Toronto Parks Guide

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1. THE LAUNCH OF THE APPLICATION

1.1. This application first checks whether the database exists.

a. If the database exists the application can work without the Internet (convenient for the user), because the application can use the information located on the phone and therefore does not require the Internet.

b. If the database does not exist, the application will still try to connect to the Internet. If the Internet is available – the application creates the database, connects to the server, parsed all data from the XML file using XMLPullParser and finally stores all its data in the database. (This method has been chosen as a better way to store the information comparing to creating objects).

If the Internet is not available, the application will inform the user that it requires the Internet to create the database.

The challenges I faced. The application did not check the connection with the Internet: created the database and obviously could not parse information to the database.
Solution: I have implemented the method that checks the availability of the Internet.

2. MAIN MENU

2.1. The menu provides two options: “Show All Parks” and “Search facilities”.
a. If the user chooses “Show All Parks” the app calls ShowAll activity will display the list of all Parks.
b. If the user chooses “Searchs” the app calls Search Activity will display the checkboxes for the available facilities.

3. SHOW ALL PARKS

3.1. “Show All Parks” uses a Filter to make the app easier to browse the list of all the parks. When the user presses the name of the park it calls “Detail” activity it shows detailed information about the park.
3.2. The Search button in the menu allows a user to start “Search” activity directly from ShowAll activity.

The problems I faced. Implementing the Filter. The default Filter implementation did not work for the custom Adapter.
Solution: I have implemented the Filter method using a rawQuery.

4. SEARCH

4.1. Search. The application asks the user to choose facilities which the user wants to find in the park. After that the application is looking for the parks which matches the requirements and then displays them. The user can press any of the parks to receive detailed information about the park.
4.2. The activity shows different facilities to choose. **TEACHER'S REQUIREMENT**

5. DETAILS

5.1. The activity retrieves the information about the park from the database and then displays it on the

screen. It shows the Name of the park, Address, Postal Code and available Facilities.
5.2. The activity has a Google Map fragment which use a Camera Activity to show exactly where the place is on the map is located. **TEACHER'S REQUIREMENT**
5.3. When the park is displayed on the GoogleMap it shows a marker with the name of the park. **TEACHER'S REQUIREMENT**
5.4. When the user presses on the marker, an option "to show the route" appears.

The problems I faced. The program crashed when the "details" activity screen was rotating.
Solution: I have changed the Fragment in the Layout to the Frame.
The problems I faced. The program crashed when you clicked on some parks.
Solution: I have changed the name of the park as criteria for search longitude and latitude on the map to address (appended with string "Toronto"). It is because some parks were not found on the map and the GoogleMap returned nullpointer.