

## 13350 (E)

Mobile Application Development
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Partial 2017 - 2018 Saturday 25/11/2017 Duration : 1½ hour Open book

The purpose of this exam is to develop a simple app for ordering pizzas. The application consists of two activities. The first activity allows you to choose a pizza, calculate its price and to add the pizza to a pizza list as shown in both figures a and b. In this activity, the user chooses the pizza size (Small, Medium, or Large). The price of a "Small" pizza is 8000 LBP, the price of a "Medium" is 10000 LBP and the size of a "Large" is 12000 LBP. The user can add sauce, olives, pepperoni or mushroom to the pizza, each of which costs an additional 2000 LBP.

The "COMPUTE PRICE" button calculates the price of the pizza according to the user's choice. For example, in Figure (b), the user chose a "Medium" size pizza and added sauce and pepperoni. The price is 8000 + 2000 + 2000 = 12000 LBP.

The "ADD ITEM TO CART" button adds the chosen pizza to a pizza list. In this case, the user can choose several pizzas before paying the total price.

After choosing one or more pizzas and adding these pizzas to the basket, the user clicks the "PAY BILL" button to pay the pizza bill. This button transfers the user to another activity on which the list of user choices is displayed and the total price of all pizzas Figure (c).

Figure (a) Figure (b) Figure (c) ▼⊿ 📗 7:41 ▼⊿ 📱 7:43 ▼⊿ 🗐 7:55 INFO3350F\_Examen\_Partiel\_2017\_2... INFO3350F\_Examen\_Partiel\_2017\_2... INFO3350F\_Examen\_Partiel\_2017\_2... Medium - Saussage - Pepperoni - Price = 14000 Pizza Order Application Pizza Order Application Large - Saussage - Mushrooms - Olives -Size: O Small Size: 

Small O Medium O Large Pepperoni - Price = 20000 LBP Small - Mushrooms - Olives - Price = 12000 LBP ☐ Olives Sausage □ Olives Sausage Medium - Olives - Pepperoni - Price = 14000 Pepperoni ☐ Mushrooms Pepperoni ■ Mushrooms Medium - Saussage - Mushrooms - Olives -Pepperoni - Price = 18000 LBP **COMPUTE PRICE COMPUTE PRICE** Large - Saussage - Olives - Pepperoni - Price = 18000 LBP Price item = 0 LBP 12000 LBP Total Price = 96000 LBP **ADD ITEM TO CART ADD ITEM TO CART** PAY BILL PAY BILL

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Answer the following questions:

<u>Part I:</u> Create an Android Studio project, and save the project on the drive D of the machine under the name: id\_part1\_FirstName\_LastName, for example the student Zahraa Kassir, with a student number 1234 will create a project named: 1234\_part1\_Zahraa\_Kassir

- 1. Create the first activity containing the components as shown in Figure (a). Do not waste time on the formatting before running the app.
- 2. Implement the method to execute when the user presses the "COMPUTE PRICE" button which calculates the price of the pizza according to the user's choices.

Part II: Save the same project under another name id\_part2\_FirstName\_LastName

- 3. Implement the method to execute when the user presses the "ADD TO CART" button. This method should add the choice of pizza to a list.
- 4. Create the second activity and implement the code of the "PAY BILL" button that starts this second activity and displays in a list the pizzas and the total price to pay as shown in Figure (c).
- 5. When the user makes a long press on an item in the list, this item will be deleted. Implement this feature taking into account the updated total price.