Changing Bluetooth discoverability in Java ME

Overview

This code example demonstrates how to change device discoverability using the Java ME Bluetooth API.

Discoverability mode can be set using the `LocalDevice.setDiscoverable` method. This method takes discoverability id as a parameter. This parameter must be one of the following values:

```
DiscoveryAgent.GIAC;
DiscoveryAgent.LIAC;
DiscoveryAgent.NOT_DISCOVERABLE;
```

More information on discoverability modes can be found in the JSR-82 specification.

Source file: BTDiscoverabilityMode.java

```
    /**
     * Allows to select discover mode from Bluetooth device.
     */
    private List listModes;
    /**
     * Discoverability mode id array.
     */
    private int[] modeArray;

    /**
     * Instantiates a listModes.
     */
    private void setupModeList() {
        listModes = new List( "Mode list", Choice.IMPLICIT );

        listModes.setSelectCommand( CHANGE_COMMAND );
        listModes.addCommand( BACK_COMMAND );
        listModes.setCommandListener( this );

        // adding discoverability modes to the list
        listModes.append( "GIAC", null );
        listModes.append( "LIAC", null );
        listModes.append( "NOT DISCOVERABLE", null );

        //setting mode id array values
        modeArray[0] = DiscoveryAgent.GIAC;
        modeArray[1] = DiscoveryAgent.LIAC;
        modeArray[2] = DiscoveryAgent.NOT_DISCOVERABLE;
    }

    /**
     * From CommandListener.
     * Called by the system to indicate that a command has been invoked on a
     * particular displayable.
     * @param command the command that was invoked
     * @param displayable the displayable where the command was invoked
     */
    public void commandAction(Command command, Displayable displayable) {
        if (command == EXIT_COMMAND) {
            // Exit the MIDlet
            exit();
        } else if (command == EXECUTE_COMMAND) {
            // Open discoverability mode list
            display.setCurrent( listModes );
        } else if ( command == CHANGE_COMMAND ) {
            //get currently selected contact
            int i = listModes.getSelectedIndex();
            String item = listModes.getString( i );
            printString( "Selected mode: " + item );
            // Bringing back main form to the foreground
            display.setCurrent( mainForm );
            // Changing discoverability mode
            changeMode( i );
        } else if ( command == BACK_COMMAND ) {
            display.setCurrent( mainForm );
        }
    }
    /**
     *
     * @param modeIndex
     */
    private void changeMode( int modeIndex ) {
        LocalDevice devLocal = null;
        try {
            printString( "Getting local device ..." );
            devLocal = LocalDevice.getLocalDevice();
        } catch ( BluetoothStateException e ) {
            printString( e.toString() );
            return;
        }
        try {
            printString( "Changing discoverability mode" );
            devLocal.setDiscoverable( modeArray[ modeIndex ] );
        } catch ( BluetoothStateException e ) {
            printString( e.toString() );
            return;
        }
        printString( "Discoverability mode changed." );
    }
```


(C) Copyright Nokia 2013. All rights reserved.

Postconditions

When the MIDlet is started, the main form with a text field will be displayed. To change the current bluetooth device mode, you should press the 'Modes' softkey, which displays a list of available modes.

When the list appears, select a specific mode and press the 'Change' softkey. The main form will be brought to the foreground. If the discoverability mode change procedure is successful, a 'Discoverability mode changed' message will appear.

(C) Copyright Nokia 2013. All rights reserved.

(C) Copyright Nokia 2013. All rights reserved.