ICP – 10

Developing earthquake

information application for Android

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ICP - 10

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ICP10 Repository: <https://github.com/UMKC-APL-WebMobileProgramming/ICP10-AnilkumarreddyNandikonda>

ICP10 source code link: <https://github.com/UMKC-APL-WebMobileProgramming/ICP10-AnilkumarreddyNandikonda/tree/main/EarthquakeApp>

My Partner :

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Partner Repository: <https://github.com/UMKC-APL-WebMobileProgramming/ICP10-YAbhinay>

Source Code Link: <https://github.com/UMKC-APL-WebMobileProgramming/ICP10-YAbhinay/tree/main/Source/EarthquakeApp/app/src>

ICP10 video: <https://umsystem.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=7cd45e14-fae4-400b-8c50-adda007f0f97>

Lesson Overview: This lesson helps understand some crucial aspects of Android, such as fetching JSON data from APIs, parsing the JSON data, handling errors, using the Async Task Class, and some Java elements and usage of ListView.

Programming elements: RESTful Services, ListView, Adapter, Recycling, Multi-Threading, and Async Task

In Class Programming (ICP):

Earthquake Info App: Create a mobile application with the following requirements.

1. The main activity should be a list of earthquakes with information as shown below.
2. On clicking any item Earthquake, the user must be directed to the USGS web page, which contains further information about the selected earthquake.
3. Follow all the three TODO instructions in the QueryUtils.java file and two more TODO instructions in the EarthquakeActivity.java file and AndroidManifest.xml to complete the functionality

To get the ListView, the following code was added, which also finished all of the TODO's in the source code.

* URL is created, where we get the data
* We get JSON response is stored in string format.

Text

Description automatically generated

* In before step which we got JSON response, now it will be parse into JSON object. The JSON object will be in clearly data i.e Time, Date, Latitude, Longitude

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* We can see different activities i.e. Earthquakes location countries, cities.

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* Giving permissions to user to use the services of the application.

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**OUTPUT :**

* The activities are listed here, where we can access the data for each and every activity.

Graphical user interface, text, application

Description automatically generated

* After selecting one activity we can observe the earthquake date, time latitude, longitude, URL’s to view exact point of location.

Graphical user interface, application

Description automatically generated