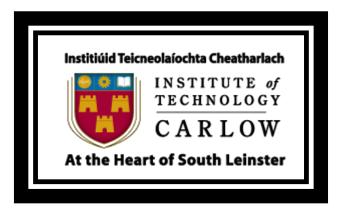
Your Cystic Fibrosis Application Technical manual



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Common

Common

```
package com.example.lorcan.yourcf.Common;
import com.example.lorcan.yourcf.Model.User;

/**
   * Created by Lorcan on 08/03/2018.
   */
public class Common {
    public static User currentUser;
}
```

Database

Database

```
package com.example.lorcan.yourcf.Database;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteQueryBuilder;
import com.example.lorcan.yourcf.Model.Selection;
import com.readystatesoftware.sqliteasset.SQLiteAssetHelper;
import java.util.ArrayList;
import java.util.List;
public class Database extends SQLiteAssetHelper {
   private static final String DB NAME="FoodDB.db";
   private static final int DB_VER = 1;
    public Database(Context context) {
        super(context, DB_NAME, null, DB_VER);
    public List<Selection> getSelections()
        SQLiteDatabase db = getReadableDatabase();
        SQLiteQueryBuilder qb = new SQLiteQueryBuilder();
        String [] sqlSelect =
{"ProductName", "Quantity", "Calories", "CalorieAmount"};
        String sqlTable = "SelectionDetail";
        qb.setTables(sqlTable);
        Cursor c = qb.query(db,sqlSelect,null,null,null,null);
        final List<Selection> result = new ArrayList<>();
        if(c.moveToFirst())
```

```
{
            do{
                result.add(new
Selection(c.getString(c.getColumnIndex("ProductId")),
                           c.getString(c.getColumnIndex("ProductName")),
                           c.getString(c.getColumnIndex("Quantity")),
                           c.getString(c.getColumnIndex("Calories")),
                           c.getString(c.getColumnIndex("CalorieAmount"))
                ));
            }while(c.moveToNext());
        return result;
    }
    public void addToSelection (Selection selection)
        SQLiteDatabase db = getReadableDatabase();
        String query = String.format("INSERT INTO
SelectionDetail(ProductId, ProductName, Quantity, Calories, CalorieAmount)
VALUES('%S','%S','%S','%S','%S',);",
                selection.getProductid(),
                selection.getProductName(),
                selection.getCalories(),
                selection.getCalorieAmount());
        db.execSQL(query);
    }
    public void cleanSelection (Selection selection)
        SQLiteDatabase db = getReadableDatabase();
        String query = String.format("DELETE FROM SelectionDetail");
        db.execSQL (query);
    }
}
```

ItemClickListener

ItemClickListener

```
package com.example.lorcan.yourcf.Interface;
import android.view.View;

/**
  * Created by Lorcan on 09/03/2018.
  */

public interface ItemClickListener {
    void onClick(View view, int position, boolean isLongClick);
}
```

Models

ActivityType

```
package com.example.lorcan.yourcf.Model;
 * Created by lorcan on 04/04/18.
public class ActivityType {
    private String IntensityOfActivity, Duration, Image,
ActivityMenuId, Name, HeartRate, About;
    public ActivityType() {
    public ActivityType(String intensityOfActivity, String duration, String image,
String activityMenuId, String name, String heartRate, String about) {
        IntensityOfActivity = intensityOfActivity;
        Duration = duration;
        Image = image;
        ActivityMenuId = activityMenuId;
        Name = name;
        HeartRate = heartRate;
        About = about;
   public String getIntensityOfActivity() {
        return IntensityOfActivity;
    public void setIntensityOfActivity(String intensityOfActivity) {
        IntensityOfActivity = intensityOfActivity;
    public String getDuration() {
        return Duration;
    public void setDuration(String duration) {
        Duration = duration;
    public String getImage() {
       return Image;
    public void setImage(String image) {
        Image = image;
    public String getActivityMenuId() {
        return ActivityMenuId;
    public void setActivityMenuId(String activityMenuId) {
        ActivityMenuId = activityMenuId;
    public String getName() {
       return Name;
```

```
public void setName(String name) {
    Name = name;
}

public String getHeartRate() {
    return HeartRate;
}

public void setHeartRate(String heartRate) {
    HeartRate = heartRate;
}

public String getAbout() {
    return About;
}

public void setAbout(String about) {
    About = about;
}
}

Category

package com.example.lorcan.yourcf.Model;

/**
    * Created by Lorcan on 09/03/2018.
    */

public class Category {
```

```
/**
  * Created by Lorcan on 09/03/2018.
  */

public class Category {
    private String Name;
    private String Image;

    public Category() {
    }

    public Category(String name, String image) {
        Name = name;
        Image = image;
    }

    public String getName() {
        return Name;
    }

    public void setName(String name) {
        Name = name;
    }

    public String getImage() {
        return Image;
    }

    public void setImage(String image) {
        Image = image;
    }
}
```

CategoryActivity

```
package com.example.lorcan.yourcf.Model;
/**
 * Created by Lorcan on 11/03/2018.
public class CategoryActivity {
    private String Name;
   private String Image;
    public CategoryActivity() {
    public CategoryActivity(String name, String image) {
        Name = name;
        Image = image;
    public String getName() {
       return Name;
    public void setName(String name) {
       Name = name;
    public String getImage() {
       return Image;
    public void setImage(String image) {
        Image = image;
}
Food
package com.example.lorcan.yourcf.Model;
 * Created by Lorcan on 03/04/2018.
public class Food {
          private String Cal,Description,OverallCalAmount,Image,MenuId,Name;
    public Food() {
    public Food(String cal, String description, String overallCalAmount, String
image, String menuId, String name) {
        Cal = cal;
        Description = description;
        OverallCalAmount = overallCalAmount;
        Image = image;
        MenuId = menuId;
        Name = name;
    public String getCal() {
        return Cal;
```

```
public void setCal(String cal) {
    Cal = cal;
public String getDescription() {
    return Description;
public void setDescription(String description) {
   Description = description;
public String getOverallCalAmount() {
   return OverallCalAmount;
public void setOverallCalAmount(String overallCalAmount) {
    OverallCalAmount = overallCalAmount;
public String getImage() {
    return Image;
public void setImage(String image) {
    Image = image;
public String getMenuId() {
    return MenuId;
public void setMenuId(String menuId) {
   MenuId = menuId;
public String getName() {
   return Name;
public void setName(String name) {
   Name = name;
```

MedicalProfile

```
package com.example.lorcan.yourcf.Model;

/**
   * Created by lorcan on 09/03/18.
   */

public class MedicalProfile {
   private String DOB;
   private String siblingWithCf;
   private String cfDiabetes;
   private String ageOfPrognosis;

   public MedicalProfile() {
   }
}
```

```
public MedicalProfile(String DOB, String siblingWithCf, String cfDiabetes,
String ageOfPrognosis) {
        this.DOB = DOB;
        this.siblingWithCf = siblingWithCf;
        this.cfDiabetes = cfDiabetes;
        this.ageOfPrognosis = ageOfPrognosis;
    public String getDOB() {
       return DOB;
   public void setDOB(String DOB) {
        this.DOB = DOB;
    public String getSiblingWithCf() {
       return siblingWithCf;
   public void setSiblingWithCf(String siblingWithCf) {
        this.siblingWithCf = siblingWithCf;
    public String getCfDiabetes() {
       return cfDiabetes;
   public void setCfDiabetes(String cfDiabetes) {
        this.cfDiabetes = cfDiabetes;
    public String getAgeOfPrognosis() {
       return ageOfPrognosis;
    public void setAgeOfPrognosis(String ageOfPrognosis) {
        this.ageOfPrognosis = ageOfPrognosis;
}
```

Selection

```
package com.example.lorcan.yourcf.Model;

public class Selection {
    private String Productid, ProductName, Quantity, Calories, CalorieAmount;

    public Selection() {
    }

    public Selection(String productid, String productName, String quantity, String calories, String calorieAmount) {
        Productid = productid;
        ProductName = productName;
        Quantity = quantity;
        Calories = calories;
        CalorieAmount = calorieAmount;
    }

    public String getProductid() {
        return Productid;
    }
}
```

```
public void setProductid(String productid) {
        Productid = productid;
    public String getProductName() {
        return ProductName;
    public void setProductName(String productName) {
       ProductName = productName;
   public String getQuantity() {
       return Quantity;
    public void setQuantity(String quantity) {
       Quantity = quantity;
   public String getCalories() {
       return Calories;
    public void setCalories(String calories) {
       Calories = calories;
   public String getCalorieAmount() {
       return CalorieAmount;
    public void setCalorieAmount(String calorieAmount) {
       CalorieAmount = calorieAmount;
}
```

Spirometer

```
package com.example.lorcan.yourcf.Model;
/**
 * Created by lorcan on 14/03/18.
public class Spirometer {
   private String Time;
    private String SpirometerResult;
    public Spirometer() {
    public Spirometer(String time, String spirometerResult) {
        Time = time;
        SpirometerResult = spirometerResult;
    public String getTime() {
        return Time;
    public void setTime(String time) {
       Time = time;
```

```
public String getSpirometerResult() {
    return SpirometerResult;
}

public void setSpirometerResult(String spirometerResult) {
    SpirometerResult = spirometerResult;
}
```

User

```
package com.example.lorcan.yourcf.Model;
* Created by Lorcan on 07/03/2018.
public class User {
   private String Email;
   private String FirstName;
   private String LastName;
    private String Password;
   private String Phone;
   public User() {
    public User(String email, String firstName, String lastName, String password) {
        Email = email;
        FirstName = firstName;
       LastName = lastName;
        Password = password;
    public String getPhone() {
       return Phone;
    public void setPhone(String phone) {
       Phone = phone;
    public String getEmail() {
       return Email;
    public void setEmail(String email) {
       Email = email;
    public String getFirstName() {
       return FirstName;
    public void setFirstName(String firstName) {
        FirstName = firstName;
    public String getLastName() {
       return LastName;
```

```
public void setLastName(String lastName) {
    LastName = lastName;
}

public String getPassword() {
    return Password;
}

public void setPassword(String password) {
    Password = password;
}
```

