

code.sprint^{MT}

TASK BOOKLET
- Qualifiers Round -
Secondary Category
2021



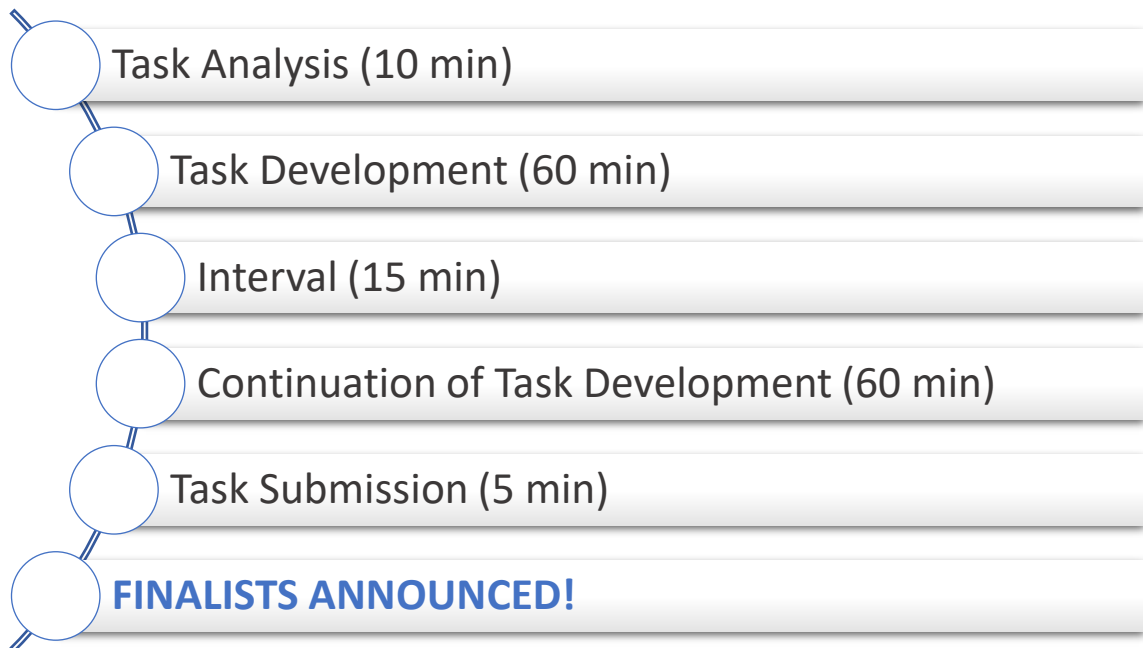
DIRECTORATE FOR LEARNING &
ASSESSMENT PROGRAMMES

X



ICEMalta

Qualifiers Round Schedule



SALT Food App (120 minutes)

The COVID-19 pandemic has had significant social and economic impact across the globe. Businesses have been investing and upgrading their eCommerce systems to better reach their clients better. Moreover, new businesses that offer delivery services opened and offered restaurants the ability to accept online orders and offer delivery to the client's home.



Develop a text-based food-ordering app for Mia Sicilia Restaurant that is accepting online orders and is using the services of **SALT Food Delivery** company to deliver orders to the clients' home.

Functionality #1: Main Menu

The app is to be used by customers, restaurant owner and delivery persons. Hence, upon opening the app, the user needs to indicate whether s/he is a: Customer, Restaurant Owner, Delivery Driver, or wants to Exit the app.

Functionality #2: Ordering Online

1. The customer can choose any number of food items per order from the food menu in Table 1 on the right.
2. If the order total is more than €20, delivery is free, otherwise there is a €5 delivery charge.
3. The order is finalised when the customer confirms the order. If confirmed, the customer must also enter the address where the order is to be delivered and a contact number.
4. The customer can place one order at a time until it is delivered.

Food Items	Price
Pizza Funghi	€7.60
Pasta Salmone	€8.50
Risotto Mozzarella	€9.00
Caesar Salad	€8.40
Chicken Breast with Parma Ham	€12.80
Full Rack of Ribs with BBQ Sauce	€17.90
The Flamethrower Burger	€12.30
The Double-Decker Burger	€13.20
The Ultimate Burger	€15.50

Table 1: Food Menu

Functionality #3: Processing and Delivering Orders

1. The 'Restaurant Owner' section of the app displays whether an order has been placed by a customer or not. If an order is placed, the items ordered, delivery charge, total cost, customer contact number and address are displayed.
2. If the order has not yet been processed, the restaurant owner will be asked to indicate whether the order is processed and ready to be picked up by the delivery person or not. Check sample Screenshot 1 below.

```
| PENDING ORDER |
-----

ORDER ITEMS:
- Pizza Funghi: €7.60
- Risotto Mozzarella: €9.00
- The Flamethrower: €12.30
- Delivery: FREE

>> Total: €28.90

-----

Delivery Address: 13, Sunshine Street, Kemmuna
Client Number: 21223344
-----

Press [Y] if order is processed and ready for Delivery?:
```

Screenshot 1: Restaurant Owner App

3. The 'Delivery Person' section of the app displays whether an order is ready for pickup and delivery or not. If an order is processed and ready for pickup, the items ordered, delivery charge, total cost, customer contact number and address are displayed.
4. The delivery person will be asked to indicate whether the order has been delivered or not. Check sample Screenshot 2 below.
5. It is not required to keep record of delivered orders.

```
| THE BELOW ORDER IS READY FOR DELIVERY |
-----

ORDER ITEMS:
- Pizza Funghi: €7.60
- Risotto Mozzarella: €9.00
- The Flamethrower: €12.30
- Delivery: FREE

>> Total: €28.90

-----

Delivery Address: 13, Sunshine Street, Kemmuna
Client Number: 21223344
-----

Press [Y] if order is delivered:
```

Screenshot 2: Delivery Driver App

Functionality #4: Data Validation

1. The user's menu option must be validated; i.e. client, restaurant owner, delivery driver or exit.
2. When doing an order, food menu options must be validated.
3. Delivery address must have at least 10 characters.
4. Contact number must contain eight numbers only.
5. Non-existing options or invalid input must be handled accordingly, and a warning message displayed.

Name the class containing the main method **RunApp**.
Submit your program in a folder named **SALTApp**

Assessment Rubric

Program Functionality	User-Friendly Interface	Proper use of Comments	Proper Conventions (Camel case, meaningful var names etc.)	Name of Folder & Class/es	User Input	Suitable Prompts / Messages displayed
Calculation of Total	Check for Delivery Charge	Customer can do only one order at a time.	Main Menu Validation (Customer, Owner, Driver, Exit)	Food Menu Options Validation (When placing an order)	Delivery Address Validation (at least 10 characters)	Contact Number Validation (8 digits)
Customer Confirming Order Validation (When confirming the order)		Restaurant Owner Validation (When confirming if order is processed and ready for delivery or not)		Delivery Person Validation (When confirming if order is delivered or not)		Code Efficiency
Proper use of Data Structures (Arrays)		Extra Features (not listed in the task)	Maximum Score: 38 + 2 for every extra feature.			
0 – Not Satisfactorily 1- Partly Satisfactorily 2- Entirely Satisfactorily						

