**Homework #4**

Case Project: Rental Car App

Application title: Rental Car App

Purpose: A Rental Car app provides a listing of cars stored in the cloud. By selecting a car, users get info about the car and are allowed to **calculate rental costs** and **update rental costs**.

Algorithm: 1. An opening screen displays a welcome message (such as “Welcome to Rental Car App!”) and a button for users to go to the next screen.

2. The second screen displays a listing of cars (their id and name).

3. When the user selects a car, a third screen displays the car’s Id, name, brand, color, rental cost per day, an **input field** used by customer representatives to enter the number of rental days, and a **Calculate Total Cost** button.

4. After the **Calculate Total Cost** button is “touched”, a “popup” message is displayed to show the total rental cost. However, **if the number of days is larger than 30, you show a message asking the customer representatives to call the phone number 512-777-2222.**

5. On the third screen, an **Update** button can be tapped to go to the fourth screen (the **Update Rental Cost** screen.

6. The fourth screen displays the **Id and name** of the car, an **input field** used by customer representatives to enter the new rental cost per day, an **Update Rental Cost per Day** button to update the car’s rental cost per day, and a **Home** button to return to the opening screen.

Conditions: 1. Use a Rental Car **Java object** to provide the Id **(integer**), Name, Brand, Color, Rental Cost per Day (**decimal number**) for each car in the cloud.

2. You must use a **ListActivity** object to display the list of cars. **The arrays must be created (contained) in the ListActivity object.**

3. Each list item displays **a car image** and the name (such as Equinox) of each car in the list view.

4. **The rental car data must be stored in a cloud-based database (Firebase).**

5. **You must enter at least five rental cars into your database.**

6. **You must use Rest API to connect to your database and perform database operations.**

Due Date: **May 10, 11:55 PM**

**You must turn in your project as a zip file and turn it in using the Assignments tool (HW4) on the TRACS.**