

CSE 4002 – MOBILE APPLICATION DEVELOPMENT

MINI PROJECT

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FASTNFITNESS APPLICATION

SOURCE CODE

JAVA CODE :-

```
package com.easyfitness;

import android.Manifest;
import android.app.AlertDialog;
import android.content.DialogInterface;
import android.content.Intent;
import android.content.SharedPreferences;
import android.content.pm.PackageManager;
import android.content.res.Configuration;
import android.os.Bundle;
import android.os.Environment;
import android.preference.PreferenceManager;
import android.view.Gravity;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.EditText;
import android.widget.ListView;
import android.widget.PopupMenu;
import android.widget.Toast;

import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
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import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import com.easyfitness.DAO.CVSManger;
import com.easyfitness.DAO.DAOCardio;
import com.easyfitness.DAO.DAOFonte;
import com.easyfitness.DAO.DAOMachine;
import com.easyfitness.DAO.DAOProfil;
import com.easyfitness.DAO.DatabaseHelper;
import com.easyfitness.DAO.Fonte;
import com.easyfitness.DAO.Machine;
import com.easyfitness.DAO.Profile;
import com.easyfitness.DAO.bodymeasures.BodyMeasure;
import com.easyfitness.DAO.bodymeasures.DAOCBodyMeasure;
import com.easyfitness.DAO.cardio.DAOCOldCardio;
import com.easyfitness.DAO.cardio.OldCardio;
import com.easyfitness.bodymeasures.BodyPartListFragment;
import com.easyfitness.fonte.FontesPagerFragment;
import com.easyfitness.intro.MainIntroActivity;
import com.easyfitness.machines.MachineFragment;
import com.easyfitness.utils.CustomExceptionHandler;
import com.easyfitness.utils.FileChooserDialog;
import com.easyfitness.utils.ImageUtil;
import com.easyfitness.utils.MusicController;
import com.mikhaellopez.circularimageview.CircularImageView;
import com.onurkaganaldemir.ktoastlib.KToast;
import com.theartofdev.edmodo.cropper.CropImage;
import com.theartofdev.edmodo.cropper.CropImageView;

import java.io.File;
import java.util.ArrayList;
import java.util.List;

//import com.crashlytics.android.Crashlytics;

//import io.fabric.sdk.android.Fabric;

public class MainActivity extends AppCompatActivity {

    private static final int TIME_INTERVAL = 2000; // # milliseconds, desired
time passed between two back presses.
    public static String FONTESPAGER = "FontePager";
    public static String FONTES = "Fonte";
    public static String HISTORY = "History";
    public static String GRAPHIC = "Graphics";
    public static String CARDIO = "Cardio";
    public static String WEIGHT = "Weight";
    public static String PROFILE = "Profile";
    public static String BODYTRACKING = "BodyTracking";
    public static String BODYTRACKINGDETAILS = "BodyTrackingDetail";
    public static String ABOUT = "About";
    public static String SETTINGS = "Settings";
    public static String MACHINES = "Machines";

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Intent(Intent.ACTION_PICK);
                                photoPickerIntent.setType("image/*");
                                startActivityResult(photoPickerIntent,
ImageUtil.REQUEST_PICK_GALLERY_PHOTO);
                                break;
                                // Camera with Cropping
                                case 0:
                                    //dispatchTakePictureIntent(mF);
                                    // start picker to get image for cropping and
then use the image in cropping activity
                                    CropImage.activity()

.setGuidelines(CropImageView.Guidelines.ON)
                                    .start(getActivity());
                                    break;
                                case 2: // Delete picture

                                    break;
                                // Camera
                                default:
                                    }
                                }
                            });
                            itemActionbuilder.show();
                            return true;
                        case R.id.change_profil:
                            String[] profilListArray =
getActivity().mDbProfils.getAllProfil();

                            AlertDialog.Builder changeProfilbuilder = new
AlertDialog.Builder(getActivity());

changeProfilbuilder.setTitle(getActivity().getResources().getText(R.string.pr
ofil_select_profil))
                            .setItems(profilListArray, (dialog, which) -> {
                                ListView lv = ((AlertDialog) dialog).getListView();
                                Object checkedItem = lv.getAdapter().getItem(which);
                                setCurrentProfil(checkedItem.toString());
                                KToast.infoToast(getActivity(),
getActivity().getResources().getText(R.string.profileSelected) + " : " +
checkedItem.toString(), Gravity.BOTTOM, KToast.LENGTH_LONG);
                                    //Toast.makeText(getApplicationContext(),
getActivity().getResources().getText(R.string.profileSelected) + " : " +
checkedItem.toString(), Toast.LENGTH_LONG).show();
                                });
                            changeProfilbuilder.show();
                            return true;
                        case R.id.delete_profil:
                            String[] profildeleteListArray =
getActivity().mDbProfils.getAllProfil();

                            AlertDialog.Builder deleteProfilbuilder = new
AlertDialog.Builder(getActivity());

deleteProfilbuilder.setTitle(getActivity().getResources().getText(R.string.pr
ofil_select_profil_to_delete))
                            .setItems(profildeleteListArray, (dialog, which) -> {

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        ListView lv = ((AlertDialog) dialog).getListView();
        Object checkedItem = lv.getAdapter().getItem(which);
        if
(getCurrentProfil().getName().equals(checkedItem.toString())) {
            KToast.errorToast(getActivity(),
getActivity().getResources().getText(R.string.impossibleToDeleteProfile).toSt
ring(), Gravity.BOTTOM, KToast.LENGTH_LONG);
        } else {
            Profile profileToDelete =
mDbProfils.getProfil(checkedItem.toString());
            mDbProfils.deleteProfil(profileToDelete);
            KToast.infoToast(getActivity(),
getString(R.string.profileDeleted) + ":" + checkedItem.toString(),
Gravity.BOTTOM, KToast.LENGTH_LONG);
        }
    });
    deleteProfilbuilder.show();
    return true;
case R.id.rename_profil:
    getActivity().renameProfil();
    return true;
case R.id.param_profil:
    showFragment(PROFILE);
    return true;
default:
    return false;
}
};
private long mBackPressed;

@Override
public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);

    top_toolbar = this.findViewById(R.id.actionToolbar);
    setSupportActionBar(top_toolbar);
    top_toolbar.setTitle(getResources().getText(R.string.app_name));

    if (savedInstanceState == null) {
        if (mpFontesPagerFrag == null)
            mpFontesPagerFrag =
FontesPagerFragment.newInstance(FONTESPAGER, 6);
        if (mpCardioFrag == null) mpCardioFrag =
CardioFragment.newInstance(CARDIO, 4);
        if (mpWeightFrag == null) mpWeightFrag =
WeightFragment.newInstance(WEIGHT, 5);
        if (mpProfileFrag == null) mpProfileFrag =
ProfileFragment.newInstance(PROFILE, 10);
        if (mpSettingFrag == null) mpSettingFrag =
SettingsFragment.newInstance(SETTINGS, 8);
        if (mpAboutFrag == null) mpAboutFrag =
AboutFragment.newInstance(ABOUT, 6);
        if (mpMachineFrag == null) mpMachineFrag =
MachineFragment.newInstance(MACHINES, 7);
        if (mpBodyPartListFrag == null)

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        mpBodyPartListFrag =
BodyPartListFragment.newInstance(BODYTRACKING, 9);
    } else {
        mpFontesPagerFrag = (FontesPagerFragment)
getSupportFragmentManager().getFragment(savedInstanceState, FONTESPAGER);
        mpCardioFrag = (CardioFragment)
getSupportFragmentManager().getFragment(savedInstanceState, CARDIO);
        mpWeightFrag = (WeightFragment)
getSupportFragmentManager().getFragment(savedInstanceState, WEIGHT);
        mpProfileFrag = (ProfileFragment)
getSupportFragmentManager().getFragment(savedInstanceState, PROFILE);
        mpSettingFrag = (SettingsFragment)
getSupportFragmentManager().getFragment(savedInstanceState, SETTINGS);
        mpAboutFrag = (AboutFragment)
getSupportFragmentManager().getFragment(savedInstanceState, ABOUT);
        mpMachineFrag = (MachineFragment)
getSupportFragmentManager().getFragment(savedInstanceState, MACHINES);
        mpBodyPartListFrag = (BodyPartListFragment)
getSupportFragmentManager().getFragment(savedInstanceState, BODYTRACKING);
    }

    loadPreferences();

    DatabaseHelper.renameOldDatabase(this);

    if (DatabaseHelper.DATABASE_VERSION >= 15 && !mMigrationBD15done) {
        DAOOldCardio mDbOldCardio = new DAOOldCardio(this);
        DAOMachine lDAOMachine = new DAOMachine(this);
        if (mDbOldCardio.tableExists()) {
            DAOCardio mDbCardio = new DAOCardio(this);
            List<OldCardio> mList = mDbOldCardio.getAllRecords();
            for (OldCardio record : mList) {
                String exerciseName = "";
                Machine m = lDAOMachine.getMachine(record.getExercice());
                exerciseName = record.getExercice();
                if (m != null) { // if a machine exists
                    if (m.getType() == DAOMachine.TYPE_FONTE) { // if it
is not a Cardio type
                        exerciseName = exerciseName + "-Cardio"; // add a
suffix to
                    }
                }

                mDbCardio.addCardioRecord(record.getDate(), "00:00",
exerciseName, record.getDistance(), record.getDuration(),
record.getProfil());
            }
            mDbOldCardio.dropTable();

            DAOFonte mDbFonte = new DAOFonte(this);
            List<Fonte> mFonteList =
mDbFonte.getAllBodyBuildingRecords();
            for (Fonte record : mFonteList) {
                mDbFonte.updateRecord(record); // Automatically update
record Type
            }
            ArrayList<Machine> machineList =

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lDAOMachine.getAllMachinesArray();
    for (Machine record : machineList) {
        lDAOMachine.updateMachine(record); // Reset all the
fields on machines.
    }
}
mMigrationBD15done = true;
savePreferences();
}

/* creation de l'arborescence de l'application */
File folder = new File(Environment.getExternalStorageDirectory() +
"/FastnFitness");
boolean success = true;
if (!folder.exists()) {
    success = folder.mkdir();
}
if (success) {
    folder = new File(Environment.getExternalStorageDirectory() +
"/FastnFitness/crashreport");
    success = folder.mkdir();
}

if (folder.exists()) {
    if (!(Thread.getDefaultUncaughtExceptionHandler() instanceof
CustomExceptionHandler)) {
        Thread.setDefaultUncaughtExceptionHandler(new
CustomExceptionHandler(
            Environment.getExternalStorageDirectory() +
"/FastnFitness/crashreport"));
    }
}

if (savedInstanceState == null) {
    showFragment(FONTESPAGER, false); // Create fragment, do not add
to backstack
    currentFragmentName = FONTESPAGER;
}

dataList = new ArrayList<>();
mDrawerLayout = findViewById(R.id.drawer_layout);
mDrawerList = findViewById(R.id.left_drawer);

DrawerItem drawerTitleItem = new DrawerItem("TITLE",
R.drawable.ic_profile_black, true);

dataList.add(drawerTitleItem);
dataList.add(new
DrawerItem(this.getResources().getString(R.string.menu_Workout),
R.drawable.ic_barbell, true));
//dataList.add(new
DrawerItem(this.getResources().getString(R.string.CardioMenuLabel),
R.drawable.ic_running, true));
dataList.add(new
DrawerItem(this.getResources().getString(R.string.MachinesLabel),
R.drawable.ic_machine, true));
dataList.add(new

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DrawerItem(this.getResources().getString(R.string.weightMenuLabel),
R.drawable.ic_scale, true));
    dataList.add(new
DrawerItem(this.getResources().getString(R.string.bodytracking),
R.drawable.ic_measuring_tape, true));
    dataList.add(new
DrawerItem(this.getResources().getString(R.string.SettingLabel),
R.drawable.ic_params, true));
    dataList.add(new
DrawerItem(this.getResources().getString(R.string.AboutLabel),
R.drawable.ic_action_info_outline, true));

    mDrawerAdapter = new CustomDrawerAdapter(this,
R.layout.custom_drawer_item,
    dataList);

    mDrawerList.setAdapter(mDrawerAdapter);

    roundProfile = top_toolbar.findViewById(R.id.imageProfile);

    mDrawerToggle = new ActionBarDrawerToggle(
        this, /* host Activity */
        mDrawerLayout, /* DrawerLayout object */
        top_toolbar, /* nav drawer icon to replace 'Up' caret */
        R.string.drawer_open, R.string.drawer_close
    );

    // Set the list's click listener
    mDrawerList.setOnItemClickListener(new DrawerItemClickListener());

    getSupportActionBar().setDisplayHomeAsUpEnabled(true);
    getSupportActionBar().setHomeButtonEnabled(true);

    musicController.initView();

    // Lance l'intro
    // Tester si l'intro a déjà été lancé
    if (!mIntro014Launched) {
        Intent intent = new Intent(this, MainIntroActivity.class);
        startActivityForResult(intent, REQUEST_CODE_INTRO);
