Programming part (8%):

Car List application:

Find the skeleton project for midterm2 on this GitHub link: <a href="https://github.com/RaniaArbash/Midterm2">https://github.com/RaniaArbash/Midterm2</a> SkeletonProject.git

This project is for collecting the user's cars information from which includes owners name, car image, car model and year, then show this information in a list. (No persistent storage required).

In this project you could find 4 Java classes and three layout files:

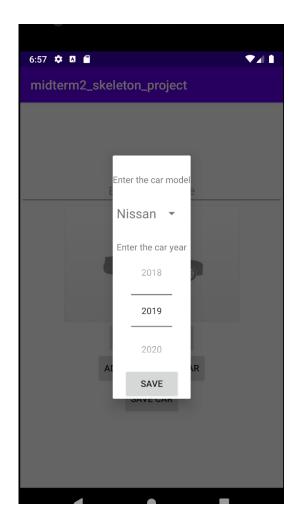
- 1. Main activity.java
- 2. Car Class.java
- 3. ReportActivity.java
- 4. AddYearAndModelDialog.java
- 5. Activity\_maint.xml
- 6. Activity\_report.xml
- 7. Add\_model\_year.xml

When you run the application, you should see this app:

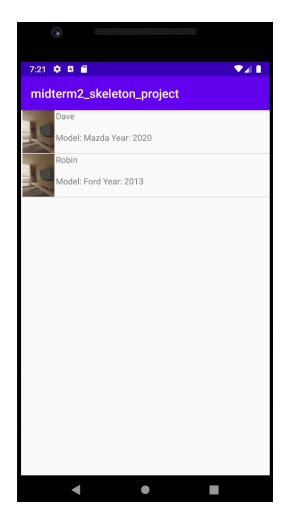


You must add the following functionality to this project:

- 1. When the user clicks on "Your Car Image" button you have to add an intent to use the device camera and capture a user's car picture and save it. (you could use emulator's camera or physical device)
- 2. When the user clicks on "Add Model and Year" button you have to use Dialog fragment to ask the user to select the car's model from drop down list (spinner) and car's year using number picker elements.
- 3. Design the dialog layout using constraint layout (like the image below).



- 4. Build the Car object (owner name, image, year, model) and Cars list.
- 5. When the user clicks on Save Button, the app navigates to report activity, in report activity the list of all saved cars listed in a list view with custom adapter (Car image, Owner name and car model and year)
- 6. Design the list-item layout using Linear layout.



Note: If you have any difficulties finishing any part, keep it empty and continue to another part.

For example: If you were not able to complete working with fragment part (selecting year and model) put those data as zero and empty string then continue building the car object.

If you were not able to capture a camera image, keep it null and continue building the car object.

## Reflection part (7%):

- 1- Explain in detail how exactly you complete this project, what are the used classes and objects and how did you use them.
- 2- Explain how the data transferred between your application's components.

## Submit the midterm:

Create a document file and give it this title "your name\_MAP or DPS\_your section\_midterm test project number2".

Write your name, student number, class and section number at the beginning of your document.

Start the documents with reflection questions and answers then copy the code from your project and paste it in that document (don't include import statements), put Java classes first them move to xml files.

Before each class or xml code, write the name of that class or xml file in bigger font and align it in the middle.

Add the important comments in your code.

Include some screenshots in your document and a link to your running application from this online emulator <a href="https://appetize.io">https://appetize.io</a> (if applicable)

Submit your document with main folder of your application.

Any similarity between two projects, the two students will get ZERO for the midterm mark.