Activity-Package

MainActivity
This is the launching point of the application. The main activity simply displays a few buttons which allows
the user to choose which action to take with the application. The main activity uses the external listener
MainActivityButtonListener to decide which Activity to launch next.

RouteActivity
This activity Presents at map to the user. It also tracks the users movement and will paint the geoPointList as the
user moves. This is accomplished by using Google's map API.

ListExistingRoutesActivity
An activity that will present the user with the option to choose and old route.Gets routes from database and presents
them in a listview.

MediaSelectorActivity
This activity displays a list of the available media on the device. It allows selecting several items from the list and
by selecting the "done" icon in the options menu, the activity will return the results to the calling activity. The list
can be sorted via the options menu. The available sorting columns are artist, title and album. By default the list
is sorted by artist name. The selection from the database consists of the _ID, ARTIST, ALBUM, TITLE, DATA,
DISPLAY_NAME and DURATION columns and is also limited to contain only files that are markes as IS_MUSIC.

Adapter-Package

MediaSelectorAdapter
This adapter is used by the media selector activity to display the list rows. It is needed to keep track of which
checkboxes have been checked and which has not. The system is aggressive in trying to re-use views that are not
currently being displayed which leads to strange behaviour with the checkboxes where they keep their "checked"
state although they have not been checked for a specific item. The class is extending SimpleCursorAdapter for easy
use of the cursor that can be obtained from a database or content resolver.

Content-Package

Result
This class is the result class used when saving results after finishing a route. It contains several constructors in order
to be be flexible during development of the android application.

Route
An activity that will present the user with the option to choose and old route. As of now it is just a button but a
future release will include a ListView representing the older routes saved in the database that the user can choose
from.
SoundManager
This class manages playing of sounds from a sound pool and recording of new sounds. This class should only be
used for sounds that are less then 1MB in size, for playing music the media player or a media service should be
used.

Track

This is a classic plain old java object which stores information about a specific music track that the user has selected. The class implements the Parcelable interface so that it can be easily transferred via intents when the application is switching between activities.

Data-Package

Database
This class handles creation, updating and deletion of the database. It uses the adapter classes constants for table creation. This class also defines the database version number and its filename.

DatabaseHandler
This class handles the communication between the database, its adapters and the rest of the application. It keeps an instance of each table adapter that is used for quick and easy access to the database.

DBAdpter
This is an abstract class that works as a base for all the table adapter classes. It handles fetching the writable database, open and closing of the database. Any table adapter should extend this class to get that functionality for free.

DBCheckPointAdapter
This class is the checkpoint adapter class used to communicate with the "checkpoints" table in the SQLite database. It contains information about the columns, basic Create, Read, Delete operations and also the initial "create table" statement.

DBGeoPointAdapter
This class is the geopoint adapter class used to communicate with the "geopoints" table in the SQLite database. It contains information about the columns, basic Create, Read, Delete operations and also the initial "create table" statement.

DBResultAdapter
This class is the result adapter class used to communicate with the "result" table in the SQLite database. It contains information about the columns, and basic Create, Read, Delete operations and also the initial "create table" statement.

DBRouteAdapter
This class is the route table adapter class used to communicate with the "routes" table in the SQLite database. It contains information about the columns, basic Create, Read, Update, Delete operations and also the initial "create table" statement.

DBTrackAdapter
This class is the track adapter class used to communicate with the "tracks" table in the SQLite database. It contains information about the columns, basic Create, Read, Delete operations and also the initial "create table" statement.

Dialog-Package

EditCheckPointDialog
This is the dialog that pops up when a checkpoint is created or touched. The Dialog has settings such as name & radius and buttons for deleting and saving the checkpoint.

SaveRouteDialog

This Dialog class is shown to the user when the user has recorded a new route and wishes to finish recording it. It has inputs for the name and description of the route and it also has a checkbox which is connected to a boolean value which decides if the results that the user had (time, length) should also be saved with the route.

Listener-Package

MainActivityButtonListener
This is the listener class for the main activity and it takes a Context as a parameter which is used to launch the next Activity. This class is responsible for deciding which button was clicked and it then responds accordingly by launching the activity that the user wishes to see next. If no matching View can be found we just do a default return.

MapLocationListener
The MapLocationListener class is a LocationListener which uses callback to update the location

MapOnGestureListener
The MapOnGestureListener class is a OnGestureListener and a OnDoubleTapListener and listen after single tap's and double tap's to call the onTap method in callback with different event types

MediaServicePhoneStateListener
This is a listener that is used to handle incoming phonecalls and end of phonecalls. It has a custom interface which is used to implement the Callbacks pattern.

Overlay-Package

CheckPoint
The Checkpoint class in which we can set different attributes and contains a geopoint

CheckPointOverlay
The CheckPointOverLay class contains a list of checkpoints and a default marker that will show up on map.

RouteOverLay

Service-Package

MediaService
This service class is used to play media from a device. It uses a media player which is loaded and prepared asynchronously and also shows a notification that the service is running as a foreground service to the user. It uses a custom phone state listener to listen for the interesting events from the system and then implements a custom Callbacks interface to be able to receive information about the events. It requires a playlist to be passed in as a string array list extra with information about where the media it is supposed to play is located.

View-Package

EditRouteMapView
The EditRouteMapView class is a subclass from mapView with a overwritten onTouchEvent method with a gestureDetector which is used for detecting single and double tap´s.