    }
}

@Override
protected void onStart() {
    super.onStart(); // Always call the superclass method first

    if (mIntro014Launched) {
        initActivity();
    }

    SharedPreferences SP =
PreferenceManager.getDefaultSharedPreferences(getBaseContext());
    boolean bShowMP3 = SP.getBoolean("prefShowMP3", false);
    this.showMP3Toolbar(bShowMP3);
}

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public void onRestoreInstanceState(Bundle savedInstanceState) {
    // Always call the superclass so it can restore the view hierarchy
    super.onRestoreInstanceState(savedInstanceState);
}

@Override
protected void onSaveInstanceState(Bundle outState) {
    super.onSaveInstanceState(outState);

    //Save the fragment's instance
    if (getFontesPagerFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, FONTESPAGER,
mpFontesPagerFrag);
    if (getCardioFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, CARDIO,
mpCardioFrag);
    if (getWeightFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, WEIGHT,
mpWeightFrag);
    if (getProfileFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, PROFILE,
mpProfileFrag);
    if (getMachineFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, MACHINES,
mpMachineFrag);
    if (getAboutFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, ABOUT,
mpAboutFrag);
    if (getSettingsFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, SETTINGS,
mpSettingFrag);
    if (getBodyPartFragment().isAdded())
        getSupportFragmentManager().putFragment(outState, BODYTRACKING,
mpBodyPartListFrag);
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu items for use in the action bar
    MenuInflater inflater = getMenuInflater();
    inflater.inflate(R.menu.main_activity_actions, menu);

    // restore the profile picture in case it was overwritten during the
menu inflate
    if (mCurrentProfile != null)
setPhotoProfile(mCurrentProfile.getPhoto());

    return super.onCreateOptionsMenu(menu);
}

@Override
public boolean onPrepareOptionsMenu(Menu menu) {
    final MenuItem alertMenuItem = menu.findItem(R.id.action_profil);

    roundProfile.setOnClickListener(v -> {
        PopupMenu popup = new PopupMenu(getActivity(), v);
        MenuInflater inflater = popup.getMenuInflater();

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        inflater.inflate(R.menu.profile_actions, popup.getMenu());
        popup.setOnMenuItemClickListener(onMenuItemClick);
        popup.show();
    });

    return super.onPrepareOptionsMenu(menu);
}

private void exportDatabase() {
    // Here, thisActivity is the current activity
    if (ContextCompat.checkSelfPermission(this,
        Manifest.permission.WRITE_EXTERNAL_STORAGE)
        != PackageManager.PERMISSION_GRANTED) {
        // No explanation needed; request the permission
        ActivityCompat.requestPermissions(this,
            new String[]{Manifest.permission.WRITE_EXTERNAL_STORAGE},
            MY_PERMISSIONS_REQUEST_WRITE_EXTERNAL_STORAGE);
    } else {
        // Afficher une boîte de dialogue pour confirmer
        AlertDialog.Builder exportDbBuilder = new
AlertDialog.Builder(this);

exportDbBuilder.setTitle(getActivity().getResources().getText(R.string.export
_database));

exportDbBuilder.setMessage(getActivity().getResources().getText(R.string.expo
rt_question) + " " + getCurrentProfil().getName() + "?");

        // Si oui, supprimer la base de donnée et refaire un Start.

exportDbBuilder.setPositiveButton(getActivity().getResources().getText(R.stri
ng.global_yes), (dialog, which) -> {
            CVSManager cvsMan = new
CVSManager(getActivity().getBaseContext());
            if (cvsMan.exportDatabase(getCurrentProfil())) {
                KToast.successToast(getActivity(),
getCurrentProfil().getName() + ": " +
getActivity().getResources().getText(R.string.export_success),
Gravity.BOTTOM, KToast.LENGTH_LONG);
            } else {
                KToast.errorToast(getActivity(),
getCurrentProfil().getName() + ": " +
getActivity().getResources().getText(R.string.export_failed), Gravity.BOTTOM,
KToast.LENGTH_LONG);
            }

            // Do nothing but close the dialog
            dialog.dismiss();
        });

exportDbBuilder.setNegativeButton(getActivity().getResources().getText(R.stri
ng.global_no), (dialog, which) -> {
            // Do nothing
            dialog.dismiss();
        });
    }
}

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        AlertDialog exportDbDialog = exportDbBuilder.create();
        exportDbDialog.show();
    }
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // The action bar home/up action should open or close the drawer.
    // ActionBarDrawerToggle will take care of this.
    if (mDrawerToggle.onOptionsItemSelected(item)) {
        return true;
    }

    // Handle presses on the action bar items
    switch (item.getItemId()) {
        case R.id.export_database:
            exportDatabase();
            return true;
        case R.id.import_database:
            // Create DirectoryChooserDialog and register a callback
            FileChooserDialog fileChooserDialog =
                new FileChooserDialog(this, chosenDir -> {
                    m_importCVSchosenDir = chosenDir;
                    //Toast.makeText(getActivity().getBaseContext(),
"Chosen directory: " +
                        //      chosenDir, Toast.LENGTH_LONG).show();
                    CVSManager cvsMan = new
CVSManager(getActivity().getBaseContext());
                    cvsMan.importDatabase(m_importCVSchosenDir,
getCurrentProfil());
                });

            fileChooserDialog.setFileFilter("csv");

            fileChooserDialog.chooseDirectory(Environment.getExternalStorageDirectory() +
"/FastnFitness/export");
            return true;
        case R.id.action_deleteDB:
            // Afficher une boîte de dialogue pour confirmer
            AlertDialog.Builder deleteDbBuilder = new
AlertDialog.Builder(this);

            deleteDbBuilder.setTitle(getActivity().getResources().getText(R.string.global
_confirm));

            deleteDbBuilder.setMessage(getActivity().getResources().getText(R.string.dele
teDB_warning));

            // Si oui, supprimer la base de donnée et refaire un Start.

            deleteDbBuilder.setPositiveButton(getActivity().getResources().getText(R.stri
ng.global_yes), (dialog, which) -> {
                // recupere le premier ID de la liste.
                List<Profile> lList = mDbProfils.getAllProfils();
                for (int i = 0; i < lList.size(); i++) {

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        Profile mTempProfile = lList.get(i);
        mDbProfils.deleteProfil(mTempProfile.getId());
    }
    DAOMachine mDbMachines = new DAOMachine(getActivity());
    // recupere le premier ID de la liste.
    List<Machine> lList2 = mDbMachines.getAllMachinesArray();
    for (int i = 0; i < lList2.size(); i++) {
        Machine mTemp = lList2.get(i);
        mDbMachines.delete(mTemp.getId());
    }

    // redisplay the intro
    mIntro014Launched=false;

    // Do nothing but close the dialog
    dialog.dismiss();

    finish();
});

deleteDbBuilder.setNegativeButton(getActivity().getResources().getText(R.string.global_no), (dialog, which) -> {
    // Do nothing
    dialog.dismiss();
});

AlertDialog deleteDbDialog = deleteDbBuilder.create();
deleteDbDialog.show();

return true;
case R.id.action_apropos:
    // Display the fragment as the main content.
    showFragment(ABOUT);
    //getAboutFragment().setHasOptionsMenu(true);
    return true;
//case android.R.id.home:
//onBackPressed();
// return true;
case R.id.action_chrono:
    ChronoDialogbox cdd = new ChronoDialogbox(MainActivity.this);
    cdd.show();
    return true;
default:
    return super.onOptionsItemSelected(item);
}
}

@Override
public void onRequestPermissionsResult(int requestCode,
                                       String[] permissions, int[]
grantResults) {
    // If request is cancelled, the result arrays are empty.
    if (requestCode == MY_PERMISSIONS_REQUEST_WRITE_EXTERNAL_STORAGE) {
        if (grantResults.length > 0
            && grantResults[0] == PackageManager.PERMISSION_GRANTED) {
            KToast.infoToast(this, getString(R.string.access_granted),

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Gravity.BOTTOM, KToast.LENGTH_SHORT);
    exportDatabase();
} else {
    KToast.infoToast(this,
getString(R.string.another_time_maybe), Gravity.BOTTOM, KToast.LENGTH_SHORT);
}
}
}

public boolean CreateNewProfil() {
    AlertDialog.Builder newProfilBuilder = new AlertDialog.Builder(this);

newProfilBuilder.setTitle(getActivity().getResources().getText(R.string.creat
eProfilTitle));

newProfilBuilder.setMessage(getActivity().getResources().getText(R.string.cre
ateProfilQuestion));

    // Set an EditText view to get user input
    final EditText input = new EditText(this);
    newProfilBuilder.setView(input);

newProfilBuilder.setPositiveButton(getActivity().getResources().getText(R.str
ing.global_ok), (dialog, whichButton) -> {
    String value = input.getText().toString();

    if (value.isEmpty()) {
        CreateNewProfil();
    } else {
        // Create the new profil
        mDbProfils.addProfil(value);
        // Make it the current.
        setCurrentProfil(value);
    }
});

newProfilBuilder.setNegativeButton(getActivity().getResources().getText(R.str
ing.global_cancel), (dialog, whichButton) -> {
    if (getCurrentProfil() == null) {
        CreateNewProfil();
    }
});

    newProfilBuilder.show();

    return true;
}

public boolean renameProfil() {
    AlertDialog.Builder newBuilder = new AlertDialog.Builder(this);

newBuilder.setTitle(getActivity().getResources().getText(R.string.renameProfi

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lTitle));

newBuilder.setMessage(getActivity().getResources().getText(R.string.renamePro
filQuestion));

    // Set an EditText view to get user input
    final EditText input = new EditText(this);
    input.setText(getCurrentProfil().getName());
    newBuilder.setView(input);

newBuilder.setPositiveButton(getActivity().getResources().getText(R.string.gl
obal_ok), (dialog, whichButton) -> {
    String value = input.getText().toString();

    if (!value.isEmpty()) {
        // Get current profil
        Profile temp = getCurrentProfil();
        // Rename it
        temp.setName(value);
        // Commit it
        mDbProfils.updateProfile(temp);
        // Make it the current.
        setCurrentProfil(value);
    }
});

newBuilder.setNegativeButton(getActivity().getResources().getText(R.string.gl
obal_cancel), (dialog, whichButton) -> {
});

    newBuilder.show();

    return true;
}

private void setDrawerTitle(String pProfilName) {
    mDrawerAdapter.getItem(0).setTitle(pProfilName);
    mDrawerAdapter.notifyDataSetChanged();
    mDrawerLayout.invalidate();
}

/**
 * Swaps fragments in the main content view
 */
private void selectItem(int position) {
    // Highlight the selected item, update the title, and close the
drawer
    mDrawerList.setItemChecked(position, true);
    //setTitle(mPlanetTitles[position]);
    mDrawerLayout.closeDrawer(mDrawerList);
}

@Override
public void setTitle(CharSequence title) {
    getSupportActionBar().setTitle(title);
}

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    }

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        // Sync the toggle state after onRestoreInstanceState has occurred.
        mDrawerToggle.syncState();
    }

    @Override
    public void onConfigurationChanged(Configuration newConfig) {
        super.onConfigurationChanged(newConfig);
        mDrawerToggle.onConfigurationChanged(newConfig);
    }

    private void showFragment(String pFragmentName) {
        showFragment(pFragmentName, true);
    }

    private void showFragment(String pFragmentName, boolean addToBackStack) {

        if (currentFragmentName.equals(pFragmentName))
            return; // If this is already the current fragment, do no
replace.

        FragmentManager fragmentManager = getSupportFragmentManager();
        FragmentTransaction ft = fragmentManager.beginTransaction();

        // Then show the fragments
        if (pFragmentName.equals(FONTESPAGER)) {
            ft.replace(R.id.fragment_container, getFontesPagerFragment(),
FONTESPAGER);
        } else if (pFragmentName.equals(CARDIO)) {
            ft.replace(R.id.fragment_container, getCardioFragment(), CARDIO);
        } else if (pFragmentName.equals(WEIGHT)) {
            ft.replace(R.id.fragment_container, getWeightFragment(), WEIGHT);
        } else if (pFragmentName.equals(SETTINGS)) {
            ft.replace(R.id.fragment_container, getSettingsFragment(),
SETTINGS);
        } else if (pFragmentName.equals(MACHINES)) {
            ft.replace(R.id.fragment_container, getMachineFragment(),
MACHINES);
        } else if (pFragmentName.equals(ABOUT)) {
            ft.replace(R.id.fragment_container, getAboutFragment(), ABOUT);
        } else if (pFragmentName.equals(BODYTRACKING)) {
            ft.replace(R.id.fragment_container, getBodyPartFragment(),
BODYTRACKING);
        } else if (pFragmentName.equals(PROFILE)) {
            ft.replace(R.id.fragment_container, getProfileFragment(),
PROFILE);
        }
        currentFragmentName = pFragmentName;
        //if (addToBackStack) ft.addToBackStack(null);
        ft.commit();
    }