Viewholder

Activity

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.support.v7.widget.LinearLayoutManager;
import android.support.v7.widget.RecyclerView;
import android.support.v7.widget.Toolbar;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;
import com.example.lorcan.yourcf.Interface.ItemClickListener;
import com.example.lorcan.yourcf.Model.Category;
import com.example.lorcan.yourcf.Model.CategoryActivity;
import com.example.lorcan.yourcf.ViewHolder.MenuViewHolder;
import com.firebase.ui.database.FirebaseRecyclerAdapter;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.squareup.picasso.Picasso;
public class Activity extends AppCompatActivity {
    FirebaseDatabase database;
    DatabaseReference category;
    TextView txtFirstName;
    RecyclerView recyler menu;
    RecyclerView.LayoutManager layoutManager;
    FirebaseRecyclerAdapter<CategoryActivity,MenuViewHolder> adapter;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity home);
       Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
        toolbar.setTitle("Your CF");
        setSupportActionBar(toolbar);
        //Init Firebase
```

```
database = FirebaseDatabase.getInstance();
        category = database.getReference("CategoryActivity");
        //load menu
        recyler menu = (RecyclerView) findViewById(R.id.recyler menu);
        recyler menu.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyler_menu.setLayoutManager(layoutManager);
        loadMenu();
    private void loadMenu() {
        adapter = new FirebaseRecyclerAdapter<CategoryActivity,</pre>
MenuViewHolder>(CategoryActivity.class, R.layout.menu item, MenuViewHolder.class, cate
gory) {
            @Override
            protected void populateViewHolder(MenuViewHolder viewHolder,
CategoryActivity model, int position) {
                viewHolder.txtMenuName.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.imageView);
                final CategoryActivity clickItem = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                        Intent foodList = new Intent(Activity.this,
ActivityList.class);
                        //because CategoryId is key so we just get the key
foodList.putExtra("CategoryId", adapter.getRef(position).getKey());
                        startActivity(foodList);
                });
            }
        };
        recyler_menu.setAdapter(adapter);
    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        // Handle action bar item clicks here. The action bar will
        // automatically handle clicks on the Home/Up button, so long
        // as you specify a parent activity in AndroidManifest.xml.
        // int id = item.getItemId();
        //noinspection SimplifiableIfStatement
        //if (id == R.id.action_settings) {
        // return true;
        return super.onOptionsItemSelected(item);
    @Override
    public void onBackPressed() {
        startActivity(new Intent(Activity.this, Home.class));
        finish();
```

ActivityDetail

```
package com.example.lorcan.yourcf;
import android.support.design.widget.CollapsingToolbarLayout;
import android.support.design.widget.FloatingActionButton;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.ImageView;
import android.widget.TextView;
import com.cepheuen.elegantnumberbutton.view.ElegantNumberButton;
import com.example.lorcan.yourcf.Model.ActivityType;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.squareup.picasso.Picasso;
public class ActivityDetail extends AppCompatActivity {
    TextView activity name, intensity of activity, activity description;
    ImageView activity_image;
    CollapsingToolbarLayout collapsingToolbarLayout;
    ElegantNumberButton activityNumberButton;
    FloatingActionButton btn_activity;
    String activityId="";
    FirebaseDatabase database;
    DatabaseReference activity;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity detail);
        //firebase
        database = FirebaseDatabase.getInstance();
        activity = database.getReference("ActivityType");
        //init
        activityNumberButton =
(ElegantNumberButton) findViewById(R.id.activity number button);
        btn activity = (FloatingActionButton)findViewById(R.id.btn activity);
        activity name = (TextView) findViewById(R.id.activity name);
        intensity of activity = (TextView) findViewById(R.id.intensity of activity);
        activity_description = (TextView) findViewById(R.id.activity_description);
        //activity image = (ImageView)findViewById(R.id.activity image);
        collapsingToolbarLayout =
(CollapsingToolbarLayout) findViewById(R.id.collapsing);
collapsingToolbarLayout.setExpandedTitleTextAppearance(R.style.ExpandedAppbar);
\verb|collapsingToolbarLayout.setCollapsedTitleTextAppearance (R.style. \textit{CollapsedAppbar})|; \\
        //get activity id from intent
        if(getIntent()!= null)
            activityId = getIntent().getStringExtra("ActivityId");
```

```
if(!activityId.isEmpty())
            getDetailActivity(activityId);
    private void getDetailActivity(String activityId) {
        activity.child(activityId).addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(DataSnapshot dataSnapshot) {
                ActivityType active = dataSnapshot.getValue(ActivityType.class);
                //set image
//Picasso.with(getBaseContext()).load(active.getImage()).into(activity image);
                collapsingToolbarLayout.setTitle(active.getName());
                intensity of activity.setText(active.getIntensityOfActivity());
                activity name.setText(active.getName());
                activity_description.setText(active.getAbout());
            }
            @Override
            public void onCancelled(DatabaseError databaseError) {
        });
}
ActivityList
```

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.support.v7.widget.LinearLayoutManager;
import android.support.v7.widget.RecyclerView;
import android.view.View;
import com.example.lorcan.yourcf.Interface.ItemClickListener;
import com.example.lorcan.yourcf.Model.ActivityType;
import com.example.lorcan.yourcf.Model.Food;
import com.example.lorcan.yourcf.ViewHolder.ActivityViewHolder;
import com.example.lorcan.yourcf.ViewHolder.FoodViewHolder;
import com.firebase.ui.database.FirebaseRecyclerAdapter;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.squareup.picasso.Picasso;
public class ActivityList extends AppCompatActivity {
    RecyclerView recyclerView;
    RecyclerView.LayoutManager layoutManager;
    FirebaseDatabase database;
    DatabaseReference activityList;
    String ActivityCategoryId="";
```

```
@Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity list);
        // firebase
        database = FirebaseDatabase.getInstance();
        activityList = database.getReference("ActivityType");
        recyclerView = (RecyclerView)findViewById(R.id.recyler activity);
        recyclerView.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyclerView.setLayoutManager(layoutManager);
        if(getIntent() != null) {
            ActivityCategoryId = getIntent().getStringExtra("CategoryId");
        if(!ActivityCategoryId.isEmpty() &&ActivityCategoryId != null) {
            loadActivityList(ActivityCategoryId);
   private void loadActivityList(String ActivityCategoryId) {
        adapter = new FirebaseRecyclerAdapter<ActivityType,</pre>
ActivityViewHolder>(ActivityType.class, R.layout.activity item, ActivityViewHolder.cl
ass,activityList.orderByChild("ActivityMenuId").equalTo(ActivityCategoryId)) {
            @Override
           protected void populateViewHolder(ActivityViewHolder viewHolder,
ActivityType model, int position) {
                viewHolder.activity name.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.activity imag
e);
                final ActivityType local = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                        //start new activity
                        Intent activityDetail = new
Intent(ActivityList.this, ActivityDetail.class);
activityDetail.putExtra("ActivityId",adapter.getRef(position).getKey());
                        startActivity(activityDetail);
                        //Toast.makeText(FoodList.this, ""+local.getName(),
Toast.LENGTH SHORT).show();
                });
        };
        recyclerView.setAdapter(adapter);
    }
```

FirebaseRecyclerAdapter<ActivityType,ActivityViewHolder> adapter;

Diary

```
package com.example.lorcan.yourcf;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.support.v7.widget.LinearLayoutManager;
import android.support.v7.widget.RecyclerView;
import android.widget.Button;
import android.widget.TextView;
import com.example.lorcan.yourcf.Database.Database;
import com.example.lorcan.yourcf.Model.Selection;
import com.example.lorcan.yourcf.ViewHolder.SelectionAdapter;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import java.text.NumberFormat;
import java.util.ArrayList;
import java.util.List;
import java.util.Locale;
public class Diary extends AppCompatActivity {
    RecyclerView recyclerView;
    RecyclerView.LayoutManager layoutManager;
    FirebaseDatabase database;
    DatabaseReference request;
    TextView txtSelection;
    Button btnPlace;
    List<Selection> listDate = new ArrayList<>();
    SelectionAdapter adapter;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_diary);
        //Firebase
        database = FirebaseDatabase.getInstance();
        request = database.getReference("Requests");
        //init
        recyclerView = (RecyclerView) findViewById(R.id.listDiary);
        recyclerView.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyclerView.setLayoutManager(layoutManager);
        txtSelection = (TextView) findViewById(R.id.total);
       btnPlace = (Button) findViewById(R.id.btnAddDiary);
        loadListFood();
    private void loadListFood() {
        listDate = new Database(this).getSelections();
        adapter = new SelectionAdapter(listDate, this);
        recyclerView.setAdapter(adapter);
        int total = 0;
        for(Selection selection:listDate) {
```

