Assignment 4

Instructions and Grading Criteria

- This is an **individual** assessment. Please review the college's **Academic Integrity Policy** to ensure that you are completing your work in an academically honest manner.
- Your application will be tested using an iPhone 14. It is your responsibility to ensure that your application runs properly on this simulator.
- In addition to the required functionality, learners are expected to use the coding conventions demonstrated in class, meaningful variable naming, and clearly organized code. Comments are helpful but not required.

Submission Checklist

For your submission to be graded, provide a **zip** file of your project, and a **screen recording** demonstrating the functionality you implemented.

1. Create a zip file of your project
- Name the zip file **A4_firstname_lastname.zip**.   **.7zip or .rar files will not be accepted**.

3. Creating Your Screen Recording
- In the screen recording, demonstrate the app running in the console, and show the relevant output.
- Max 7 mins (per recording).

3. In the assignment:
1. Upload your screen recording to **Microsoft OneDrive** and ensure that the link is set to: "Anyone with the link can view". Paste a link to the recording in the **submission comments**.
2. Submit your zip file containing the project(s).

Academic Integrity
- This is an individual assessment.
- Permitted activities: Usage of Internet to search for syntax only; usage of course materials
- Not permitted:
  - Communication with others (both inside and outside the class)
  - Discussion of solution or approaches with others; sharing/using a "reference" from someone
  - Searching the internet for full or partial solutions
  - Sharing of resources, including links, computers, accounts

Problem Description

Tax Filing Management App:
You are hired as an iOS developer to create a Tax Filing Management App.

Screens:
- Registration Screen
- Login Screen
- Home Screen
- Customer Detail Screen

User Types:
- Admin
- Customer

Registration Screen:
- Customers can register themselves on the app using this screen. Data must persist in DB.
- This screen must capture all the required information from the customer along with a password. Check https://jsonplaceholder.typicode.com/users/1 for reference.
- Do not capture latitude and longitude in the registration. Use the entered address to get the coordinates using Forward Geocoding.
- Admin do not need to register. You can pre-register admin details in the DB.

Login Screen:
- Admin and Customers can use this screen to log in.

Home Screen (logged in as admin):
- Logout button: To logout from the app.
- Fetch all the customers from Core Data and list them on the Home Screen using a Table View with custom cells showing actionable information about them:
  - Name
  - Phone
  - City
  - Process Status
- The admin will use this information to approach the customers and get them onboarded for the tax filing process.
- Process Status types:
  - AWAITED – when the admin is yet to contact the customer.
  - FAILEDTOREACH – when the admin tried to but could not reach the customer.

- o ONBOARDED – when the admin reached out, onboarded the customer, and is now waiting for their confirmation and payment.
  - o INPROCESS – when the tax filing is in process.
  - o COMPLETED – when the admin has completed the process for the customer.
  - o DENIED – when the customer has denied availing the firm's services.
- All customers will have AWAITED status in the beginning.
- The background color of a table view row should be based on the process status and should change when the process status changes:
  - o AWAITED – Yellow tone.
  - o FAILEDTOREACH – Light Red tone.
  - o ONBOARDED – Light Green tone.
  - o INPROCESS – Mid Green tone.
  - o COMPLETED – Dark Green tone.
  - o DENIED – RED tone.
- Tapping on a row in the Table View should take the admin to the Customer Detail Screen. Show all the information of the customer here including their location on a map. On this screen, admin should be able to change the process status for that customer.
- Back on the Home Screen, provide the option of swipe-to-delete a customer, if in some cases, the admin concludes that a certain customer data is not real. Ask for a confirmation from the admin before deleting the data to avoid a potential mistake. Updated data should reflect and persist in Core Data.

Home Screen (logged in as customer):
- Logout button: To logout from the app.
- Customer will be able to see all their details here. They should be able to edit the details (except email) which should reflect on the admin side. They can see their process status as set by admin. Note: Process status will be read-only for a customer, and they should not be able to edit. It should be specified in text with the associated color.

Customer Detail Screen (only for admin):
- Show all the details of the customer including their location on the map.
- Admin should be able to modify the process status of a customer from this screen.
- The modification must persist using Core Data and should reflect on the Home Screen. It should reflect on the customer side.
- At any time, the admin should be able to go back to the Home Screen using the Back button on the Navigation bar.

END OF ASSESSMENT