```

```

@Override
protected void onStop() {
    super.onStop();
    savePreferences();
}

@Override
protected void onDestroy() {
    super.onDestroy();
}

public Profile getCurrentProfil() {
    return mCurrentProfile;
}

//@SuppressWarnings("RestrictedApi")
public void setCurrentProfil(String newProfilName) {
    Profile newProfil = this.mDbProfiles.getProfil(newProfilName);
    setCurrentProfil(newProfil);
}

public void setCurrentProfil(Profile newProfil) {
    if (newProfil != null)
        if (mCurrentProfile == null || mCurrentProfilID !=
newProfil.getId() || !mCurrentProfile.equals(newProfil)) {

            mCurrentProfile = newProfil;
            mCurrentProfilID = mCurrentProfile.getId();

            // rafraichit le fragment courant
            FragmentManager fragmentManager =
getSupportFragmentManager();
            //FragmentTransaction ft=fragmentManager.beginTransaction();
            //showFragment(WEIGHT);

            // Moyen de rafraichir tous les fragments. Attention, les
View des fragments peuvent avoir ete detruit.
            // Il faut donc que cela soit pris en compte dans le refresh
des fragments.
            for (int i = 0; i < fragmentManager.getFragments().size();
i++) {
                if (fragmentManager.getFragments().get(i) != null)

fragmentManager.getFragments().get(i).onHiddenChanged(false);
            }

            setTitle(mCurrentProfile.getName());
            setPhotoProfile(mCurrentProfile.getPhoto());

            savePreferences();
        }
}

public long getCurrentProfilID() {
    return mCurrentProfile.getId();
}