FoodDetail

```
package com.example.lorcan.yourcf;
import android.support.design.widget.CollapsingToolbarLayout;
import android.support.design.widget.FloatingActionButton;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;
import com.cepheuen.elegantnumberbutton.view.ElegantNumberButton;
import com.example.lorcan.yourcf.Database.Database;
import com.example.lorcan.yourcf.Model.Food;
import com.example.lorcan.yourcf.Model.Selection;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.squareup.picasso.Picasso;
public class FoodDetail extends AppCompatActivity {
    /*TextView food name, food description, food amount;
    ImageView food image;
    CollapsingToolbarLayout collapsingToolbarLayout;
    FloatingActionButton btnFood; // keep an eye on for errors
    ElegantNumberButton numberButton;
    String foodId="";
    FirebaseDatabase database;
    DatabaseReference foods;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity food detail);
        //Firebase
        database = FirebaseDatabase.getInstance();
        foods = database.getReference("Foods");
        //Init View
        numberButton = (ElegantNumberButton) findViewById(R.id.number button);
        btnFood = (FloatingActionButton) findViewById(R.id.btnFood);
        food_description = (TextView) findViewById(R.id.food description);
        food name = (TextView) findViewById(R.id.food name);
        food amount = (TextView) findViewById(R.id.food amount);
        food image = (ImageView) findViewById(R.id.food image);
```

```
collapsingToolbarLayout =
(CollapsingToolbarLayout) findViewById (R.id.collapsing);
collapsingToolbarLayout.setExpandedTitleTextAppearance(R.style.ExpandedAppbar);
collapsingToolbarLayout.setCollapsedTitleTextAppearance(R.style.CollapsedAppbar);
        //get food ide from intent
        if(getIntent() != null)
            foodId = getIntent().getStringExtra("FoodId");
        if(!foodId.isEmpty())
            getDetailFood(foodId);
    private void getDetailFood(String foodId) {
        foods.child(foodId).addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(DataSnapshot dataSnapshot) {
                Food food = dataSnapshot.getValue(Food.class);
                //set image
Picasso.with(getBaseContext()).load(food.getImage()).into(food image);
                collapsingToolbarLayout.setTitle(food.getName());
                food amount.setText(food.getCal());
                food name.setText(food.getName());
                food description.setText(food.getDescription());
            }
            Coverride
            public void onCancelled(DatabaseError databaseError) {
   });
}*/
    TextView food name, food price, food description;
    ImageView food image;
    CollapsingToolbarLayout collapsingToolbarLayout;
    FloatingActionButton btnCart;
   ElegantNumberButton numberButton;
    String foodId="";
    FirebaseDatabase database;
    DatabaseReference foods;
    Food currentFood;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity food detail);
        //firebase
        database = FirebaseDatabase.getInstance();
```

```
foods = database.getReference("Foods");
        //init view
        numberButton = (ElegantNumberButton) findViewById (R.id.number button);
        btnCart = (FloatingActionButton) findViewById(R.id.btnFood);
        btnCart.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                new Database(getBaseContext()).addToSelection(new Selection(
                        foodId,
                        currentFood.getName(),
                        numberButton.getNumber(),
                        currentFood.getCal(), // make sure that they are the
correct way around!!!
                        currentFood.getOverallCalAmount()
                ));
                Toast.makeText(FoodDetail.this, "Added To Diary",
Toast. LENGTH SHORT) . show();
        });
        food description = (TextView) findViewById(R.id.food description);
        food_name = (TextView) findViewById(R.id.food_name);
        food price = (TextView) findViewById(R.id.food amount);
        food_image = (ImageView) findViewById(R.id.img_food);
        collapsingToolbarLayout =
(CollapsingToolbarLayout) findViewById(R.id.collapsing);
collapsingToolbarLayout.setExpandedTitleTextAppearance(R.style.ExpandedAppbar);
collapsingToolbarLayout.setCollapsedTitleTextAppearance(R.style.CollapsedAppbar);
        //get food id from intent
        if(getIntent() != null)
            foodId = getIntent().getStringExtra("FoodId");
        if(!foodId.isEmpty())
        {
            getDetailFood(foodId);
        }
    private void getDetailFood(String foodId) {
        foods.child(foodId).addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(DataSnapshot dataSnapshot) {
                currentFood = dataSnapshot.getValue(Food.class);
                //set image
Picasso.with(getBaseContext()).load(currentFood.getImage()).into(food image);
                collapsingToolbarLayout.setTitle(currentFood.getName());
                food_price.setText(currentFood.getOverallCalAmount());
                food name.setText(currentFood.getName());
                food description.setText(currentFood.getDescription());
            @Override
            public void onCancelled(DatabaseError databaseError) {
```

```
});
}
```

FoodList

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.support.v7.widget.LinearLayoutManager;
import android.support.v7.widget.RecyclerView;
import android.view.View;
import android.widget.Toast;
import com.example.lorcan.yourcf.Interface.ItemClickListener;
import com.example.lorcan.yourcf.Model.Food;
import com.example.lorcan.yourcf.ViewHolder.FoodViewHolder;
import com.firebase.ui.database.FirebaseRecyclerAdapter;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.squareup.picasso.Picasso;
/*public class FoodList extends AppCompatActivity {
    RecyclerView recyclerView;
    RecyclerView.LayoutManager layoutManager;
    FirebaseDatabase database;
    DatabaseReference foodList;
    String categoryId="";
    FirebaseRecyclerAdapter<Food,FoodViewHolder> adapter;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity food list);
        //Firebase
        database = FirebaseDatabase.getInstance();
        foodList = database.getReference("Foods");
        recyclerView = (RecyclerView) findViewById(R.id.recyler food);
        recyclerView.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyclerView.setLayoutManager(layoutManager);
        //get intent here
        if(getIntent() != null)
            categoryId = getIntent().getStringExtra("CategoryId");
        if(categoryId.isEmpty() && categoryId != null)
            loadListFood(categoryId);
    private void loadListFood(String categoryId) {
```

```
// this is the equivalent select * where MenuId
        adapter = new FirebaseRecyclerAdapter<Food,
FoodViewHolder>(Food.class,R.layout.food item,FoodViewHolder.class,foodList.orderBy
Child("MenuId").equalTo(categoryId)) {
            @Override
            protected void populateViewHolder(FoodViewHolder viewHolder, Food
model, int position) {
                viewHolder.food name.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.food image);
                final Food local = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                        //start new activity
                        //Intent foodDetail = new
Intent(FoodList.this,FoodDetail.class);
//foodDetail.putExtra("FoodId",adapter.getRef(position).getKey());
                        //startActivity(foodDetail);
                        Toast.makeText(FoodList.this, ""+local.getName(),
Toast.LENGTH SHORT).show();
                });
        recyclerView.setAdapter(adapter);
    /*private void loadListFood(String categoryId) {
        adapter = new FirebaseRecyclerAdapter<Food, FoodViewHolder>(Food.class,
                R.layout.food item,
                FoodViewHolder.class,
                foodList.orderByChild("MenuId").equalTo(categoryId)) { // like :
Select * From
            @Override
            protected void populateViewHolder(FoodViewHolder viewHolder, Food
model, int position) {
                viewHolder.food name.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.food image);
                final Food local = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                        Toast.makeText(FoodList.this, ""+local.getName(),
Toast.LENGTH SHORT).show();
                });
        };
        // set adapter
        recyclerView.setAdapter(adapter);
    } */
```

```
public class FoodList extends AppCompatActivity {
    RecyclerView recyclerView;
    RecyclerView.LayoutManager layoutManager;
    FirebaseDatabase database;
    DatabaseReference foodList;
    String categoryId="";
    FirebaseRecyclerAdapter<Food,FoodViewHolder> adapter;
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity food list);
        // Firebase
        database = FirebaseDatabase.getInstance();
        foodList = database.getReference("Foods");
       recyclerView = (RecyclerView) findViewById(R.id.recyler_food);
        recyclerView.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyclerView.setLayoutManager(layoutManager);
        if(getIntent() != null){
            categoryId = getIntent().getStringExtra("CategoryId");
        if(!categoryId.isEmpty() && categoryId != null){
            loadFoodList(categoryId);
    private void loadFoodList(String categoryId) {
         // this is the equivalent select * where MenuId
        adapter = new FirebaseRecyclerAdapter<Food,</pre>
FoodViewHolder>(Food.class, R.layout.food item, FoodViewHolder.class, foodList.orderBy
Child("MenuId").equalTo(categoryId)) {
            @Override
            protected void populateViewHolder(FoodViewHolder viewHolder, Food
model, int position) {
                viewHolder.food name.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.food image);
                final Food local = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                         //start new activity
                        Intent foodDetail = new
Intent(FoodList.this, FoodDetail.class);
foodDetail.putExtra("FoodId",adapter.getRef(position).getKey());
                        startActivity(foodDetail);
                        //Toast.makeText(FoodList.this, ""+local.getName(),
Toast.LENGTH SHORT).show();
                    }
                });
            }
        };
```

```
recyclerView.setAdapter(adapter);
}
```

Home

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.os.Bundle;
import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
import android.support.v7.widget.LinearLayoutManager;
import android.support.v7.widget.RecyclerView;
import android.view.View;
import android.support.design.widget.NavigationView;
import android.support.v4.view.GravityCompat;
import android.support.v4.widget.DrawerLayout;
import android.support.v7.app.ActionBarDrawerToggle;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.TextView;
import android.widget.Toast;
import com.example.lorcan.yourcf.Common.Common;
import com.example.lorcan.yourcf.Interface.ItemClickListener;
import com.example.lorcan.yourcf.Model.Category;
import com.example.lorcan.yourcf.ViewHolder.MenuViewHolder;
import com.firebase.ui.database.FirebaseRecyclerAdapter;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.squareup.picasso.Picasso;
public class Home extends AppCompatActivity
        implements NavigationView.OnNavigationItemSelectedListener {
    FirebaseDatabase database;
    DatabaseReference category;
    TextView txtFirstName;
    RecyclerView recyler menu;
    RecyclerView.LayoutManager layoutManager;
    FirebaseRecyclerAdapter<Category, MenuViewHolder> adapter;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
        toolbar.setTitle("Your CF");
        setSupportActionBar(toolbar);
        //Init Firebase
        database = FirebaseDatabase.getInstance();
        category = database.getReference("Category");
        FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
        fab.setOnClickListener(new View.OnClickListener() {
            @Override
```

```
public void onClick(View view) {
                Snackbar.make(view, "Replace with your own action",
Snackbar. LENGTH LONG)
                        .setAction("Action", null).show();
        });
        DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer_layout);
        ActionBarDrawerToggle toggle = new ActionBarDrawerToggle(
                this, drawer, toolbar, R.string.navigation drawer open,
R.string.navigation drawer close);
        drawer.addDrawerListener(toggle);
        toggle.syncState();
        NavigationView navigationView = (NavigationView)
findViewById(R.id.nav view);
        navigationView.setNavigationItemSelectedListener(this);
        //set name for user
        View headerView = navigationView.getHeaderView(0);
        txtFirstName = (TextView)headerView.findViewById(R.id.txtFirstName);
        txtFirstName.setText(Common.currentUser.getFirstName());
        recyler menu = (RecyclerView) findViewById(R.id.recyler menu);
        recyler menu.setHasFixedSize(true);
        layoutManager = new LinearLayoutManager(this);
        recyler_menu.setLayoutManager(layoutManager);
        loadMenu();
   private void loadMenu() {
        adapter = new FirebaseRecyclerAdapter<Category,</pre>
MenuViewHolder>(Category.class, R.layout.menu item, MenuViewHolder.class, category) {
            @Override
            protected void populateViewHolder(MenuViewHolder viewHolder, Category
model, int position) {
                viewHolder.txtMenuName.setText(model.getName());
                Picasso.with(getBaseContext()).load(model.getImage())
                        .into(viewHolder.imageView);
                final Category clickItem = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    public void onClick(View view, int position, boolean
isLongClick) {
                        //get catogoryid and send it to new activity
                        Intent foodList = new Intent(Home.this, FoodList.class);
                        //because CategoryId is key so we just get the key
foodList.putExtra("CategoryId", adapter.getRef(position).getKey());
                        startActivity(foodList);
                        //Toast.makeText(Home.this, ""+clickItem.getName(),
Toast.LENGTH SHORT).show();
                });
        recyler menu.setAdapter(adapter);
        /*adapter = new FirebaseRecyclerAdapter<Category,
MenuViewHolder>(Category.class,R.layout.menu item,MenuViewHolder.class,category) {
            @Override
            protected void populateViewHolder (MenuViewHolder viewHolder, Category
```

```
model, int position) {
                viewHolder.txtMenuName.setText(model.getName());
Picasso.with(getBaseContext()).load(model.getImage()).into(viewHolder.imageView);
                final Category clickItem = model;
                viewHolder.setItemClickListener(new ItemClickListener() {
                    @Override
                    public void onClick(View view, int position, boolean
isLongClick) {
                        //get cat id and send it to new activity
                        Intent foodList = new Intent(Home.this, FoodList.class);
foodList.putExtra("CategoryId", adapter.getRef(position).getKey());
                        startActivity(foodList);
                });
        recyler_menu.setAdapter(adapter);
    @Override
    public void onBackPressed() {
        DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
        if (drawer.isDrawerOpen(GravityCompat.START)) {
            drawer.closeDrawer(GravityCompat.START);
        } else {
            super.onBackPressed();
            startActivity(new Intent(Home.this, Home.class));
            finish();
        }
    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.home, menu);
       return true;
    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        // Handle action bar item clicks here. The action bar will
        // automatically handle clicks on the Home/Up button, so long
        // as you specify a parent activity in AndroidManifest.xml.
       // int id = item.getItemId();
        //noinspection SimplifiableIfStatement
        //if (id == R.id.action settings) {
             return true;
        return super.onOptionsItemSelected(item);
    @SuppressWarnings("StatementWithEmptyBody")
    @Override
    public boolean onNavigationItemSelected(MenuItem item) {
         // Handle navigation view item clicks here.
        int id = item.getItemId();
        if (id == R.id.nav menu) {
            // Handle the camera action
```

```
} else if (id == R.id.nav_food) {
    } else if (id == R.id.nav plan) {
    } else if (id == R.id.nav Activity) {
        Intent activity = new Intent(Home.this, Activity.class);
        startActivity(activity);
       finish();
    } else if (id == R.id.nav_spirometer) {
        Intent profile = new Intent(Home.this, SpirometerTest.class);
        startActivity(profile);
       finish();
    else if (id == R.id.nav howTo) {
       Intent howTo = new Intent(Home.this, InformationPage2.class);
       startActivity(howTo);
       finish();
    else if (id == R.id.nav profile) {
        Intent profile = new Intent(Home.this, Medical.class);
        startActivity(profile);
       finish();
    else if (id == R.id.nav_settings) {
    else if (id == R.id.nav logout) {
    DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
    drawer.closeDrawer(GravityCompat.START);
    return true;
}
```

