1 Problem Definition

In this assignment, you will create a simple application for ordering pizzas! You will use a segmented VC, alerts, and action sheets to allow the user to select options for the pizzas.

The Main VC consists of a Table View containing all of the pizzas that have been created. When the application first launches, the table will be empty as in figure (a). To create a new pizza, the user must click on the “+” button in the Navigation Bar. This will take the user to the Pizza Creation VC, figure (b). The user then configures a pizza to be ordered.

- The user can select one of three pizza sizes, small, medium, or large, using a segmented VC.
- There are two crust types: Thin Crust or Thick Crust. The user should be presented these two options as buttons in an alert.
- There are three cheese options: Regular Cheese, No Cheese, or Double Cheese. The user should be presented these options in an action sheet.
• There are three meat options: Pepperoni, Sausage, or Canadian Bacon. The user should be presented these options in an action sheet.

• There are five veggie options: Mushroom, Onion, Green Olive, Black Olive, or None. The user should be presented these options in an action sheet.

![Select crust option](image1)
![Select cheese option](image2)
![Select meat option](image3)
![Select veggie option](image4)

When one of each option has been selected, the user should click the “Done” button. This should display a summary of the pizza created below the button as shown in figure (g) below.

If the user failed to make a selection for any of the options, an error message resembling (h) below should appear. (If the user missed two or more selections, only one error message needs to appear.) Note that since
the segmented controller comes up with "Small" preselected, a small pizza is the default, and you should never see an error for a missing pizza size.

If the user now clicks on the Pizza Order nav button, the app should return to the Main VC, and the new pizza should be added to the bottom of the Table VC.
2  Hints to Get Started

- When you create your new Xcode project, in the screen where you give the project a name, click the "Use Core Data" checkbox. This will make life a lot easier for you later; don’t ask why, I’ll explain at the appropriate time.

- Use the simulator for "iPhone 11 Pro Max".

- Create a class called Pizza that includes properties pSize, crust, cheese, meat, and veggies. Then create a variable pizzaList:[Pizza] = []. This will contain the pizzas you create.

- Use delegates and protocols to update the Table View.

- For this assignment, you are not required to write code that allows the user to select a pizza from the table. The only action available from the Main VC is the “+” button to create a new pizza.

3  Grading criteria

1. You have UI components as defined. (20%)

2. The Main VC works as defined. (20%)

3. The Pizza Creation VC works as defined. (20%)

4. The alerts and action sheets work as defined. (20%)

5. Error handling for missing ingredients works as expected. (20%)

6. If the app does not build and run, ZERO points will be given.

7. The Coding Standard is followed. One point deducted for each violation.

4  General criteria

1. I will be looking for good documentation, descriptive variable names, clean logical structure, and adherence to all coding conventions expected of an experienced programmer, as well as those outlined in the Coding Standard document. There will be penalties for failure to meet these standards.

2. Your code must compile and run before submission.

3. Xcode will automatically generate standard headers to your .swift files. Add two lines to each Swift file so that the header includes the following:

```
// Project: LastnameFirstname-HW5
// EID: xxxxxxx
// Course: CS371L
```