```



```

private void setPhotoProfile(String path) {
    ImageUtil imgUtil = new ImageUtil();

    // Check if path is pointing to a thumb else create it and use it.
    String thumbPath = imgUtil.getThumbPath(path);
    if (thumbPath != null) {
        ImageUtil.setPic(roundProfile, thumbPath);
        mDrawerAdapter.getItem(0).setImg(thumbPath);
        mDrawerAdapter.notifyDataSetChanged();
        mDrawerLayout.invalidate();
    } else {

roundProfile.setImageDrawable(getActivity().getResources().getDrawable(R.draw
able.ic_profile_black));

mDrawerAdapter.getItem(0).setImgResID(R.drawable.ic_profile_black);
        mDrawerAdapter.getItem(0).setImg(null); // Img has priority over
Resource
        mDrawerAdapter.notifyDataSetChanged();
        mDrawerLayout.invalidate();
    }
}

private void savePhotoProfile(String path) {
    mCurrentProfile.setPhoto(path); // Enregistrer sur le profile le path
de la photo.
    mDbProfils.updateProfile(mCurrentProfile);
}

public String getCurrentMachine() {
    return mCurrentMachine;
}

public void setCurrentMachine(String newMachine) {
    mCurrentMachine = newMachine;
}

public MainActivity getActivity() {
    return this;
}

private void loadPreferences() {
    // Restore preferences
    SharedPreferences settings = getSharedPreferences(PREFS_NAME, 0);
    mCurrentProfileID = settings.getLong("currentProfil", -1); // return -
1 if it doesn't exist
    mIntro014Launched = settings.getBoolean("intro014Launched", false);
    mMigrationBD15done = settings.getBoolean("migrationBD15done", false);
}

private void savePreferences() {
    // Restore preferences
    SharedPreferences settings = getSharedPreferences(PREFS_NAME, 0);
    SharedPreferences.Editor editor = settings.edit();
    if (mCurrentProfile != null) editor.putLong("currentProfil",
mCurrentProfile.getId());
    editor.putBoolean("intro014Launched", mIntro014Launched);
}