InformationPage1

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class InformationPagel extends AppCompatActivity {

   Button btnNext;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_information_page1);

        btnNext = (Button)findViewById(R.id.btnNext);

        btnNext.setOnClickListener(new View.OnClickListener() {
            @Override
```

InformationPage2

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
public class InformationPage2 extends AppCompatActivity {
    Button btnNext;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity information page2);
        btnNext = (Button) findViewById(R.id.btnNext);
        btnNext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent signIn = new Intent(InformationPage2.this, Home.class);
                startActivity(signIn);
        });
    }
```

MainActivity

```
package com.example.lorcan.yourcf;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
```

```
TextView txtSlogan;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
       btnSignIn = (Button) findViewById(R.id.btnSignIn);
        btnSignUp = (Button) findViewById(R.id.btnSignUp);
        txtSlogan = (TextView)findViewById(R.id.txtSlogan);
        btnSignIn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent signIn = new Intent(MainActivity.this, SignIn.class);
                startActivity(signIn);
        });
        btnSignUp.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent info = new Intent(MainActivity.this,InformationPage1.class);
                startActivity(info);
       });
   }
}
Medical
package com.example.lorcan.yourcf;
import android.app.ProgressDialog;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
import com.example.lorcan.yourcf.Model.MedicalProfile;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.rengwuxian.materialedittext.MaterialEditText;
public class Medical extends AppCompatActivity {
    MaterialEditText edtDoctor, edtDOB, edtSiblingsWithcF, edtdiabetes,
edtAgeofPrognosis;
    Button btnProfile:
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity medical profile);
        edtDoctor = (MaterialEditText) findViewById(R.id.edtDoctor);
```

Button btnSignIn,btnSignUp;

```
edtDOB = (MaterialEditText) findViewById(R.id.edtDOB);
        edtSiblingsWithcF = (MaterialEditText) findViewById(R.id.edtSiblingsWithcF);
        edtdiabetes = (MaterialEditText) findViewById(R.id.edtdiabetes);
        edtAgeofPrognosis = (MaterialEditText) findViewById(R.id.edtAgeofPrognosis);
        btnProfile = (Button) findViewById (R.id.btnProfile);
        //Init Firebase
        FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference table_medical = database.getReference("Medical");
        btnProfile.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                final ProgressDialog mDialog = new ProgressDialog(Medical.this);
                mDialog.setMessage("Please Wait....");
                mDialog.show();
                table medical.addValueEventListener(new ValueEventListener() {
                    @Override
                    public void onDataChange(DataSnapshot dataSnapshot) {
                         // check if number already exists
if(dataSnapshot.child(edtDoctor.getText().toString()).exists())
                            mDialog.dismiss();
                            Toast.makeText (Medical.this, "Phone Number Already
Exists !!!", Toast.LENGTH SHORT).show();
                        else
                            mDialog.dismiss();
                            MedicalProfile med = new
MedicalProfile(edtDOB.getText().toString(),edtSiblingsWithcF.getText().toString(),e
dtdiabetes.getText().toString(),edtAgeofPrognosis.getText().toString());
table medical.child(edtDoctor.getText().toString()).setValue(med);
                            Toast.makeText(Medical.this, "User Created",
Toast. LENGTH SHORT) . show();
                            finish();
                        }
                    @Override
                    public void onCancelled(DatabaseError databaseError) {
                });
                Intent Medical = new
Intent(com.example.lorcan.yourcf.Medical.this, MainActivity.class);
                startActivity(Medical);
        });
    @Override
    public void onBackPressed() {
        startActivity(new Intent(Medical.this, Home.class));
        finish();
```

SignIn

```
package com.example.lorcan.yourcf;
import android.app.ProgressDialog;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import com.example.lorcan.yourcf.Common.Common;
import com.example.lorcan.yourcf.Model.User;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
public class SignIn extends AppCompatActivity {
    EditText edtPhone, edtPassword;
    Button btnSignIn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign_in);
        edtPhone = (EditText) findViewById(R.id.edtPhone);
        edtPassword = (EditText) findViewById(R.id.edtPassword);
       btnSignIn = (Button) findViewById(R.id.btnSignIn);
        //Init Firebase
        FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference table user = database.getReference("User");
        btnSignIn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                final ProgressDialog mDialog = new ProgressDialog(SignIn.this);
                mDialog.setMessage("Please Wait....");
                mDialog.show();
                table user.addValueEventListener(new ValueEventListener() {
                    @Override
                    public void onDataChange(DataSnapshot dataSnapshot) {
                        // check if user exists
if(dataSnapshot.child(edtPhone.getText().toString()).exists())
                            //get user info
                            mDialog.dismiss();
                            User user =
dataSnapshot.child(edtPhone.getText().toString()).getValue(User.class);
                            user.setPhone(edtPhone.getText().toString()); //set
phone
if(user.getPassword().equals(edtPassword.getText().toString()))
                            {
                                 //Toast.makeText(SignIn.this, "Sign In
Success!!!!", Toast.LENGTH SHORT).show();
                                Intent homeIntent = new
Intent(SignIn.this, Home.class);
                                //store current user
                                Common.currentUser = user;
```

```
startActivity(homeIntent);
                                 finish();
                             }
                            else
                             {
                                mDialog.dismiss();
                                Toast.makeText(SignIn.this, "Wrong Password !!!",
Toast. LENGTH SHORT) . show();
                        }
                        else
                            Toast.makeText(SignIn.this, "User not found in
database!!!", Toast.LENGTH SHORT).show();
                    }
                    @Override
                    public void onCancelled(DatabaseError databaseError) {
                });
            }
       });
    }
}
SignUp
package com.example.lorcan.yourcf;
import android.app.ProgressDialog;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
import com.example.lorcan.yourcf.Model.User;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.rengwuxian.materialedittext.MaterialEditText;
public class SignUp extends AppCompatActivity {
    MaterialEditText edtPhone, edtFirstName, edtLastName, edtEmail, edtPassword;
    Button btnSignUp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign_up);
        edtPhone = (MaterialEditText) findViewById(R.id.edtPhone);
        edtFirstName = (MaterialEditText) findViewById(R.id.edtFirstName);
        edtLastName = (MaterialEditText) findViewById(R.id.edtLastName);
        edtEmail = (MaterialEditText) findViewById(R.id.edtEmail);
```

```
edtPassword = (MaterialEditText) findViewById(R.id.edtPassword);
        btnSignUp = (Button) findViewById(R.id.btnSignUp);
        //Init Firebase
        FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference table user = database.getReference("User");
        btnSignUp.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                final ProgressDialog mDialog = new ProgressDialog(SignUp.this);
                mDialog.setMessage("Please Wait....");
                mDialog.show();
                table user.addValueEventListener(new ValueEventListener() {
                    @Override
                    public void onDataChange(DataSnapshot dataSnapshot) {
                        // check if number already exists
if(dataSnapshot.child(edtPhone.getText().toString()).exists())
                            mDialog.dismiss();
                            Toast.makeText(SignUp.this, "Phone Number Already
Exists !!!", Toast.LENGTH SHORT).show();
                        }
                        else
                            mDialog.dismiss();
                            User user = new
User(edtEmail.getText().toString(),edtFirstName.getText().toString(),edtLastName.ge
tText().toString(),edtPassword.getText().toString());
table_user.child(edtPhone.getText().toString()).setValue(user);
                            Toast.makeText(SignUp.this, "User Created",
Toast. LENGTH SHORT) . show();
                            finish();
                        }
                    }
                    @Override
                    public void onCancelled(DatabaseError databaseError) {
                Intent signUp = new Intent(SignUp.this, MainActivity.class);
                startActivity(signUp);
       });
   }
}
spirometerTest
package com.example.lorcan.yourcf;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.Handler;
import android.os.SystemClock;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
```

```
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;
import com.example.lorcan.yourcf.Model.Spirometer;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.rengwuxian.materialedittext.MaterialEditText;
public class SpirometerTest extends AppCompatActivity {
    MaterialEditText edtDate, edtSpiroResult, edtSpiroResult1, edtSpiroResult2;
    TextView edtStopWatch;
    Button btnSubmit, btnStart, btnStop;
    Handler customhandler = new Handler();
    long startTime=0L,timeInMilliseconds=0L,timeSwapBuff=0L,updateTime=0L;
    Runnable updateTimeThread = new Runnable() {
        @Override
       public void run() {
            timeInMilliseconds = SystemClock.uptimeMillis()-startTime;
            updateTime = timeSwapBuff + timeInMilliseconds;
            int secs = (int) (updateTime/1000);
            int mins=secs/60;
            secs = 60;
            int milliseconds=(int) (updateTime%1000);
edtStopWatch.setText(""+mins+":"+String.format("%2d", secs)+":"+String.format("%3d",
milliseconds));
            customhandler.postDelayed(this, 0);
        }
    };
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_spirometer);
        edtDate = (MaterialEditText) findViewById(R.id.edtDate);
        edtStopWatch = (TextView) findViewById(R.id.edtStopWatch);
        edtSpiroResult = (MaterialEditText) findViewById(R.id.edtSpiroResult);
        edtSpiroResult1 = (MaterialEditText) findViewById(R.id.edtSpiroResult1);
        edtSpiroResult2 = (MaterialEditText) findViewById (R.id.edtSpiroResult2);
       btnSubmit = (Button) findViewById(R.id.btnSubmit);
       btnStart = (Button) findViewById(R.id.btnStart);
       btnStop = (Button) findViewById(R.id.btnStop);
        // init Firebase
        FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference table_Spirometer =
database.getReference("Spirometer");
       btnStart.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startTime = SystemClock.uptimeMillis();
                customhandler.postDelayed(updateTimeThread, 0);
        });
```

```
btnStop.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                timeSwapBuff+=timeInMilliseconds;
                customhandler.removeCallbacks(updateTimeThread);
        });
        btnSubmit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                final ProgressDialog mDialog = new
ProgressDialog(SpirometerTest.this);
                mDialog.setMessage("Please Wait....");
                mDialog.show();
                table Spirometer.addValueEventListener(new ValueEventListener() {
                    @Override
                    public void onDataChange(DataSnapshot dataSnapshot) {
                        // check if number already exists
if(dataSnapshot.child(edtDate.getText().toString()).exists())
                            mDialog.dismiss();
                            Toast.makeText(SpirometerTest.this, "Date Has Already
Been Entered!!!", Toast. LENGTH SHORT) . show();
                        }
                        else
                            mDialog.dismiss();
//total+=(Integer.parseInt(selection.getCalorieAmount()))*(Integer.parseInt(selecti
on.getQuantity()));
                            Spirometer spiro = new
Spirometer(edtStopWatch.getText().toString(),edtSpiroResult.getText().toString());
                            Spirometer spiro1 = new
Spirometer(edtStopWatch.getText().toString(),edtSpiroResult1.getText().toString());
                            Spirometer spiro4 = new
Spirometer(edtStopWatch.getText().toString(),edtSpiroResult2.getText().toString());
                            int spiro3 =
Integer.parseInt(spiro.getSpirometerResult()) +
(Integer.parseInt(spiro1.getSpirometerResult()) +
(Integer.parseInt(spiro4.getSpirometerResult())));
                             //Spirometer result =
Integer.parseInt(spiro3.getSpirometerResult());
                            int result = spiro3/3;
                            Spirometer test = new
Spirometer(edtStopWatch.getText().toString(),String.valueOf(result));
table_Spirometer.child(edtDate.getText().toString()).setValue(test);
                            Toast.makeText(SpirometerTest.this, "Test Recorded",
Toast. LENGTH SHORT) . show();
                            Intent homeIntent = new
Intent(SpirometerTest.this, Home.class);
                            startActivity(homeIntent);
                            //finish();
                        }
                    }
                    @Override
                    public void onCancelled(DatabaseError databaseError) {
```

```
}
});

});

}Override
public void onBackPressed() {
    startActivity(new Intent(SpirometerTest.this, Home.class));
    finish();
}
```

