CS493

Regis University Senior Capstone

Presentation of DataFace

handout



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The Object Based Study Application
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1 A quick review about the concepts which are forming the DataFace application

To begin I would like to ask you to take a look at my project on the GITHUB page here: DataFace wiki The below is an example of a constructor. DataFace uses two constructors: ConstructorOne and ConstructorTwo.

```
public Bicycle(int startCadence, int startSpeed, int startGear) {
  gear = startGear;
  cadence = startCadence;
  speed = startSpeed;
}
  Therefore, to create a new Bicycle:
Bicycle myBike = new Bicycle(30, 0, 8);
```

2 This is a quick review of the portions of the Android API used in this project

The following API Items may be covered:

```
Activities (Activity 2013)
Views (View 2013)
Layouts (Layouts 2013; R 2013)
Intents (Intent 2013)
ListView (ListView 2013)
```

Where is Main()? AH HA! Android apps have NO Main function, just a bunch of Activities! Instead Activities are stacked and play off of each other.

3 Review of the SQLite3 database on android

- SQLite3 (Saving Data in SQL Databases 2013)
- android.database.sqlite (android.database.sqlite 2013)
- SimpleCursorAdapter (SimpleCursorAdapter 2013)

I will try to demonstraight the two SQLite databases and walk through the various portions of the code to show its effects on the ListView.

4 Some important point to look for

Here are some points to look for which will help put all these pieces together:

- Activities have lifecycles with three states.
 - 1. Resumed: in the foreground
 - 2. Paused: The current activity is coved by another partially in a transparent state.
 - 3. Stopped: Activity is in the background and no longer visible.
- Intents launch Activities.
- Bundles pass data between Activities.
- The SimpleCursorAdapter is a specialized adapter that uses the database cursor to map columns in a TextView or ImageView.
- The latest DataFace apk can be found here: DataFace-release-unsigned

5 A walk through user input

The following is a Walkabout user input:

- 1. GetUserTextInputOne gets user input with 2 * EditText and a Button.
- 2. ConstructorOne is called by GetUserTextInput and two strings are sent to the DataBaseOne
- 3. DataBaseOne adds the two strings to the KEY_OBNAME and KEY_CONTENT or objectone and contentone in the databaseone table tableone.

For now all data is viewed by the use of the SimpleCursorAdapter passing all the columns to a ListView. There is a second database which hold the second table, similar queries are made with some small differences.

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