```

```

        editor.putBoolean("migrationBD15done", mMigrationBD15done);
        editor.apply();
    }

    private FontesPagerFragment getFontesPagerFragment() {
        if (mpFontesPagerFrag == null)
            mpFontesPagerFrag = (FontesPagerFragment)
getSupportFragmentManager().findFragmentByTag(FONTESPAGER);
        if (mpFontesPagerFrag == null)
            mpFontesPagerFrag = FontesPagerFragment.newInstance(FONTESPAGER,
6);

        return mpFontesPagerFrag;
    }

    private CardioFragment getCardioFragment() {
        if (mpCardioFrag == null)
            mpCardioFrag = (CardioFragment)
getSupportFragmentManager().findFragmentByTag(CARDIO);
        if (mpCardioFrag == null) mpCardioFrag =
CardioFragment.newInstance(CARDIO, 2);

        return mpCardioFrag;
    }

    private WeightFragment getWeightFragment() {
        if (mpWeightFrag == null)
            mpWeightFrag = (WeightFragment)
getSupportFragmentManager().findFragmentByTag(WEIGHT);
        if (mpWeightFrag == null) mpWeightFrag =
WeightFragment.newInstance(WEIGHT, 5);

        return mpWeightFrag;
    }

    private ProfileFragment getProfileFragment() {
        if (mpProfileFrag == null)
            mpProfileFrag = (ProfileFragment)
getSupportFragmentManager().findFragmentByTag(PROFILE);
        if (mpProfileFrag == null) mpProfileFrag =
ProfileFragment.newInstance(PROFILE, 10);

        return mpProfileFrag;
    }

    private MachineFragment getMachineFragment() {
        if (mpMachineFrag == null)
            mpMachineFrag = (MachineFragment)
getSupportFragmentManager().findFragmentByTag(MACHINES);
        if (mpMachineFrag == null) mpMachineFrag =
MachineFragment.newInstance(MACHINES, 7);

        return mpMachineFrag;
    }

    private AboutFragment getAboutFragment() {
        if (mpAboutFrag == null)
            mpAboutFrag = (AboutFragment)

```

```

getSupportFragmentManager().findFragmentByTag(ABOUT);
    if (mpAboutFrag == null) mpAboutFrag =
AboutFragment.newInstance(ABOUT, 6);

    return mpAboutFrag;
}

private BodyPartListFragment getBodyPartFragment() {
    if (mpBodyPartListFrag == null)
        mpBodyPartListFrag = (BodyPartListFragment)
getSupportFragmentManager().findFragmentByTag(BODYTRACKING);
    if (mpBodyPartListFrag == null)
        mpBodyPartListFrag =
BodyPartListFragment.newInstance(BODYTRACKING, 9);

    return mpBodyPartListFrag;
}

private SettingsFragment getSettingsFragment() {
    if (mpSettingFrag == null)
        mpSettingFrag = (SettingsFragment)
getSupportFragmentManager().findFragmentByTag(SETTINGS);
    if (mpSettingFrag == null) mpSettingFrag =
SettingsFragment.newInstance(SETTINGS, 8);

    return mpSettingFrag;
}

public Toolbar getActivityToolbar() {
    return top_toolbar;
}

public void restoreToolbar() {
    if (top_toolbar != null) setSupportActionBar(top_toolbar);
}

public void showMP3Toolbar(boolean show) {
    Toolbar mp3toolbar = this.findViewById(R.id.musicToolbar);
    if (!show) {
        mp3toolbar.setVisibility(View.GONE);
    } else {
        mp3toolbar.setVisibility(View.VISIBLE);
    }
}

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent
data) {
    super.onActivityResult(requestCode, resultCode, data);
    if (requestCode == REQUEST_CODE_INTRO) {
        if (resultCode == RESULT_OK) {
            initActivity();
            mIntro014Launched = true;
            this.savePreferences();
        } else {
            // Cancelled the intro. You can then e.g. finish this
activity too.

```

```

        finish();
    }
}

@Override
public void onBackPressed() {
    int index =
getActivity().getSupportFragmentManager().getBackStackEntryCount() - 1;
    if (index >= 0) { // Si on est dans une sous activité
        FragmentManager.BackStackEntry backEntry =
getSupportFragmentManager().getBackStackEntryAt(index);
        String tag = backEntry.getName();
        Fragment fragment =
getSupportFragmentManager().findFragmentByTag(tag);
        super.onBackPressed();
        getActivity().getSupportActionBar().show();
    } else { // Si on est la racine, avec il faut cliquer deux fois
        if (mBackPressed + TIME_INTERVAL > System.currentTimeMillis()) {
            super.onBackPressed();
            return;
        } else {
            Toast.makeText(getBaseContext(), R.string.pressBackAgain,
Toast.LENGTH_SHORT).show();
        }

        mBackPressed = System.currentTimeMillis();
    }
}

public void initActivity() {
    // Initialisation des objets DB
    mDbProfils = new DAOProfil(this.getApplicationContext());

    // Pour la base de donnee profil, il faut toujours qu'il y ai au
moins un profil
    /*if (mDbProfils.getCount() == 0 || mCurrentProfilID == -1) {
        // Ouvre la fenetre de creation de profil
        this.CreateNewProfil();
    } else {*/
    mCurrentProfile = mDbProfils.getProfil(mCurrentProfilID);
    if (mCurrentProfile == null) { // au cas ou il y aurait un probleme
de synchro
        try {
            List<Profile> lList = mDbProfils.getAllProfils();
            mCurrentProfile = lList.get(0);
        } catch (IndexOutOfBoundsException e) {
            this.CreateNewProfil();
        }
    }

    if (mCurrentProfile != null)
setCurrentProfil (mCurrentProfile.getName());
}

private class DrawerItemClickListener implements

```

```

ListView.OnItemClickListener {
    @Override
    public void onItemClick(AdapterView parent, View view, int position,
long id) {

        selectItem(position);

        // Insert the fragment by replacing any existing fragment
        switch (position) {
            case 0:
                showFragment (PROFILE) ;
                setTitle(getString(R.string.ProfileLabel));
                break;
            case 1:
                showFragment (FONTESPAGER) ;
                setTitle(getResources().getText(R.string.menu_Workout));
                break;
            case 2:
                showFragment (MACHINES) ;
                setTitle(getResources().getText(R.string.MachinesLabel));
                break;
            case 3:
                showFragment (WEIGHT) ;

setTitle(getResources().getText(R.string.weightMenuLabel));
                break;
            case 4:
                showFragment (BODYTRACKING) ;
                setTitle(getResources().getText(R.string.bodytracking));
                break;
            case 5:
                showFragment (SETTINGS) ;
                setTitle(getResources().getText(R.string.SettingLabel));
                break;
            case 6:
                showFragment (ABOUT) ;
                setTitle(getResources().getText(R.string.AboutLabel));
                break;
            default:
                showFragment (FONTESPAGER) ;
                setTitle(getResources().getText(R.string.FonteLabel));
        }
    }
}

```

XML CODE :-

```

<androidx.drawerlayout.widget.DrawerLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/drawer_layout"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <!-- The main content view -->

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@color/background"
        android:focusableInTouchMode="true"
        android:orientation="vertical"
        android:paddingLeft="0dp"
        android:paddingTop="0dp"
        android:paddingRight="0dp"
        android:paddingBottom="0dp">

        <androidx.appcompat.widget.Toolbar
            android:id="@+id/actionToolbar"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="@color/toolbar_background"
            android:elevation="4dp"
            android:minHeight="?attr/actionBarSize"
            android:visibility="visible">

            <com.mikhaellopez.circularimageview.CircularImageView
                android:id="@+id/imageProfile"
                android:layout_width="40dp"
                android:layout_height="40dp"
                android:layout_alignParentStart="true"
                android:layout_centerVertical="true"
                android:layout_gravity="end"
                android:src="@drawable/ic_profile_black"
                app:civ_border_color="#EEEEEE"
                app:civ_border_width="0dp"
                app:civ_shadow="false"
                app:civ_shadow_color="#8BC34A"
                app:civ_shadow_radius="0" />
        </androidx.appcompat.widget.Toolbar>

        <androidx.appcompat.widget.Toolbar
            android:id="@+id/musicToolbar"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_alignParentBottom="true"
            android:layout_margin="0dp"
            android:background="@color/toolbar_background"
            android:elevation="4dp"
            android:minHeight="?attr/actionBarSize"