Layout

Activity_xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
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:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/blue"
    tools:context="com.example.lorcan.yourcf.Activity">
</android.support.constraint.ConstraintLayout>
```

Activity_detail

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.design.widget.CoordinatorLayout</pre>
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:layout width="match parent"
    android:layout_height="match_parent"
    tools:context="com.example.lorcan.yourcf.ActivityDetail">
    <android.support.design.widget.AppBarLayout</pre>
        android:id="@+id/app_bar_layout"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android: theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"
        android:fitsSystemWindows="true">
        <android.support.design.widget.CollapsingToolbarLayout</pre>
            android:id="@+id/collapsing"
            android:layout width="match parent"
            android:layout_height="350dp"
            android:fitsSystemWindows="true"
            app:layout scrollFlags="scroll|exitUntilCollapsed"
            app:contentScrim="#0e0d0e"
            app:collapsedTitleTextAppearance="@android:color/transparent">
            <ImageView</pre>
                android:id="@+id/img activity"
```

```
android:contentDescription="@null"
            android:scaleType="centerCrop"
            app:layout collapseMode="parallax"
            android: layout_width="match_parent"
            android:layout height="match parent" />
        <android.support.v7.widget.Toolbar</pre>
            app:title="Activity Name"
            android:id="@+id/toolbar"
            android:layout width="match parent"
            android:layout_height="?attr/actionBarSize"
            app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
            app:layout collapseMode="parallax">
        </android.support.v7.widget.Toolbar>
    </android.support.design.widget.CollapsingToolbarLayout>
</android.support.design.widget.AppBarLayout>
<android.support.design.widget.FloatingActionButton</pre>
    android:id="@+id/btn activity"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:backgroundTint="@android:color/white"
    android:src="@drawable/ic_directions_run_black_24dp"
    app:elevation="6dp"
    app:layout anchor="@id/app bar layout"
    app:layout_anchorGravity="bottom|right|end"
    app:pressedTranslationZ="12dp"
    app:useCompatPadding="true" />
<android.support.v4.widget.NestedScrollView</pre>
    android:id="@+id/nestedScrollView"
    android:clipToPadding="false"
    app:layout behavior="@string/appbar scrolling view behavior"
    android:layout_width="match_parent"
    android:layout height="match parent">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:layout height="wrap content">
        <android.support.v7.widget.CardView</pre>
            android:layout width="match parent"
            android: layout height="wrap content"
            app:cardElevation="5dp"
            app:cardUseCompatPadding="true">
            <LinearLayout</pre>
                android:layout width="match parent"
                android:layout_height="wrap_content"
                android:orientation="vertical">
                <TextView
                    android:id="@+id/activity_name"
                    android:layout width="wrap content"
                    android:layout height="match parent"
                    android:layout marginTop="8dp"
                    android:padding="12dp"
                    android:text="Activity Name"
                    android:textColor="@color/colorPrimary"
                    android: textSize="20sp"
                    android:textStyle="bold" />
```

```
<LinearLayout</pre>
                    android:id="@+id/layout cal"
                    android:layout_width="match_parent"
                    android:layout_height="wrap_content"
                    android:orientation="horizontal">
                    <ImageView</pre>
                        android:layout_width="0dp"
                         android:layout_height="wrap_content"
                         android:layout_weight="1"
                         android:src="@drawable/ic_library_books_black_24dp" />
                    <TextView
                        android:id="@+id/intensity_of_activity"
                         android:layout width="0dp'
                         android:layout height="match parent"
                        android:layout weight="5"
                        android:text="1200"
                         android:textColor="@color/colorPrimary"
                         android:textSize="18sp"
                         android:textStyle="bold" />
                </LinearLayout>
                <com.cepheuen.elegantnumberbutton.view.ElegantNumberButton</pre>
                    android:id="@+id/activity_number_button"
                    android:layout width="100dp"
                    android:layout_height="30dp"
                    android:layout_marginBottom="18dp"
                    android:layout marginLeft="8dp"
                    android:layout marginTop="8dp"
                    app:backGroundColor="@color/colorPrimary"
                    app:finalNumber="20"
                    app:initialNumber="1"
                    app:textSize="8sp" >
                < /com.cepheuen.elegantnumberbutton.view.ElegantNumberButton>
            </LinearLayout>
        </android.support.v7.widget.CardView>
        <android.support.v7.widget.CardView</pre>
            app:cardElevation="5dp"
            app:cardUseCompatPadding="true"
            android:layout width="match parent"
            android: layout height="wrap content">
            <TextView
                android:id="@+id/activity_description"
                android:layout marginTop="12dp"
                android:lineSpacingMultiplier="1.5"
                android:padding="12dp"
                android:text="Description"
                android:textColor="@color/colorPrimary"
                android:textSize="14sp"
                android:layout width="wrap content"
                android:layout_height="wrap_content" />
        </android.support.v7.widget.CardView>
    </LinearLayout>
</android.support.v4.widget.NestedScrollView>
```

```
</android.support.design.widget.CoordinatorLayout>
```

Activity_diary

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:padding="16dp"
    android:background="@color/colorPrimary"
    tools:context=".Diary">
    <android.support.v7.widget.RecyclerView</pre>
        android:id="@+id/listDiary"
        android:background="@android:color/transparent"
        android:layout width="match parent"
        android:layout_height="match_parent"/>
    <android.support.v7.widget.CardView</pre>
        android:layout_alignParentBottom="true"
        android:layout width="match parent"
        app:cardBackgroundColor="@color/colorPrimary"
        android:layout height="150dp">
        <RelativeLayout
            android:layout width="match parent"
            android:layout height="match parent">
            <LinearLayout</pre>
                android:gravity="center vertical"
                android:layout margin="8dp"
                android:orientation="horizontal"
                android:layout_width="wrap_content"
                android:layout height="wrap content">
                <TextView
                    android:text="Total :"
                    android:textSize="20sp"
                    android:textColor="@android:color/white"
                    android:layout width="wrap content"
                    android:layout_height="wrap_content" />
                <TextView
                    android:id="@+id/total"
                    android:text="1000"
                    android:textSize="24sp"
                    android:textColor="@android:color/white"
                    android:layout width="wrap content"
                    android:layout_height="wrap_content" />
            </LinearLayout>
            <Button
                android:id="@+id/btnAddDiary"
                style="@android:style/Widget.Material.Button"
                android:layout width="match parent"
                android:layout height="wrap content"
                android:layout alignParentBottom="true"
                android:layout_marginBottom="30dp"
```

