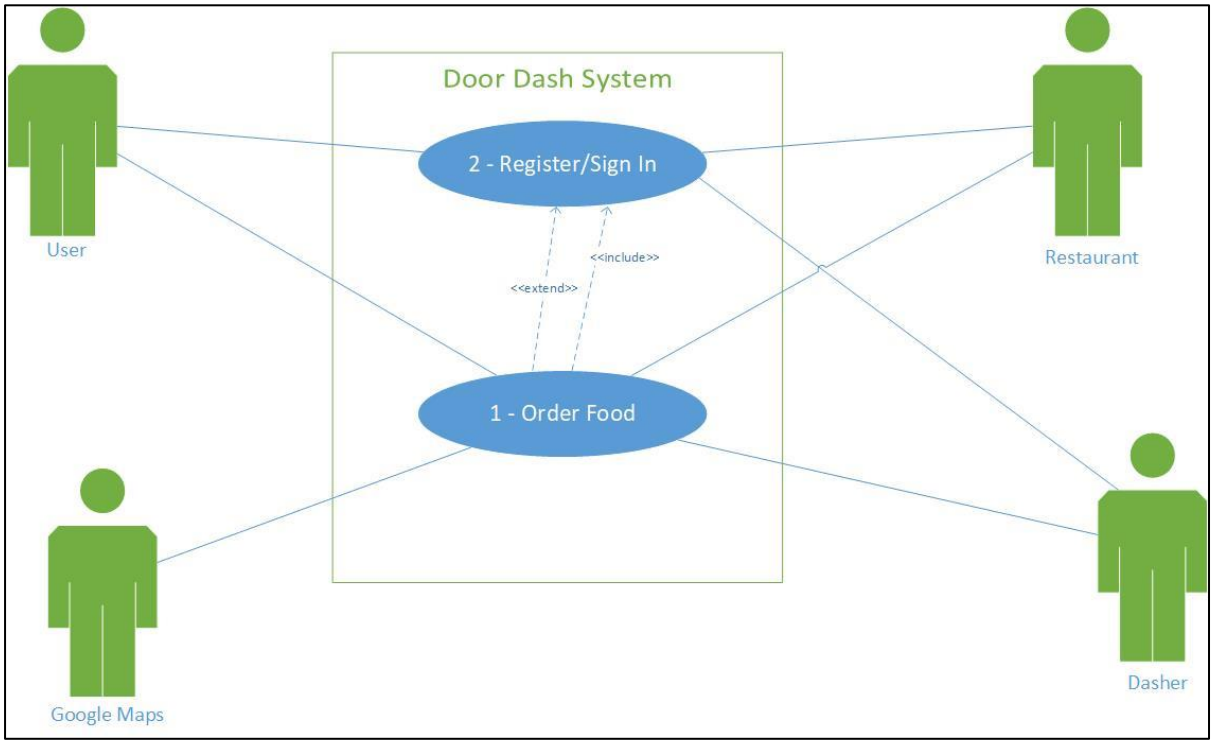
Assignment 2

1) The UML diagrams for DoorDash are as follows:
   a) Context Diagram



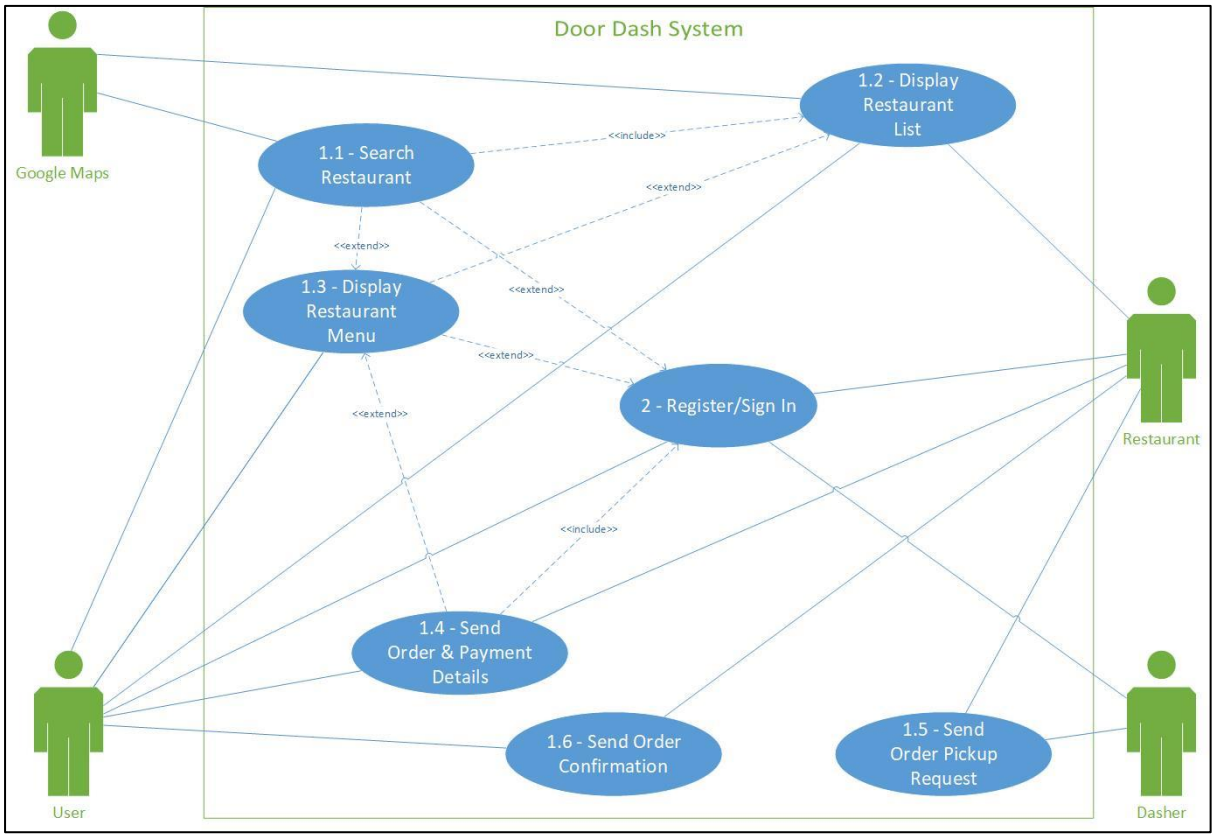
b) Use Case Diagram

i) Level 1

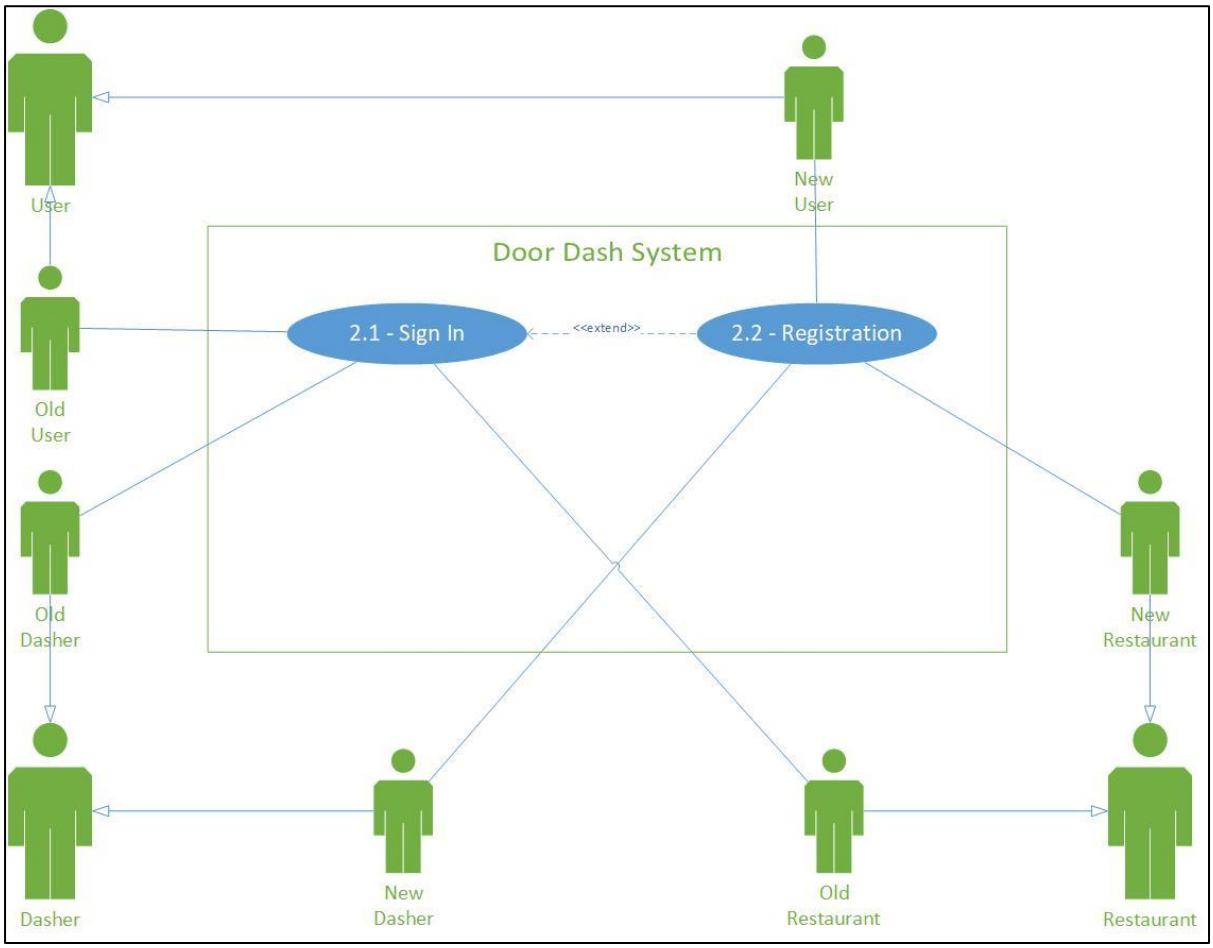


ii) Level 2

(1) Order Food



(2) Register/Sign In



c) The description of respective use case diagrams are as follows:

Use Case Name	Order Food
Use Case ID	1
Primary Actors	User, Google Maps, Restaurant, Dasher
Stakeholders & Interests	User – wants to order food Restaurant – wants to prepare food to its customers and give it to delivery person on time Dasher – wants to deliver food from restaurant to customer on time
Brief Description	This use case describes the process of order of food on DoorDash site
Trigger	User comes to DoorDash site for ordering food
Trigger Type	External Trigger
Relationships	
Association	User, Google Maps, Restaurant, Dasher
Include	Registration/Sign In
Extend	
Generalization	
Normal Flow of Events	
1. The user comes to DoorDash, searches for restaurant within his/her area. 2. Google Maps receives entered area data and executes *"Search Restaurant"* use case. 3. The user finalizes order details, enters payment details and executes the *"Send Order & Payment"* use case. 4. The restaurant receives order and payment details, prepares food for the order and executes *"Send Order Pickup Request"* use