```

```

        android:padding="0dp"
        app:contentInsetStart="0dp"
        app:titleMargins="0dp">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_margin="0dp"
            android:orientation="vertical"
            android:padding="0dp">

            <LinearLayout
                android:id="@+id/playerTopLayout"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginBottom="0dp"
                android:orientation="vertical">

                <LinearLayout
                    android:layout_width="match_parent"
                    android:layout_height="wrap_content"
                    android:orientation="horizontal">

                    <TextView
                        android:id="@+id/playerSongProgress"
                        android:layout_width="wrap_content"
                        android:layout_height="wrap_content"
                        android:layout_marginLeft="4dp"
                        android:layout_marginRight="4dp"
                        android:maxLines="1"
                        tools:text="00:00" />

                    <TextView
                        android:id="@+id/playerSongTitle"
                        android:layout_width="match_parent"
                        android:layout_height="wrap_content"
                        android:layout_gravity="top"
                        android:layout_marginLeft="4dp"
                        android:layout_marginRight="4dp"
                        android:ellipsize="marquee"
                        android:marqueeRepeatLimit="marquee_forever"
                        android:scrollHorizontally="true"
                        android:singleLine="true"
                        tools:text="musique_test.mp3" />

                </LinearLayout>

                <SeekBar
                    android:id="@+id/playerSeekBar"
                    android:layout_width="match_parent"
                    android:layout_height="wrap_content"
                    android:layout_marginStart="0dp"
                    android:layout_marginLeft="0dp"
                    android:layout_marginTop="-4dp"
                    android:layout_marginEnd="0dp"
                    android:layout_marginRight="0dp"
                    android:layout_marginBottom="-4dp" />

```

```

</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="32dp"
    android:orientation="horizontal">

    <ImageButton
        android:id="@+id/playerPrevious"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical"
        android:layout_weight="5"
        android:adjustViewBounds="false"
        android:background="@android:color/transparent"
        android:baselineAlignBottom="false"
        android:cropToPadding="true"
        android:padding="5dp"
        android:src="@drawable/ic_skip_previous_black_36dp"
    />

    <ImageButton
        android:id="@+id/playerStop"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical"
        android:layout_weight="5"
        android:adjustViewBounds="false"
        android:background="@android:color/transparent"
        android:baselineAlignBottom="false"
        android:cropToPadding="true"
        android:src="@drawable/ic_stop_black_36dp" />

    <ImageButton
        android:id="@+id/playerPlay"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical"
        android:layout_weight="5"
        android:adjustViewBounds="false"
        android:background="@android:color/transparent"
        android:baselineAlignBottom="false"
        android:cropToPadding="true"
        android:src="@drawable/ic_play_arrow_black_36dp" />

    <ImageButton
        android:id="@+id/playerNext"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical"
        android:layout_weight="5"
        android:adjustViewBounds="false"
        android:background="@android:color/transparent"
        android:baselineAlignBottom="false"
        android:cropToPadding="true"
        android:src="@drawable/ic_skip_next_black_36dp" />

```



```

        <ImageButton
            android:id="@+id/playerLoop"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical"
            android:layout_weight="5"
            android:adjustViewBounds="false"
            android:background="@android:color/transparent"
            android:baselineAlignBottom="false"
            android:cropToPadding="true"
            android:src="@drawable/ic_replay_blue_36dp" />

        <ImageButton
            android:id="@+id/playerList"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical"
            android:layout_weight="5"
            android:adjustViewBounds="false"
            android:background="@android:color/transparent"
            android:baselineAlignBottom="false"
            android:cropToPadding="true"
            android:src="@drawable/ic_library_music_black_36dp"
        />

    </LinearLayout>
</LinearLayout>
</androidx.appcompat.widget.Toolbar>

<LinearLayout
    android:id="@+id/fragment_container"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_above="@id/musicToolbar"
    android:layout_below="@id/actionToolbar"
    android:orientation="vertical" />

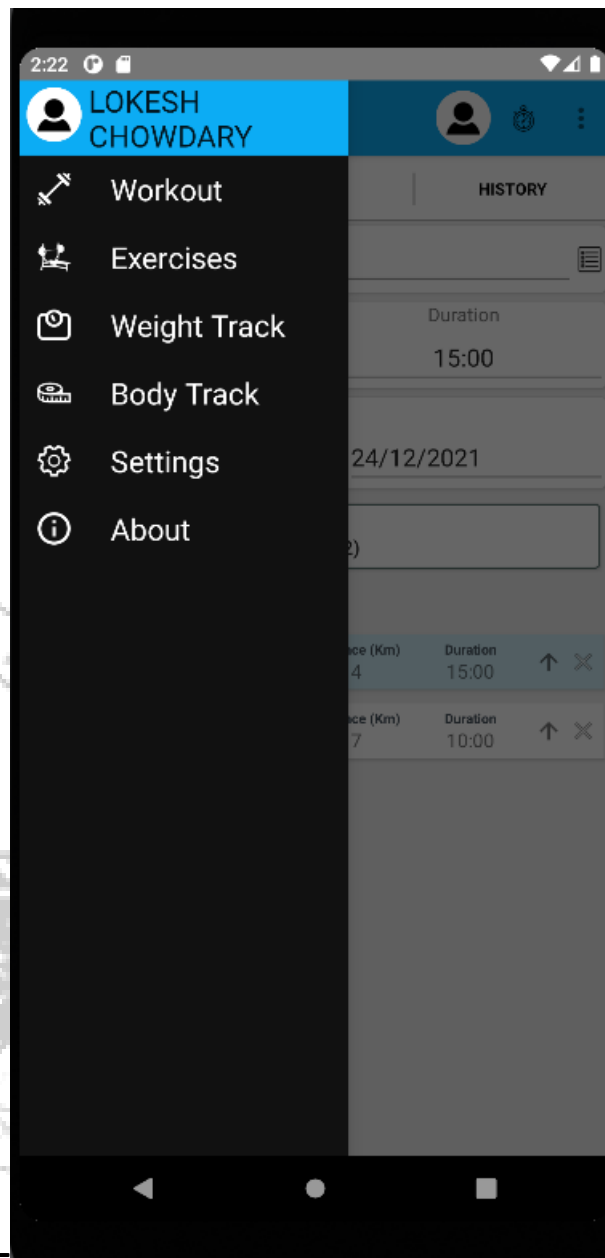
</RelativeLayout>

<!-- The navigation drawer -->

<ListView
    android:id="@+id/left_drawer"
    android:layout_width="240dp"
    android:layout_height="match_parent"
    android:layout_gravity="start"
    android:background="#111"
    android:choiceMode="none"
    android:divider="@android:color/transparent"
    android:dividerHeight="0dp" />

</androidx.drawerlayout.widget.DrawerLayout>

```



APPLICATION OUTPUT :-

2:23

Fast N Fitness

EXERCISES

GRAPHS

HISTORY

Swimming

Distance (Km)