```
android:layout marginLeft="20dp"
                android:layout marginRight="20dp"
                android:layout_weight="1"
                android:background="@color/cardview dark background"
                android: fontFamily="sans-serif-condensed"
                android:text="Add"
                android:textColor="@android:color/white" />
        </RelativeLayout>
    </android.support.v7.widget.CardView>
</RelativeLayout>
Activity_food_detail
<?xml version="1.0" encoding="utf-8"?>
<android.support.design.widget.CoordinatorLayout</pre>
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:layout width="match parent"
    android:layout_height="match_parent"
    tools:context="com.example.lorcan.yourcf.FoodDetail">
    <android.support.design.widget.AppBarLayout</pre>
        android:id="@+id/app_bar_layout"
        android:layout width="match parent"
        android: layout height="wrap content"
        android: theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"
        android:fitsSystemWindows="true">
        <android.support.design.widget.CollapsingToolbarLayout</pre>
            android:id="@+id/collapsing"
            android:layout width="match parent"
            android:layout_height="350dp"
            android:fitsSystemWindows="true"
            app:layout scrollFlags="scroll|exitUntilCollapsed"
            app:contentScrim="#0e0d0e"
            app:collapsedTitleTextAppearance="@android:color/transparent">
            <ImageView</pre>
                android:id="@+id/img food"
                android:contentDescription="@null"
                android:scaleType="centerCrop"
                app:layout collapseMode="parallax"
                android:layout width="match parent"
                android:layout_height="match_parent" />
            <android.support.v7.widget.Toolbar</pre>
                app:title="Food Name"
                android:id="@+id/toolbar"
                android:layout_width="match_parent"
                android:layout_height="?attr/actionBarSize"
                app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
                app:layout_collapseMode="parallax">
           </android.support.v7.widget.Toolbar>
```

```
</android.support.design.widget.CollapsingToolbarLayout>
</android.support.design.widget.AppBarLayout>
<android.support.design.widget.FloatingActionButton</pre>
    android:id="@+id/btnFood"
    android:src="@drawable/ic kitchen black 24dp"
    android:backgroundTint="@android:color/white"
    android:layout_width="wrap_content"
    android: layout height="wrap content"
    app:elevation="6dp"
    app:pressedTranslationZ="12dp"
    app:layout anchor="@id/app bar layout"
    app:layout_anchorGravity="bottom|right|end"
    app:useCompatPadding="true"
<android.support.v4.widget.NestedScrollView</pre>
    android:id="@+id/nestedScrollView"
    android:clipToPadding="false"
    app:layout behavior="@string/appbar scrolling view behavior"
    android:layout width="match parent"
    android:layout_height="match_parent">
    <LinearLayout</pre>
        android:orientation="vertical"
        android: layout_width="match_parent"
        android:layout height="wrap content">
        <android.support.v7.widget.CardView</pre>
            android:layout_width="match_parent"
            android:layout height="wrap content"
            app:cardElevation="5dp"
            app:cardUseCompatPadding="true">
            <LinearLayout
                android:layout width="match parent"
                android:layout_height="wrap_content"
                android:orientation="vertical">
                <TextView
                    android:id="@+id/food name"
                    android:layout width="wrap content"
                    android:layout height="match parent"
                    android:layout marginTop="8dp"
                    android:padding="12dp"
                    android:text="Food Name"
                    android:textColor="@color/colorPrimary"
                    android:textSize="20sp"
                    android:textStyle="bold" />
                <LinearLayout</pre>
                    android:id="@+id/layout cal"
                    android:layout width="match parent"
                    android:layout height="wrap_content"
                    android:orientation="horizontal">
                    <ImageView</pre>
                         android:layout width="0dp"
                         android:layout_height="wrap_content"
                         android:layout weight="1"
                         android:src="@drawable/ic_restaurant_black_24dp" />
                     <TextView
                        android:id="@+id/food amount"
                        android:layout width="0dp"
                         android:layout_height="match_parent"
```

```
android:layout weight="5"
                             android: text="1200"
                            android:textColor="@color/colorPrimary"
                             android: textSize="18sp"
                             android:textStyle="bold" />
                    </LinearLayout>
                    <com.cepheuen.elegantnumberbutton.view.ElegantNumberButton</pre>
                         android:id="@+id/number button"
                        android:layout width="100dp"
                        android:layout height="30dp"
                        android:layout_marginBottom="18dp"
                        android:layout_marginLeft="8dp"
                        android:layout marginTop="8dp"
                        app:backGroundColor="@color/colorPrimary"
                        app:finalNumber="20"
                        app:initialNumber="1"
                        app:textSize="8sp" >
                    </com.cepheuen.elegantnumberbutton.view.ElegantNumberButton>
                </LinearLayout>
            </android.support.v7.widget.CardView>
            <android.support.v7.widget.CardView</pre>
                app:cardElevation="5dp"
                app:cardUseCompatPadding="true"
                android:layout width="match parent"
                android:layout_height="wrap_content">
                    android:id="@+id/food description"
                    android:layout marginTop="12dp"
                    android:lineSpacingMultiplier="1.5"
                    android:padding="12dp"
                    android:text="Description"
                    android:textColor="@color/colorPrimary"
                    android:textSize="14sp"
                    android:layout width="wrap content"
                    android:layout_height="wrap_content" />
            </android.support.v7.widget.CardView>
        </LinearLayout>
    </android.support.v4.widget.NestedScrollView>
</android.support.design.widget.CoordinatorLayout>
Activity_food_list
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout</pre>
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:layout width="match parent"
    android:layout_height="match_parent"
```

```
tools:context="com.example.lorcan.yourcf.FoodList">
    <android.support.v7.widget.RecyclerView</pre>
        android:layout_width="match_parent"
        android:layout height="match parent"
        android:id="@+id/recyler food"
        android:scrollbars="vertical"
</android.support.v7.widget.RecyclerView>
</android.support.constraint.ConstraintLayout>
Activity home
<?xml version="1.0" encoding="utf-8"?>
<android.support.v4.widget.DrawerLayout</pre>
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"
    android:background="@color/overLayActionBar"
    android:fitsSystemWindows="true"
    tools:openDrawer="start">
    <include
        layout="@layout/app_bar_home"
        android:layout_width="match parent"
        android:layout height="match parent" />
    <android.support.design.widget.NavigationView</pre>
        android:id="@+id/nav view"
        android:layout width="wrap content"
        android:layout height="match parent"
        android:layout_gravity="start"
        android:fitsSystemWindows="true"
        app:headerLayout="@layout/nav header home"
        android:background="@color/overLayBackground"
        app:itemTextColor="@android:color/white"
        app:itemIconTint="@android:color/white"
        app:menu="@menu/activity home drawer" />
</android.support.v4.widget.DrawerLayout>
Activity_item
<?xml version="1.0" encoding="utf-8"?>
<android.support.v7.widget.CardView</pre>
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout height="200dp"
    app:cardElevation="4dp"
    android:layout_marginBottom="8dp"
    <RelativeLayout
```

```
android:layout width="match parent"
        android:layout height="match parent">
        <ImageView</pre>
            android:id="@+id/activity image"
            android:scaleType="centerCrop"
            android:src="@drawable/purple"
            android:layout_width="match_parent"
            android:layout_height="match_parent" />
        <TextView
            android:id="@+id/activity name"
            android:text="Name of Food"
            android: textColor="@android:color/white"
            android:background="@color/overLayBackground"
            android:textSize="20sp"
            android:gravity="center"
            android:layout alignParentBottom="true"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            />
    </RelativeLayout>
</android.support.v7.widget.CardView>
Activity_list
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout</pre>
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:layout_width="match_parent"
    android:layout height="match parent"
    tools:context="com.example.lorcan.yourcf.ActivityList">
    <android.support.v7.widget.RecyclerView</pre>
        android:layout width="match parent"
        android:layout_height="match_parent"
        android:id="@+id/recyler activity"
        android:scrollbars="vertical">
    </android.support.v7.widget.RecyclerView>
</android.support.constraint.ConstraintLayout>
Activity_main
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:background="@drawable/main"
    tools:context="com.example.lorcan.yourcf.MainActivity">
<LinearLayout</pre>
    android:orientation="vertical"
    android:layout_centerInParent="true"
```

