#### **Project Requirements**

### Description

The project is to be carried out individually. Themes will be allocated on online.ase.ro. A solution for the Android mobile platform should be implemented using Java.

### **Submission Requirements**

The project is individual and must be uploaded by the end of the 13th week on the platform <a href="http://online.ase.ro">http://online.ase.ro</a>. The assessment will be done according to the following scale:

#### Scale

- 1. Defining a minimum of six activities, populated with appropriate visual controls; (0.5 pts.)
- 2. Use of various controls (Button, TextView, EditView, CheckBox, Spinner, ProgressBar, SeekBar, Switch, RatingBar, ImageView, DatePicker, or TimePicker); (1 pt.)
- 3. Use of at least one data entry form; (0.5 pts.)
- 4. Transfer of parameters (custom objects and primitives) between at least two activities; (0.5 pts.)
- 5. Implementation of a custom adapter (at least three different visual controls); (0.5 pts.)
- 6. Implementation and use of asynchronous operations; (0.5 pts.)
- 7. Use of classes for accessing external resources (from the network); (0.25 pts.)
- 8. Processing JSON files. Files must contain at least 3 nodes arranged on different levels. Each node must have at least 3 attributes; (0.75 pts.)
- 9. Use of preference files. Both writing and reading; (0.5 pts.)
- 10. Creating a SQLite database with at least two tables linked together. Implementation of DDL operations; (0.5 pts.)
- 11. Implementation of DML operations. For each table, at least one data access class should be implemented including methods for insertion, modification, and deletion. All methods must be called; (1 pt.)
- 12. Defining a minimum of two reports (displaying in activities) of information retrieved from the database. Reports differ in terms of structure; (0.5 pts.)
- 13. Use of two-dimensional graphics elements, with values retrieved from the database (1 pt.)
- 14. Processing image elements from different sources (static images, retrieved through the network, loaded from the mobile device's gallery, retrieved from databases); Images must be sourced from at least two sources; (0.5 pts.)
- 15. Styling the mobile application (for example, create a new theme in the styles.xml file or modify the font, colors of visual components); (0.75 pts.)
- 16. All strings used at the interface level should be retrieved from resources; (0.75 pts.)

## **Deductions**

• 2 points - non-compliance with project submission requirements (mode of sending files, archive naming, archive structure, not deleting build directories).

# **Minimum Conditions for Passing:**

- The application must be functional.
- The application must address the theme of the project.
- Achieving a minimum score of 5 points out of 10.