4.0

Duration

15:00

^

Date

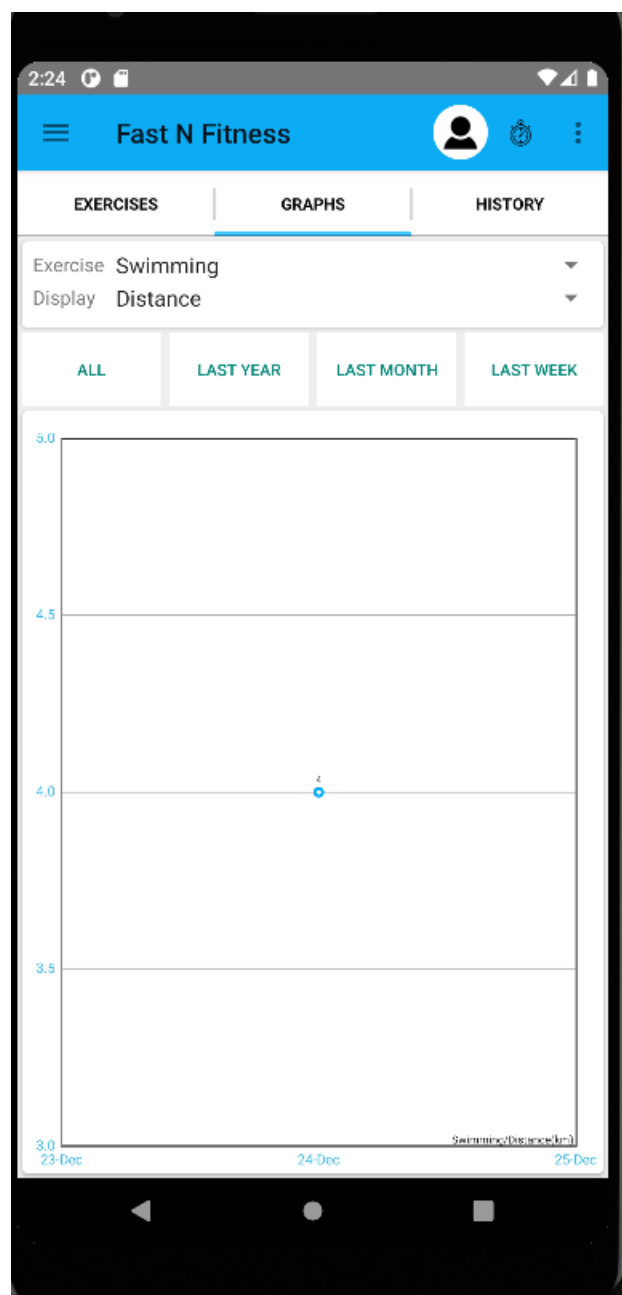
31/12/2021

ADD

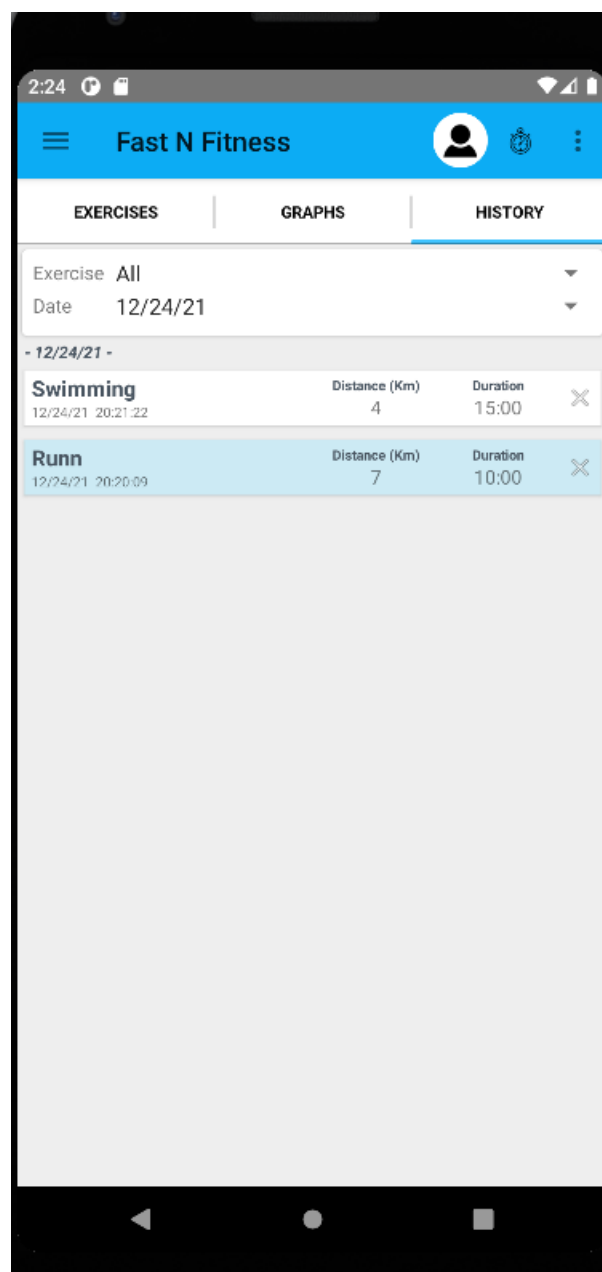
Last records:
- 12/24/21 -

Swimming 12/24/21 20:21:22	Distance (Km) 4	Duration 15:00	↑ ×
Runn 12/24/21 20:20:09	Distance (Km) 7	Duration 10:00	↑ ×