```
android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout alignParentTop="true">
    <ImageView</pre>
        android:id="@+id/imageView2"
        android:layout width="120dp"
        android:layout_height="120dp"
        android:layout_marginTop="72dp"
        android:layout_gravity="center"
        app:srcCompat="@drawable/rbicon" />
    <TextView
        android:id="@+id/txtSlogan"
        android:layout_width="200dp"
        android:layout height="wrap content"
        android:gravity="center"
        android:paddingTop="100dp"
        android:textSize="18sp"
        android:text="@string/slogan"
        android:textColor="@android:color/white"
        android:fontFamily="sans-serif-condensed"
</LinearLayout>
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:weightSum="2"
        android:layout_alignParentBottom="true"
        android:layout height="wrap content">
        <Button
            android:id="@+id/btnSignIn"
            style="@android:style/Widget.Material.Button"
            android:layout_width="match_parent"
            android: layout height="wrap content"
            android:textColor="@android:color/white"
            android:layout_marginLeft="20dp"
            android:layout_marginRight="20dp"
            android:layout weight="1"
            android:fontFamily="sans-serif-condensed"
            android:background="@color/colorAccent"
            android:text="Sign In" />
        <Button
            android:id="@+id/btnSignUp"
            style="@android:style/Widget.Material.Button.Borderless.Colored"
            android:layout_width="200dp"
            android:layout height="wrap content"
            android: fontFamily="sans-serif-condensed"
            android:textColor="@android:color/white"
            android:layout_gravity="center"
            android:layout marginBottom="30dp"
            android:layout weight="1"
            android:text="Sign Up" />
    </LinearLayout>
</RelativeLayout>
```

Activity_medical_profile

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout_height="match_parent"
    android:background="@color/medicalbg"
    tools:context="com.example.lorcan.yourcf.Medical">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:layout centerInParent="true"
        android:layout_marginRight="8dp"
        android:layout marginLeft="8dp"
        android:layout height="wrap content">
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtDoctor"
            android:hint="Enter Doctor Name"
            android:textColorHint="@android:color/white"
            android:layout_width="match_parent"
            android:text=""
            android:textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="text"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met maxCharacters="10"
            app:met_primaryColor="@android:color/white"
            app:met_singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtDOB"
            android:hint="Enter Date Of Birth"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android:textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="date"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met_maxCharacters="50"
            app:met_primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtSiblingsWithcF"
            android:hint="Enter Siblings With CF"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android: textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="text"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met_maxCharacters="50"
```

```
app:met primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtdiabetes"
            android:hint="Enter Yes/No For Diabetes "
            android:textColorHint="@android:color/white"
            android:layout_width="match_parent"
            android:text=""
            android: textColor="@android:color/white"
            android: textSize="24sp"
            android:inputType="text"
            android:layout height="wrap content"
            app:met_baseColor="@android:color/white"
            app:met_floatingLabel="highlight"
            app:met maxCharacters="50"
            app:met primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <\!\mathtt{com.rengwuxian.materialedittext.MaterialEditText}
            android:id="@+id/edtAgeofPrognosis"
            android:hint="Age Of Prognosis"
            android:textColorHint="@android:color/white"
            android:layout_width="match_parent"
            android:text=""
            android:textColor="@android:color/white"
            android: textSize="24sp"
            android:inputType="textPassword"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met_floatingLabel="highlight"
            app:met maxCharacters="10"
            app:met primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <Button
            android:id="@+id/btnProfile"
            style="@android:style/Widget.Material.Button"
            android:layout_width="match_parent"
            android: layout height="wrap content"
            android:layout_alignParentBottom="true"
            android:layout_marginTop="40dp"
            android:layout_marginLeft="20dp"
            android:layout marginRight="20dp"
            android:layout_weight="1"
            android:background="@color/colorAccent"
            android:fontFamily="sans-serif-condensed"
            android:text="Sign Up"
            android:textColor="@android:color/white" />
    </LinearLayout>
</RelativeLayout>
Activity_sign_in
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/blue"
    tools:context="com.example.lorcan.yourcf.SignIn">
```

```
<ImageView</pre>
    android:id="@+id/imageView2"
    android:layout_width="120dp"
    android:layout_height="120dp"
    android:layout_marginTop="72dp"
    android:layout centerHorizontal="true"
    app:srcCompat="@drawable/rbicon" />
<LinearLayout</pre>
    android:orientation="vertical"
    android:layout_width="match_parent"
    android: layout centerInParent="true"
    android:layout_marginRight="8dp"
    android:layout_marginLeft="8dp"
    android:layout height="wrap content">
    <\!\mathtt{com.rengwuxian.materialedittext.MaterialEditText}
        android:id="@+id/edtPhone"
        android:hint="Phone Number"
        android:textColorHint="@android:color/white"
        android:layout width="match parent"
        android: text="0868663769"
        android:textColor="@android:color/white"
        android: textSize="24sp"
        android:inputType="phone"
        android:layout_height="wrap_content"
        app:met baseColor="@android:color/white"
        app:met_floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met_primaryColor="@android:color/white"
        app:met_singleLineEllipsis="true"/>
    <com.rengwuxian.materialedittext.MaterialEditText</pre>
        android:id="@+id/edtPassword"
        android:hint="Password"
        android:textColorHint="@android:color/white"
        android:layout width="match parent"
        android:text="password"
        android:textColor="@android:color/white"
        android: textSize="24sp"
        android:inputType="textPassword"
        android:layout_height="wrap_content"
        app:met baseColor="@android:color/white"
        app:met floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met primaryColor="@android:color/white"
        app:met singleLineEllipsis="true"/>
</LinearLayout>
<Button
    android:id="@+id/btnSignIn"
    style="@android:style/Widget.Material.Button"
    android:layout_width="match_parent"
    android: layout height="wrap content"
    android:layout alignParentBottom="true"
    android:layout marginBottom="70dp"
    android:layout marginLeft="20dp"
    android:layout_marginRight="20dp"
    android:layout_weight="1"
    android:background="@color/colorAccent"
    android: fontFamily="sans-serif-condensed"
    android:text="Login"
    android:textColor="@android:color/white" />
```

Activity_sign_up

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:layout width="match parent"
    android: layout height="match parent"
    android:background="@drawable/dark"
    tools:context="com.example.lorcan.yourcf.SignUp">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:layout_centerInParent="true"
        android:layout_marginRight="8dp"
        android:layout marginLeft="8dp"
        android:layout height="wrap content">
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtPhone"
            android:hint="Phone Number"
            android:textColorHint="@android:color/white"
            android:layout_width="match_parent"
            android:text=""
            android:textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="phone"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met maxCharacters="10"
            app:met_primaryColor="@android:color/white"
            app:met_singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtEmail"
            android:hint="Email"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android:textColor="@android:color/white"
            android: textSize="24sp"
            android:inputType="textEmailAddress"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met_maxCharacters="50"
            app:met_primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtFirstName"
            android:hint="First Name"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android: textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="text"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met_maxCharacters="50"
            app:met_primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
```

```
<com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtLastName"
            android:hint="Last Name"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android:textColor="@android:color/white"
            android:textSize="24sp"
            android:inputType="text"
            android:layout_height="wrap_content"
            app:met baseColor="@android:color/white"
            app:met floatingLabel="highlight"
            app:met maxCharacters="50"
            app:met_primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <com.rengwuxian.materialedittext.MaterialEditText</pre>
            android:id="@+id/edtPassword"
            android:hint="Password"
            android:textColorHint="@android:color/white"
            android:layout width="match parent"
            android:text=""
            android:textColor="@android:color/white"
            android: textSize="24sp"
            android:inputType="textPassword"
            android:layout height="wrap content"
            app:met baseColor="@android:color/white"
            app:met_floatingLabel="highlight"
            app:met maxCharacters="10"
            app:met primaryColor="@android:color/white"
            app:met singleLineEllipsis="true"/>
        <Button
            android:id="@+id/btnSignUp"
            style="@android:style/Widget.Material.Button"
            android:layout_width="match_parent"
            android:layout height="wrap content"
            android:layout_alignParentBottom="true"
            android:layout_marginTop="40dp"
            android:layout_marginLeft="20dp"
            android:layout marginRight="20dp"
            android:layout_weight="1"
            android:background="@color/colorAccent"
            android:fontFamily="sans-serif-condensed"
            android:text="Sign Up"
            android:textColor="@android:color/white" />
    </LinearLayout>
</RelativeLayout>
Activity_spirometer
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/fbutton color green sea"
    tools:context="com.example.lorcan.yourcf.SpirometerTest">
    <ImageView</pre>
```

```
android:id="@+id/imageView2"
    android:layout width="120dp"
    android:layout_height="50dp"
    android:paddingBottom="10dp"
    android:layout marginTop="15dp"
    android:layout centerHorizontal="true"
    app:srcCompat="@drawable/rbicon" />
<LinearLayout</pre>
    android:orientation="vertical"
    android:layout_width="match_parent"
    android: layout centerInParent="true"
    android:layout_marginRight="8dp"
    android:layout_marginLeft="8dp"
    android:layout height="wrap content">
    <com.rengwuxian.materialedittext.MaterialEditText</pre>
        android:id="@+id/edtDate"
        android:hint="Enter Test Number"
        android:textColorHint="@android:color/white"
        android:layout width="match parent"
        android:text=""
        android:textColor="@android:color/white"
        android:textSize="24sp"
        android:inputType="text"
        android:layout_height="wrap_content"
        app:met baseColor="@android:color/white"
        app:met_floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met_primaryColor="@android:color/white"
        app:met_singleLineEllipsis="true"/>
    <TextView
        android:id="@+id/edtStopWatch"
        android:layout width="match parent"
        android:textSize="40sp"
        android: text="0:00:000"
        android:textAlignment="center"
        android:textColor="@android:color/white"
        android:layout height="wrap content" />
    <Button
        android:id="@+id/btnStart"
        style="@style/Widget.AppCompat.Button.Borderless.Colored"
        android: layout width="match parent"
        android:layout height="wrap content"
        android:layout_marginLeft="100dp"
        android:layout marginRight="99dp"
        android:text="Start" />
    <Button
        android:id="@+id/btnStop"
        style="@style/Widget.AppCompat.Button.Borderless.Colored"
        android:layout width="match parent"
        android:layout height="wrap content"
        android:layout_marginLeft="\overline{1}00dp"
        android:layout_marginRight="99dp"
        android:text="Stop" />
    <!-- <com.rengwuxian.materialedittext.MaterialEditText
         android:id="@+id/edtStopWatch"
         android:hint="Enter Time"
         android:textColorHint="@android:color/white"
         android:layout width="match parent"
         android:text=""
         android:textColor="@android:color/white"
         android:textSize="24sp"
```

```
android:inputType="time"
         android:layout height="wrap content"
         app:met baseColor="@android:color/white"
         app:met_floatingLabel="highlight"
         app:met_maxCharacters="10"
         app:met_primaryColor="@android:color/white"
         app:met singleLineEllipsis="true"/>-->
    <LinearLayout</pre>
        android:layout_width="match_parent"
        android:layout_height="wrap_content"></LinearLayout>
    <com.rengwuxian.materialedittext.MaterialEditText</pre>
        android:id="@+id/edtSpiroResult"
        android:hint="Enter Spirometer Result 1"
        android:textColorHint="@android:color/white"
        android:layout_width="match_parent"
        android:text=""
        android:textColor="@android:color/white"
        android:textSize="24sp"
        android:inputType="numberDecimal"
        android:layout_height="wrap_content"
        app:met baseColor="@android:color/white"
        app:met floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met primaryColor="@android:color/white"
        app:met singleLineEllipsis="true"/>
    <com.rengwuxian.materialedittext.MaterialEditText</pre>
        android:id="@+id/edtSpiroResult1"
        android:hint="Enter Spirometer Result 2"
        android:textColorHint="@android:color/white"
        android:layout_width="match_parent"
        android:text=""
        android:textColor="@android:color/white"
        android:textSize="24sp"
        android:inputType="numberDecimal"
        android:layout height="wrap content"
        app:met baseColor="@android:color/white"
        app:met_floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met primaryColor="@android:color/white"
        app:met singleLineEllipsis="true"/>
    <com.rengwuxian.materialedittext.MaterialEditText</pre>
        android:id="@+id/edtSpiroResult2"
        android:hint="Enter Spirometer Result 3"
        android:textColorHint="@android:color/white"
        android:layout width="match parent"
        android:text=""
        android:textColor="@android:color/white"
        android:textSize="24sp"
        android:inputType="numberDecimal"
        android:layout height="wrap content"
        app:met baseColor="@android:color/white"
        app:met_floatingLabel="highlight"
        app:met maxCharacters="10"
        app:met primaryColor="@android:color/white"
        app:met_singleLineEllipsis="true"/>
</LinearLayout>
<Button
    android:id="@+id/btnSubmit"
    style="@android:style/Widget.Material.Button"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="15dp"
    android:layout marginLeft="10dp"
    android:layout marginRight="10dp"
    android:background="@color/colorAccent"
```

