

Task Reminder Android Application

(MainActivity.java)

```
package com.example.taskreminder;

//import stmt
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Build;
import android.os.Bundle;
import android.view.Gravity;
import android.view.View;
import android.widget.TableLayout;
import android.widget.TableRow;
import android.widget.TextView;
import android.widget.Toast;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Objects;

public class MainActivity extends AppCompatActivity {

    public ArrayList<Appointment> appointmentArrayList= new ArrayList<Appointment>();

    @Override

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        createSomeTextAppointment();
    }

    private void createSomeTextAppointment() {int i;

    appointmentArrayList.add(new Appointment("Doctor visit", "Health", "Dec", "AM", 18, 2019, 9, 0));
    appointmentArrayList.add(new Appointment("Hair cut", "Personal", "Dec", "PM", 20, 2019, 5, 0));
    appointmentArrayList.add(new Appointment("Birthday wishes(vinish,Ranjith)", "Other", "Dec", "AM", 21, 2019, 12, 1));
    appointmentArrayList.add(new Appointment("Meeting with Accountant", "Personal", "Dec", "PM", 2, 2019, 6, 15));
    appointmentArrayList.add(new Appointment("HR Meeting", "Work", "Jan", "AM", 2, 2020, 11, 0));
    appointmentArrayList.add(new Appointment("Professor Conference", "College", "Jan", "AM", 26, 2020, 8, 45));
    appointmentArrayList.add(new Appointment("Dinner with Priya", "Personal", "Feb", "PM", 14, 2020, 8, 30));
    appointmentArrayList.add(new Appointment("Shopping for Shadow(Dog)", "Other", "Feb", "PM", 21, 2020, 9, 30));
    appointmentArrayList.add(new Appointment("Birthday wishes(Roshan)", "Other", "Mar", "AM", 22, 2020, 12, 2));

    for (i = 0; i < appointmentArrayList.size(); i++) populateTable(i);
    }

    private void populateTable(int arrayListCounter) {
```

```

        TableLayout tbl=findViewById(R.id.tblTableLayout);

        TableRow tableRow=new TableRow(this);

        TableRow.LayoutParams lp=new TableRow.LayoutParams(TableRow.LayoutParams.MATCH_PARENT,TableRow.LayoutParams.WRAP_CONTENT);

        tableRow.setLayoutParams(lp);

        TextView txtName=new TextView(this);

        txtName.setLayoutParams(lp);

        txtName.setGravity(Gravity.CENTER);

        txtName.setText(appointmentArrayList.get(arrayListCounter).name);

        txtName.setWidth(140);

        txtName.setTextSize(14);

        TextView txtType=new TextView(this);

        txtType.setLayoutParams(lp);

        txtType.setGravity(Gravity.CENTER);

        txtType.setText(appointmentArrayList.get(arrayListCounter).type);

        txtType.setWidth(93);

        txtType.setTextSize(14);

        TextView txtDate=new TextView(this);

        txtDate.setLayoutParams(lp);

        txtDate.setGravity(Gravity.CENTER);

        txtDate.setText(SetDateAndTime(appointmentArrayList.get(arrayListCounter)));

        txtDate.setWidth(97);

        txtDate.setTextSize(14);

        tableRow.addView(txtName);

        tableRow.addView(txtType);

        tableRow.addView(txtDate);

        tbl.addView(tableRow,arrayListCounter+1);
    }

    private String SetDateAndTime(Appointment appointment) {
        long curDatenTime=System.currentTimeMillis();

        SimpleDateFormat formatDate=new SimpleDateFormat("MMM d,YYYY");
    
```

```

String todayDate=formatDate.format(curDatenTime);
String passDate=appointment.monDate+" "+appointment.dDate+" "+appointment.yrDate;
if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.KITKAT) {
    if(Objects.equals(todayDate,passDate)) {
        return appointment.hrDate + " " + appointment.minDate + " " + appointment.AMorPMTTime;
    }
}
return appointment.monDate+" "+appointment.dDate+" "+appointment.yrDate;
}

public void nextActivity(View view){
    startActivityForResult(new Intent(this,Main2Activity.class),1542);
}

@Override
public void onActivityResult(int reqC, int resC, Intent i)
{
    super.onActivityResult(reqC,resC,i);
    if(reqC==1542 && resC==RESULT_OK && i!=null) {
        appointmentArrayList.add(new Appointment(i.getStringExtra("name"),
            i.getStringExtra("type"), i.getStringExtra("monthofyear"),
            i.getStringExtra("amrpm"),
            i.getIntExtra("dayofmonth", 0), i.getIntExtra("year", 0),
            i.getIntExtra("hour", 11), i.getIntExtra("minute", 11)));
        populateTable(appointmentArrayList.size() - 1);
        Toast.makeText(this, "Remainder is added", Toast.LENGTH_SHORT).show();
    }
}
}
}