case. 5. The dasher receives the order pickup request, a. Accepts it, confirmation is sent to restaurant. b. Declines it, order pickup request is sent to another dasher and step 5 is repeated till pickup is accepted by a dasher. 6. The restaurant receives confirmed order pickup response from dasher and executes *"Send Order Confirmation"* use case.	
Sub Flows	
Alternate/Exception Flows	
1a – Selects restaurant from the displayed options of restaurants based on previously entered area data and executes the *"Display Restaurant Menu*" use case. 1b – Goes to register/sign in and executes the *"Register/Sign In"* use case.	

Use Case Name	Register/Sign In
Use Case ID	2
Primary Actors	User, Restaurant, Dasher
Stakeholders & Interests	User – wants to order food Restaurant – wants to prepare food to its customers and give it to delivery person on time Dasher – wants to deliver food from restaurant to customer on time
Brief Description	This use case describes the process of registration of new actors and sign in for old actors on DoorDash site
Trigger	Actor comes to DoorDash site
Trigger Type	External Trigger
Relationships	
Association	User, Restaurant, Dasher
Include	
Extend	Registration/Sign In
Generalization	User – New and old user Dasher – New and old dasher Restaurant – New and old restaurant
Normal Flow of Events	
7. Actor comes to DoorDash, clicks on Register/Sign In button, enters user data a. If actor is new, executes *"Registration"* use case. b. If actor is old, executes *"Sign In"* use case.	
Sub Flows	
Alternate/Exception Flows	

2) Data mentioned in above use case descriptions as per data dictionary notation:

"Order Food" use case:

1. Aggregate Data:
   a. Delivery Area = [Street Address | Zip code]
   b. Street Address = Address Line 1 + (City Name) + (State Name) + (Country Name) + (Zip Code)
   c. Restaurant Options = 0{Cuisine Type + 0{Restaurant Details}}
   d. Restaurant Details = Restaurant Name + Restaurant Description + Restaurant Logo + Street Address + Restaurant Website URL + 1{Restaurant Phone Number} + Restaurant Number of Employees + Restaurant Rating + Restaurant Delivery Hours + Restaurant $ Rating
   e. Order Details = Order ID + 1{Item} + Payment Details
   f. Item = {Name + Quantity + (Customizations) + (Additional Instructions) + Issue Instruction}
   g. Payment Details = Payment ID + Card Details + (Promo Code) + Total Amount
   h. Card Details = Card Owner Name + Card Number + Expiry Information + CVV Code + Card Zip Code + (Pin Code)
   i. Total Amount = Sub-total + Taxes + Delivery Fee + Service Fee + (Small Order Fee)
   j. Pickup Request = Request ID + Order Details + User Address + Restaurant Address + Delivery Time
   k. Pickup Response = Response + (Reason for response)

