

CSX4108 / ITX4108

iOS Application Development

Practical Midterm Examination

Semester 1/2024

Date: July 27, 2024

Time: 09:00 – 12:00 (3 hours)

Instructor: A. Nattachai Saejiem (section 541)
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**** This examination is worth 10 marks towards your final grade. ****

Instruction:

- 1) Create a new Xcode project with following these details;
 - ❖ Template: iOS Application
 - ❖ Product name: [PME-<Your Student Code>] (e.g. PME-6510000)
 - ❖ Organization Identifier: <Your Student Code>
 - ❖ Interface: Storyboard
 - ❖ Language: Swift
 - ❖ Storage: None
- 2) Import the provided files into your workspace. The folder contains following files;
 - ❖ File - Restaurant.json
 - ❖ Folder - Restaurant Picture (3 images)
- 3) This is an open-book exam.
- 4) You are allowed to use the Internet.
- 5) All the icons will be available as system image in SF Symbols.
- 6) Record the screen of your application.
- 7) ZIP the Xcode project and rename it to be the same as the product name. Submit it to Microsoft Teams alongside with the screen record of your application.
- 8) **Submission is only allowed using UIKit. SwiftUI project will not be accepted.**



App Display Name:

Restaurant Finder

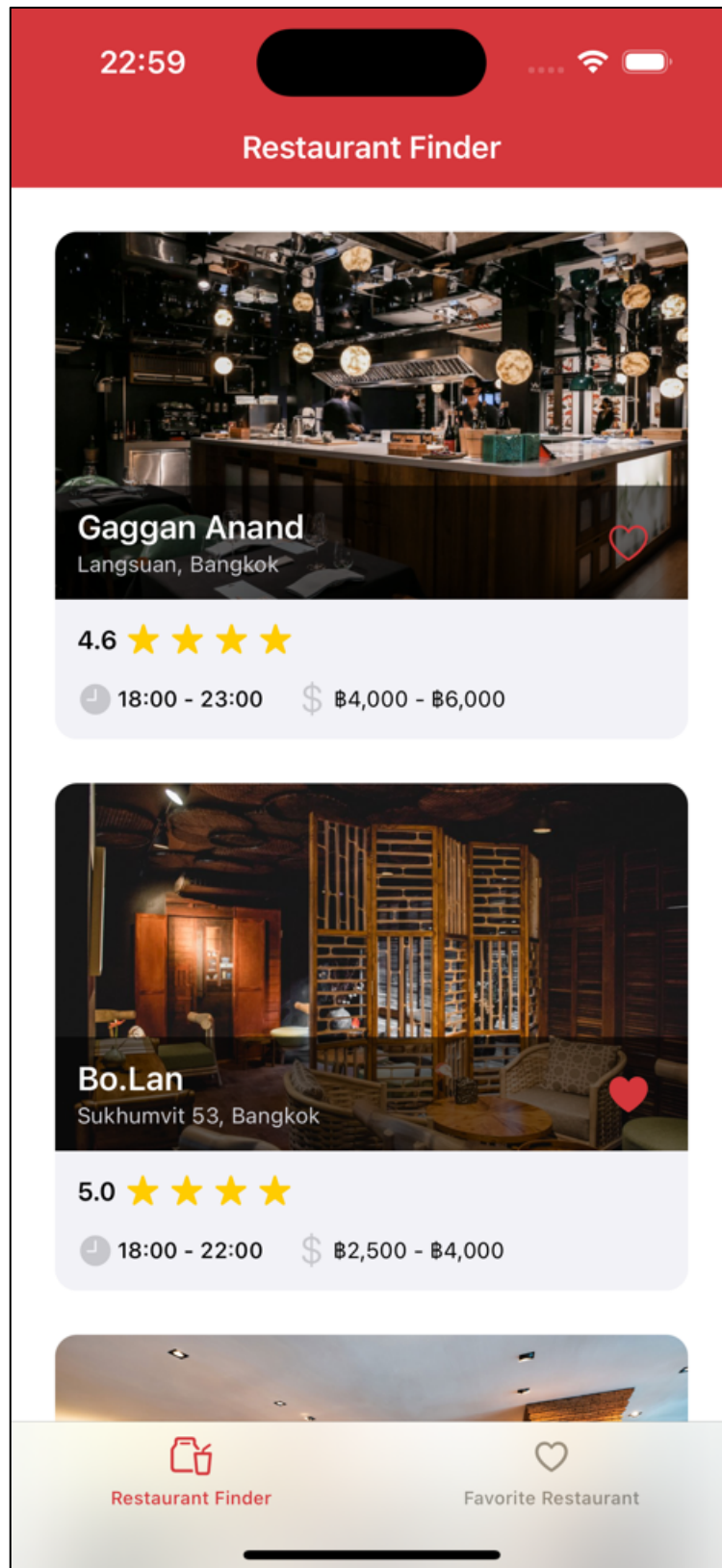
App Description:

Restaurant Finder is the best way to discover great places to eat. As shown in page 3, the app has two sections: Restaurant Finder and Favorite Restaurant (shown as a Tab Bar).