```

(Application.java)

```

package com.example.taskreminder;

public class Appointment {

    public String name,type,monDate,AMorPMTTime;

```

```

public int dDate,yrDate,hrDate,minDate;
public Appointment(String name,String type,String monDate,String AMorPMTIME,int dDate,
    int yrDate,int hrDate,int minDate){

    this.name=name;

    this.type=type;

    this.monDate=monDate;

    this.AMorPMTIME=AMorPMTIME;

    this.dDate=dDate;

    this.yrDate=yrDate;

    this.hrDate=hrDate;

    this.minDate=minDate;

}
}

```

(Main2Activity.java)

//package and all import stmts

```

public class Main2Activity extends AppCompatActivity {

    private TextView txtDate,txtTime;

    private int yr,mon,dy,hr,min;

    static final int DATE_DIALOG_ID=999,TIME_DIALOG_ID=998;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main2);SetDateAndTime();

    }

    private void SetDateAndTime() {

        txtDate=(TextView)findViewById(R.id.textViewDate);

        txtTime=(TextView)findViewById(R.id.textViewTime);

        final Calendar c=Calendar.getInstance();

        yr=c.get(Calendar.YEAR);

        mon=c.get(Calendar.MONTH);

        dy=c.get(Calendar.DAY_OF_MONTH);
    }
}

```



```

txtTime.setText(new StringBuilder().append(pad(hr)).append(":").append(pad(min)));

txtDate.setText(new StringBuilder().append(dy).append("-").append(mon+1).append("-"
").append(yr).append(" "));
}

private String pad(int i) {
    if(i>=10) return String.valueOf(i);
    else return "0"+String.valueOf(i);
}

private DatePickerDialog.OnDateSetListener datePickerListener=new DatePickerDialog.OnDateSet
Listener() {
    @Override

    public void onDateSet(DatePicker datePicker, int i, int i1, int i2) {
        yr=i; mon=i1; dy=i2;

        txtDate.setText(new StringBuilder().append(dy).append("-").append(mon+1).append("-"
").append(yr).append(" "));
    }
};

private TimePickerDialog.OnTimeSetListener timePickerListener=new TimePickerDialog.OnTimeSe
tListener() {
    @Override

    public void onTimeSet(TimePicker timePicker, int i, int i1) {
        hr=i; min=i1;

        txtTime.setText(new StringBuilder().append(pad(hr)).append(":").append(pad(min)));
    }
};

@Override
protected Dialog onCreateDialog(int id)
{
    switch (id){
        case DATE_DIALOG_ID:
            return new DatePickerDialog(this,datePickerListener,yr,mon,dy);

        case TIME_DIALOG_ID:

```

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        return new TimePickerDialog(this,timePickerListener,hr,min,false);
    }

    return null;
}

public void selectTime(View view) {
    showDialog(TIME_DIALOG_ID);
}

public void selectDate(View view) {
    showDialog(DATE_DIALOG_ID);
}

public void cancelButton(View view)
{
    setResult(RESULT_CANCELED);
    finish();
}

public void addAppointment(View view) {
    EditText ed =(EditText)findViewById(R.id.editText);
    Spinner stype=(Spinner)findViewById(R.id.spinner);
    if(!ed.getText().toString().isEmpty()){
        Intent i=new Intent();
        i.putExtra("name",ed.getText().toString());
        i.putExtra("type",stype.getSelectedItem().toString());
        i.putExtra("monthofyear",DisplayMonthInChar(mon));
        i.putExtra("amrpm",AMorPM(hr));
        i.putExtra("dayofmonth",dy);
        i.putExtra("year",yr);
        i.putExtra("hour",formatthehour(hr));
        i.putExtra("minute",min);
        setResult(RESULT_OK,i);
        finish();
    }
}

```

else

```
Toast.makeText(this,"please enter the name!",Toast.LENGTH_LONG).show();
```

```
}
```

```
private String AMorPM(int i) {
```

```
    if(i>12) return "PM";
```

```
    else return "AM";
```

```
}
```

```
private int formatthehour(int i) {
```

```
    if(i>12) i-=12;
```

```
    return i;
```

```
}
```

```
private String DisplayMonthInChar(int i) {
```

```
    switch (i){
```

```
        case 0: return "Jan";
```

```
        case 1: return "Feb";
```

```
        case 2: return "Mar";
```

```
        case 3: return "Apr";
```

```
        case 4: return "May";
```

```
        case 5: return "Jun";
```

```
        case 6: return "Jul";
```

```
        case 7: return "Aug";
```

```
        case 8: return "Sept";
```

```
        case 9: return "Oct";
```

```
        case 10: return "Nov";
```

```
        case 11: return "Dec";
```

```
    }
```

```
    return "";
```

```
}
```

```
public void onCancel(View view) {
```

```
    finish();
```

```
}
```

```
}
```