2. Data Elements:
   a. Item Name
   b. Item Quantity
   c. Customization
   d. Additional Instructions
   e. Delivery Time
   f. Promo Code
   g. Card Owner Name
   h. Card Number
   i. Expiry Information
   j. CVV Code
   k. Card Zip Code
   l. Sub-total
   m. Taxes
   n. Delivery Fee
   o. Service Fee
   p. Small Order Fee
   q. Response
   r. Reason for response
   s. Zip code

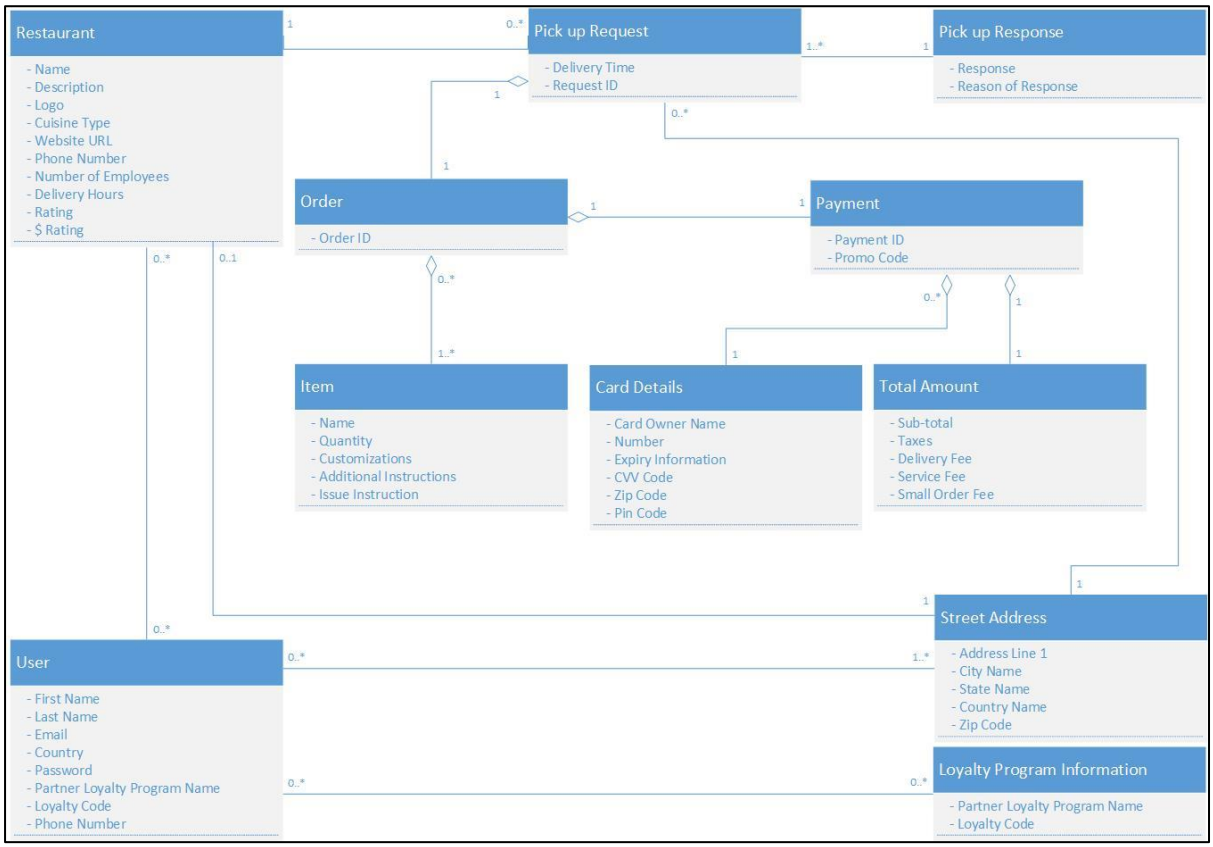
t. Address Line 1
u. City Name
v. State Name
w. Country Name
x. Cuisine Type
y. Restaurant Name
z. Restaurant Description
aa. Restaurant Logo
bb. Restaurant Website URL
cc. Restaurant Phone Number
dd. Restaurant Number of Employees
ee. Restaurant Rating
ff. Restaurant Delivery Hours
gg. Restaurant $ Rating
hh. Order ID
ii. Request ID
jj. Payment ID

"Registration/Sign In" use case:

1. Aggregate Data:
   a. User Details = First Name + Last Name + Email + Phone Number + Country + Password + (Loyalty Program Information)
   b. Loyalty Program Information = Partner Loyalty Program Name + Loyalty Code

2. Data Elements:
   a. First Name
   b. Last Name
   c. Email
   d. Phone Number
   e. Country
   f. Password
   g. Partner Loyalty Program Name
   h. Loyalty Code

3) Class Diagram



4) Sequence Diagram for ***"Order Food"*** use case