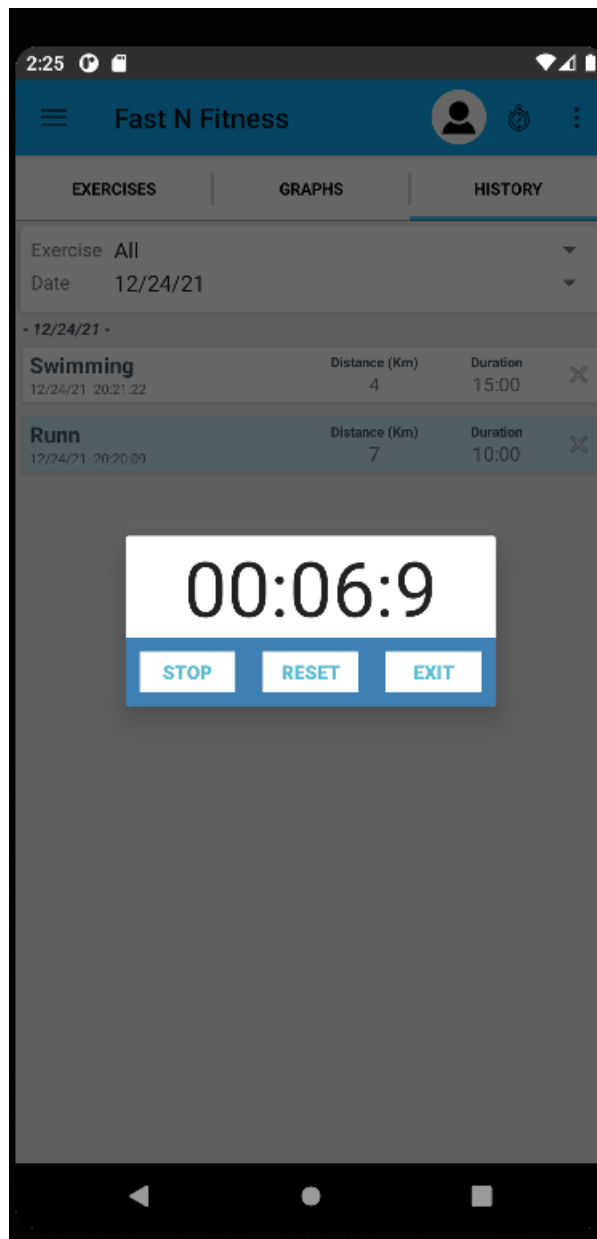
VIT
AP



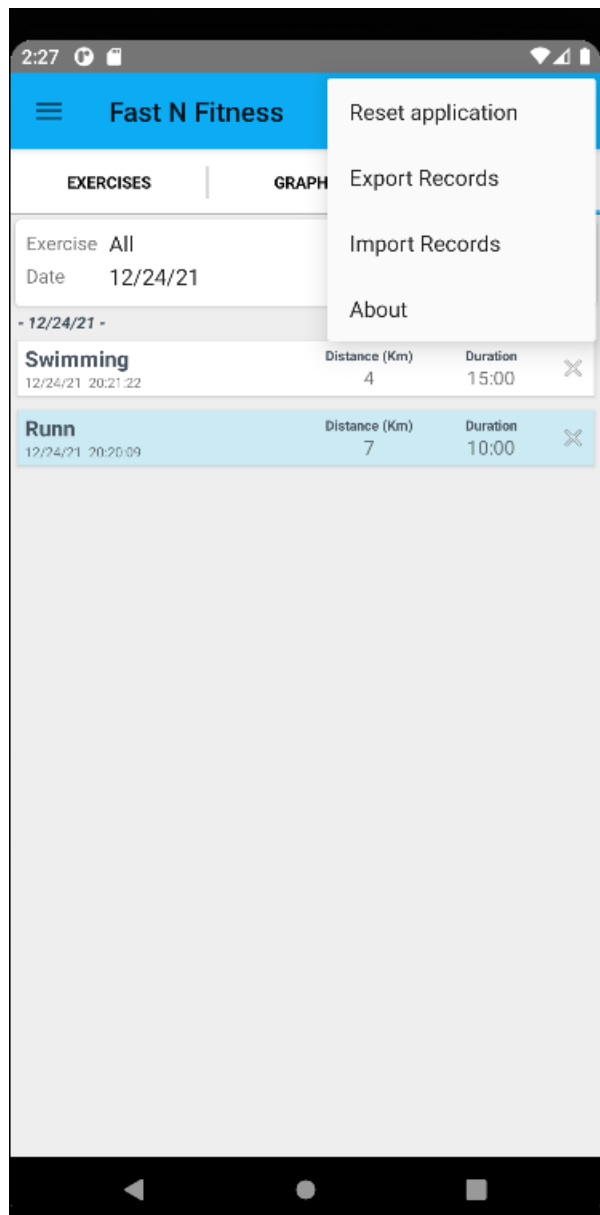
VIT
AP



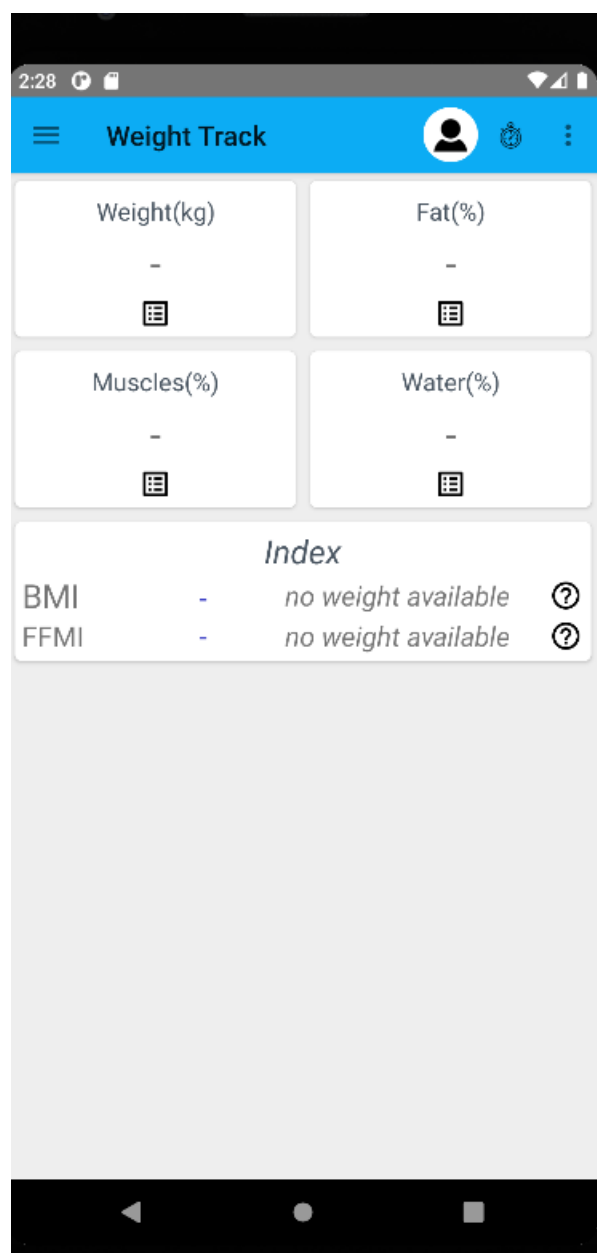
VIT
AP



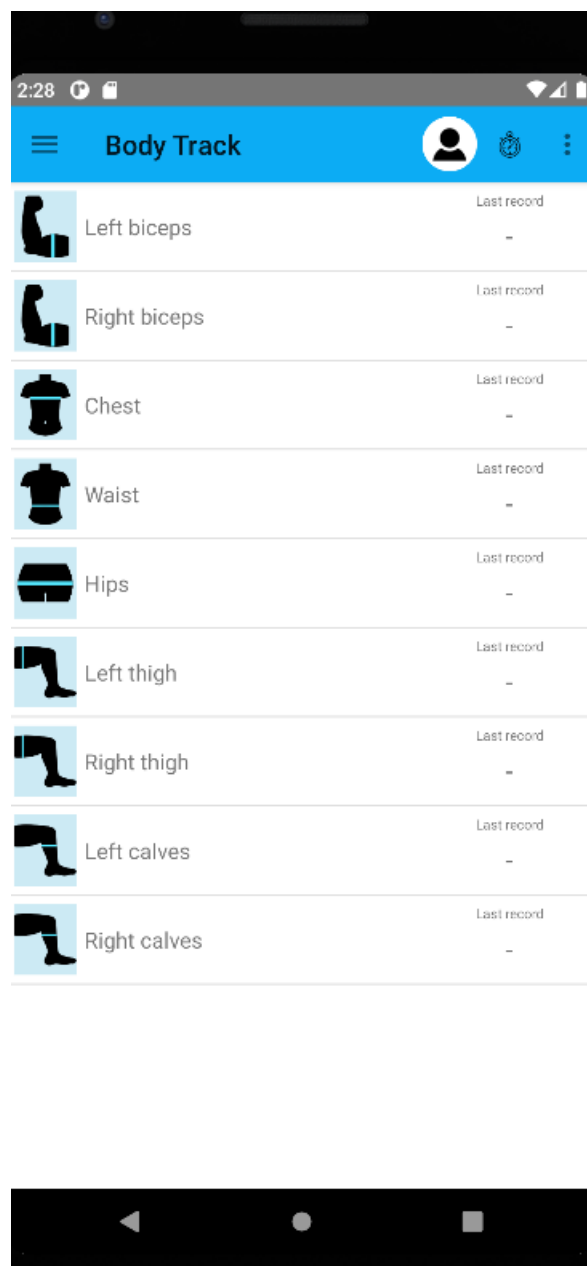
VIT
AP



VIT
AP



VIT
AP



VIT

AP

-----THE END-----