- From the restaurant tab, it displays the list of restaurants in UITableView for which each row's components will show the following restaurant's information: picture, name, address, rating, rating stars, opening hours, average price and favorite button.
- For favorite button, the image will be based on SFSymbols. Where if the user marked this restaurant as favorite the button image name is "heart.fill". If the user does not mark as favorite, the button image name is "heart".
- A user can click on each row to view more information of the selected restaurant. As shown in page 4, the restaurant's detail screen displays other useful information such as the restaurant description. There is also a heart button, where the condition will be the same as Restaurant Finder screen.
- As shown in page 5, from the Favorite Restaurants tab, it displays the same design as the restaurant tab, but the list of displayed restaurants will be based on the restaurants that the user selects as a bookmark. Also, the user can click on each restaurant to view more details as shown in page 4.

Sample Screen:

1) Restaurant List Screen



Sample Screen:

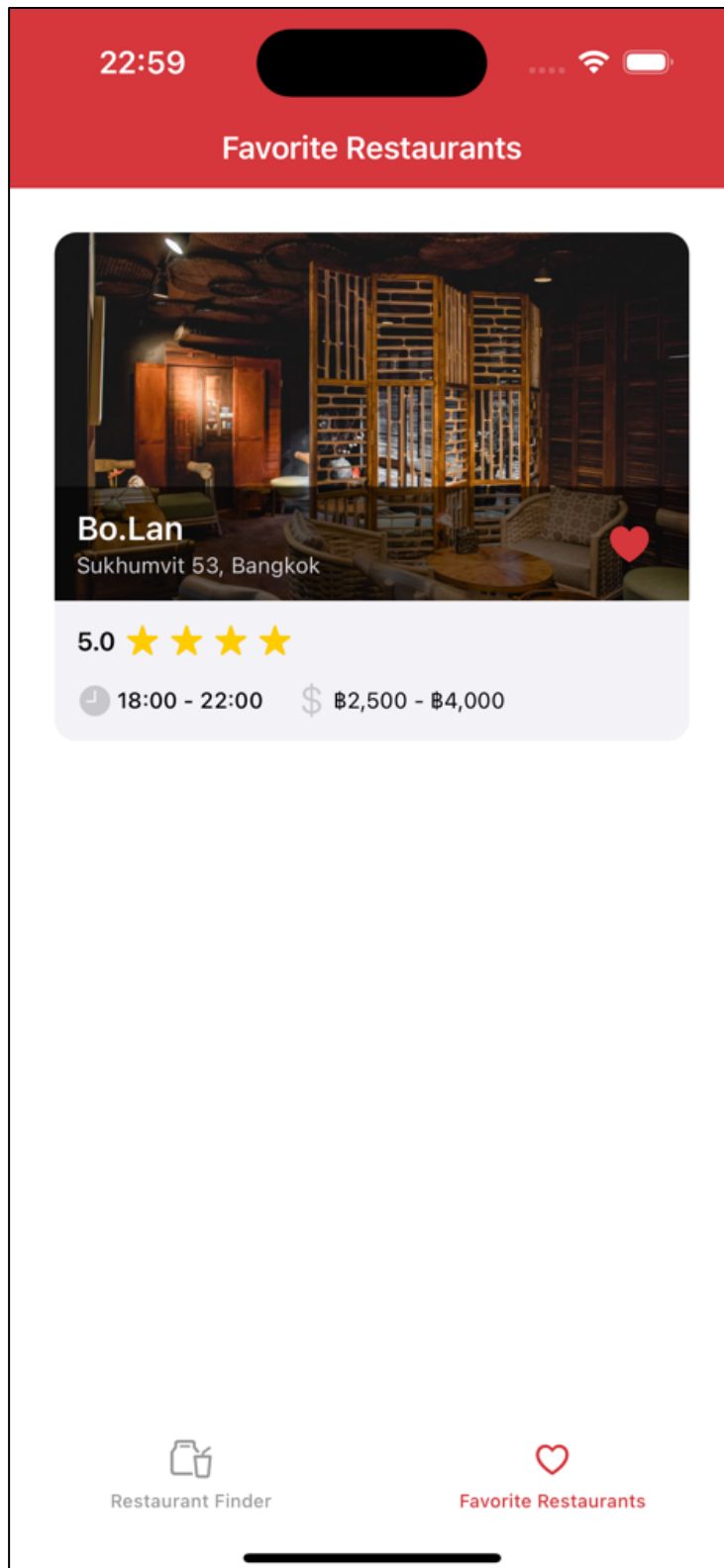
2) Restaurant Details Screen



HINT If you want to disable the Tab Bar in this screen, you have to select None for Bottom Bar property for this UIViewController.

Sample Screen:

3) Favorite Restaurants Screen



Grading Criteria

Access Local Files & Read JSON

Correctly read/use contents from JSON file 1 mark

Dynamically display contents from JSON file 3 marks

Favorite Restaurants

Allow a user to add/remove favorite restaurants 2 marks

Design & Layouts

Correctly display the components in UITableViewCell 2 marks

Correctly display rating star according to review data 0.5 marks

Constraints are set properly, where the layout will not be clipped for iPhone 15 series and iPhone SE 3rd generation. 1 mark

UINavigationController

Correctly navigate views using Navigation Controller 0.5 marks

Total 10 marks

**** End ****