```
android:fontFamily="sans-serif-condensed"
        android:text="Submit"
        android:textColor="@android:color/white" />
</RelativeLayout>
App_bar_home
<?xml version="1.0" encoding="utf-8"?>
<android.support.design.widget.CoordinatorLayout</pre>
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:layout width="match parent"
    android:layout height="match parent"
    tools:context="com.example.lorcan.yourcf.Home">
    <android.support.design.widget.AppBarLayout</pre>
        android:layout width="match parent"
        android: layout height="wrap content"
        android:theme="@style/AppTheme.AppBarOverlay">
        <android.support.v7.widget.Toolbar</pre>
            android:id="@+id/toolbar"
            android:layout width="match parent"
            android:layout_height="?attr/actionBarSize"
            android:background="?attr/colorPrimary"
            app:popupTheme="@style/AppTheme.PopupOverlay" />
    </android.support.design.widget.AppBarLayout>
    <include layout="@layout/content home" />
    <android.support.design.widget.FloatingActionButton</pre>
        android:id="@+id/fab"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|end"
        android:layout margin="@dimen/fab margin"
        android:backgroundTint="@android:color/white"
        app:srcCompat="@drawable/ic_add_circle_black_24dp" />
</android.support.design.widget.CoordinatorLayout>
Content_home
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout</pre>
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:layout width="match parent"
    android:layout height="match parent"
    app:layout_behavior="@string/appbar_scrolling_view_behavior"
    tools:context="com.example.lorcan.yourcf.Home"
    tools:showIn="@layout/app_bar_home">
    <android.support.v7.widget.RecyclerView</pre>
        android:id="@+id/recyler menu"
        android:scrollbars="vertical"
        android:layout_width="match_parent"
```

```
android:layout_height="match_parent">
    </android.support.v7.widget.RecyclerView>
</android.support.constraint.ConstraintLayout>
Food_item
<?xml version="1.0" encoding="utf-8"?>
<android.support.v7.widget.CardView</pre>
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:orientation="vertical"
    android:layout width="match parent"
    android:layout height="200dp"
    app:cardElevation="4dp"
    android:layout_marginBottom="8dp"
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match parent">
        <ImageView</pre>
            android:id="@+id/food_image"
            android:scaleType="centerCrop"
            android:src="@drawable/purple"
            android:layout_width="match_parent"
            android:layout height="match parent" />
        <TextView
            android:id="@+id/food name"
            android:text="Name of Food"
            android: textColor="@android:color/white"
            android:background="@color/overLayBackground"
            android:textSize="20sp"
            android:gravity="center"
            android:layout_alignParentBottom="true"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            />
    </RelativeLayout>
</android.support.v7.widget.CardView>
Menu_item
<?xml version="1.0" encoding="utf-8"?>
<android.support.v7.widget.CardView</pre>
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout height="200dp"
    app:cardElevation="4dp"
    <RelativeLayout
        android:layout_width="match_parent"
```

```
android:layout_height="match_parent">
        <ImageView</pre>
            android:id="@+id/menu image"
            android:scaleType="centerCrop"
            android:src="@drawable/purple"
            android:layout_width="match_parent"
            android:layout_height="match_parent" />
        <TextView
            android:id="@+id/menu_name"
            android:text="Name of Food"
            android:textColor="@android:color/white"
            android:background="@color/overLayBackground"
            android:textSize="20sp"
            android:gravity="center"
            android:layout alignParentBottom="true"
            android:layout width="match parent"
            android:layout height="wrap content"
    </RelativeLayout>
</android.support.v7.widget.CardView>
Nav header home
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android: layout height="@dimen/nav header height"
    android:background="@color/overLayActionBar"
    android:gravity="bottom"
    android:orientation="vertical"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android: theme="@style/ThemeOverlay.AppCompat.Dark">
    <ImageView</pre>
        android:id="@+id/imageView3"
        android:layout width="66dp"
        android:layout_height="92dp"
        app:srcCompat="@drawable/rbicon" />
    <TextView
        android:id="@+id/txtFirstName"
        android:layout width="match parent"
        android:layout_height="wrap_content"
        android:paddingTop="@dimen/nav_header_vertical_spacing"
        android:text=""
        android:textAppearance="@style/TextAppearance.AppCompat.Body1" />
</LinearLayout>
```

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Selection home

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.v7.widget.CardView</pre>
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout width="match parent"
    android: layout height="wrap content"
    android:layout margin="8dp"
    app:cardElevation="4dp">
    <LinearLayout</pre>
        android:layout_marginTop="16dp"
        android:layout_marginBottom="16dp"
        android:orientation="horizontal"
        android:layout_gravity="center_vertical"
        android:layout_width="match_parent"
        android:layout height="wrap content">
        <LinearLayout</pre>
            android:orientation="vertical"
            android:layout_weight="9"
            android:layout_width="0dp"
            android:layout height="wrap content">
            <TextView
                android:id="@+id/selection item name"
                android:layout marginLeft="10dp"
                android:gravity="center_vertical|start"
                android:textAllCaps="true"
                android: textStyle="bold"
                android:text="Food 01"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content" />
            <TextView
                android:id="@+id/selection item cal"
                android:layout marginLeft="10dp"
                android:gravity="center vertical|start"
                android:textAllCaps="true"
                android:textStyle="italic"
                android:text="1000"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content" />
        </LinearLayout>
        <ImageView</pre>
            android:layout_gravity="center_vertical|end"
            android:layout marginRight="16dp"
            android:id="@+id/selection item count"
            android:layout_width="20dp"
            android:layout height="20dp" />
    </LinearLayout>
</android.support.v7.widget.CardView>
Information_page_1
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout</pre>
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:layout width="match parent"
    android:layout height="match parent"
    android:background="@color/info1"
    tools:context="com.example.lorcan.yourcf.InformationPage1">
    <TextView
        android:id="@+id/textView"
        android:layout_width="273dp"
        android:layout_height="220dp"
        android:layout_marginBottom="8dp"
        android:layout marginEnd="8dp"
        android:layout_marginStart="8dp"
        android:layout marginTop="8dp"
        android:fontFamily="sans-serif-condensed"
        android:text="Welcome to your cystic fibrosis. The next page leads to a
sign up page. This page only requires basic information in order for a user to set
up an account with us. Once logged in you will have an option to create a profile.
This profile will contain both personal and medical infomation. Select next to
continue."
        android: textColor="@android:color/white"
        android:textSize="18sp"
        app:layout constraintBottom toTopOf="@+id/btnNext"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toBottomOf="@+id/imageView" />
    <Button
        android:id="@+id/btnNext"
        style="@android:style/Widget.Material.Button.Borderless.Colored"
        android:layout_width="208dp"
        android:layout_height="42dp"
        android:layout_marginBottom="28dp"
        android:layout marginEnd="8dp"
        android:layout marginStart="8dp"
        android: text="Next"
        android: textColor="@android:color/white"
        app:layout constraintBottom toBottomOf="parent"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" />
    <ImageView</pre>
        android:id="@+id/imageView"
        android:layout_width="109dp"
        android:layout height="111dp"
        android:layout marginEnd="8dp"
        android:layout marginStart="8dp"
        android:layout_marginTop="28dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/rbicon" />
</android.support.constraint.ConstraintLayout>
Information_page_2
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout_height="match_parent"
    android:background="@drawable/blue"
    tools:context="com.example.lorcan.yourcf.InformationPage2">
    <ImageView</pre>
```

```
android:id="@+id/imageView2"
        android:layout width="120dp"
        android:layout_height="120dp"
        android:layout_marginTop="17dp"
        android:layout centerHorizontal="true"
        app:srcCompat="@drawable/rbicon" />
    <TextView
        android:id="@+id/textView"
        android:layout width="273dp"
        android:layout height="220dp"
        android:layout_centerInParent="true"
        android:fontFamily="sans-serif-condensed"
        android:text="Welcome to your cystic fibrosis. The next page leads to a
sign up page. This page only requires basic information in order for a user to set
up an account with us. Once logged in you will have an option to create a profile.
This profile will contain both personal and medical infomation. Select next to
continue."
        android:textColor="@android:color/white"
        android:textSize="18sp"
        app:layout constraintBottom toTopOf="@+id/btnNext"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toBottomOf="@+id/imageView" />
    <Button
        android:id="@+id/btnNext"
        style="@android:style/Widget.Material.Button.Borderless.Colored"
        android:layout width="match parent"
        android:layout_height="42dp"
        android:layout_marginBottom="28dp"
        android:layout_alignParentBottom="true"
        android:text="Next"
</RelativeLayout>
```

Gradle

Build.gradle(project)

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/blue"
    tools:context="com.example.lorcan.yourcf.InformationPage2">

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="120dp"
        android:layout_height="120dp"
        android:layout_marginTop="17dp"
        android:layout_centerHorizontal="true"</pre>
```

```
app:srcCompat="@drawable/rbicon" />
    <TextView
        android:id="@+id/textView"
        android:layout_width="273dp"
android:layout_height="220dp"
        android:layout centerInParent="true"
        android:fontFamily="sans-serif-condensed"
        android:text="Welcome to your cystic fibrosis. The next page leads to a
sign up page. This page only requires basic information in order for a user to set
up an account with us. Once logged in you will have an option to create a profile.
This profile will contain both personal and medical infomation. Select next to
continue."
        android: textColor="@android:color/white"
        android:textSize="18sp"
        app:layout constraintBottom toTopOf="@+id/btnNext"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imageView" />
    <Button
        android:id="@+id/btnNext"
        style="@android:style/Widget.Material.Button.Borderless.Colored"
        android:layout width="match parent"
        android:layout_height="42dp"
        android:layout_marginBottom="28dp"
        android:layout alignParentBottom="true"
        android: text="Next"
        />
</RelativeLayout>
```

Build.gradle(module app)

```
// Top-level build file where you can add configuration options common to all sub-
projects/modules.
buildscript {
    repositories {
        google()
        jcenter()
    dependencies {
        classpath 'com.android.tools.build:gradle:3.0.1'
        classpath 'com.google.gms:google-services:3.2.0'
        // NOTE: Do not place your application dependencies here; they belong
        // in the individual module build.gradle files
    }
}
allprojects {
   repositories {
        google()
        jcenter()
}
```

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```
task clean(type: Delete) {
    delete rootProject.buildDir
}
```