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National University of Computer & Emerging Sciences

Department of Software Engineering

Software Requirements Engineering

In-Class Group Assignment - Fall 2024

Name	Roll No.
~~23F-3~~	
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Time allowed: **1 hour** Total Marks: **15** Marks Obtained:

Scenario: Online Food Delivery System

You have been approached by PopularDesiFood chain to help transition to an online food delivery system. Your requirements engineering team agrees to design an **Online Food Delivery System (OFDS)** that serves three primary user groups: **Customers**, **Restaurant Managers**, and **Delivery Personnel**. The system aims to make the process of ordering, preparing, and delivering food seamless and efficient.

Description of the System:

Customers can browse menus, place orders, and track delivery status in real time. Restaurant managers receive order notifications, update menu availability, and manage operational reports. Delivery personnel can access optimized delivery routes, update order statuses, and receive push notifications about order assignments. The system integrates with third-party services like payment gateways, map APIs, and SMS notification systems.

External gateways

User Stories

Customer User Stories:

1. As a customer, I want to browse restaurant menus categorized by cuisine and price so I can decide what to order.
2. As a customer, I want to place an order with multiple items so that I can buy a complete meal in one go.

Instructions for the Activity

Duration: 1 hour

Read the scenario and user stories provided. Can you think from the perspective of customer, restaurant manager/staff, and delivery personnel and add more user stories?

First, add more user stories.

Identify **Functional Requirements (FRs)** for the system against user stories for each user group.

Identify **Non-Functional Requirements (NFRs)** such as performance, security, and usability etc.

BE CREATIVE! BRAINSTORM!

Use of AI is strictly not allowed. There is a second part to this activity. To ensure that the second part of the activity is successful all requirements must be manually generated.

Additional Customer User Stories:

US_C_1	As a customer, I want to cancle order on my mind change so that I can get refund.
US-C-2	As a customer, I want to submit my feed-back so that I can give my opinion.
US-C-3	As a customer, I want to review the feedbacks of other customers so that I can judge resturants creadibility.
US-C-4	As a customer, I want to preset my location so that I can order easily.
US-C-4	As a customer, I want to have diffrent methods for payment so that I can decide accodily to my pocket.

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Additional Restaurant Manager/Staff User Stories: 5

US_S_1	As a manager, I want to block the scamers so that I can confirm ~~payment~~ customers identity.
US-S-2	As a manager, I want to confirm payment receivment so that I can verify income.
US-S-3	As a manager, I want to assign task to kithen staff so that I can manage work load.
US-S-4	As a manager, I want to assign cupon codes to my loyal customers so that they trust more.
US-S-5	As a manager, I want to review feedback from customer so that I can track my progress.

4/5

Additional Deliver Personnel User Stories: 4.5

US_D_1	As a delivery, I want to track my daily earning and parcle delivers so that I can track my income.
US-D-2	As a delivery man, I want to show my availability status so that I can give my availibily status.
US-D-3	As a delivery man, I want to see the traffic conditions so that I can avoid delays.

unclear

vague -0.5

Customer Functional Requirements (FRs)

R_C_1	The system shall allow customer to browser restaurant menus
R_C_2	The system shall allow customer to select multiple items to place orders
R_C_2	The system shall provide real time delivery status updates to customer
R_C_3	The system shall allow customers to save favourite restaurants for future orders
R_C_4	The system shall allow customer to use promo codes during checkouts
R_C_5	The system shall allow customers to submit feedback for completed orders
R_C_7	The system shall allow user to rest locations for accurate delivery
R_C_8	The system shall support multiple payment methods
R_C_9	The system shall allow the customerer to cancel their orders
R_C_10	The system shall allow customer, to submit feedback of restaurants
R_C_20	

5/5

Restaurant Staff Functional Requirements (FRs) 5 1 to 5

R_S_1	The system shall generate optimize delivery routes
R-S-2	The system shall allow manager to update restaurant menu
R-S-3	The system shall notify staff when order is placed
R-S-4	The system shall allow managers to mark item as out of stock
R-S-6	The system should generate daily/monthly sale reports
R-S-7	The system shall provide a communication channel (chat) between staff and manager
R-S-8	The system shall allow manager to assign coupon codes to regular customer
R_S_20	

Delivery Personnel Functional Requirements (FRs)

R_D_1	The system shall allow to genrate optimized delivery routs to minimize delivery time.
R-D-2	The system shall allow delivery staff to upadte delivery status.
R-D-3	The system shall send notification to delivery staff for new order
R-D-4	The system shall provide customer contact detail to delivery staff.
RD5	The system shall allow delivery staff to report delivery details.
RD6	The system shall allow to show his delivery status.
RD7	The system shall allow to check the number of deliveries. and payments.
R_D_20	

4.5.25

5/5

1.25

Non-Functional Requirements (NFRs)

NFR1	The system shall process 90% of user requests in 2 seconds under normal load.
NFR2	The system shall support upto 10,000 simultaneous users without without significat performance degradtion.
NFR3	The route optimization shall be complete within 5 seconds after delivery order assigned.
NFR4	The user interface shall be intutive and eeisy to navigate for all users.
NFR5	The system shall have an uptime of at atleast 99.9% over a month-period.
NFR6	~~order status updates~~ and ~~notifications~~ shall be delivered within 2 seconds of my status change.
NFR7	The system shall use HTTPS for secure data transmission.
NFR8	The system shall accomodate increase traffic during peak times.
NFR9	Error logs shall be genrated and stored for debugging purpose.