What will learn

splash screen

fetch data from firebase

alert dialog

progressbar

Drawer menu in android

open website,open youtube share app in social media using intent.

how to search data from firebase and show data in recyclerview.

PdfViewer in android

1) splash screen

```java
package com.example.noteapp;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.widget.Toast;

public class splashscreen extends AppCompatActivity {

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


        Thread thread = new Thread(){
            @Override
            public void run() {
                try{
                 sleep(5 * 1000);
                    Intent intent = new
Intent(splashscreen.this,MainActivity.class);
                    startActivity(intent);
                    finish();
                }catch(Exception e){
                    Toast.makeText(splashscreen.this, e.getMessage(),
Toast.LENGTH_SHORT).show();
                }
                super.run();
```

```
            }
        };
        thread.start();


    }
}
```

2) inside Mainpage

```java
package com.example.noteapp;

import androidx.annotation.NonNull;
import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.view.GravityCompat;
import androidx.recyclerview.widget.GridLayoutManager;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.StaggeredGridLayoutManager;

import android.app.AlertDialog;
import android.app.ProgressDialog;
import android.content.DialogInterface;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.text.Editable;
import android.text.TextWatcher;
import android.util.Log;
import android.view.Menu;
import android.view.MenuItem;
import android.view.WindowManager;
import android.widget.ArrayAdapter;
import android.widget.SearchView;
import android.widget.Toast;

import com.example.noteapp.Adapters.BookAdapters;
import com.example.noteapp.databinding.ActivityMainBinding;
import com.example.noteapp.models.BookModels;
import com.google.android.material.navigation.NavigationView;
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 java.util.ArrayList;
import java.util.List;
import java.util.Locale;

public class MainActivity extends AppCompatActivity {
private FirebaseDatabase firebaseDatabase;
private DatabaseReference databaseReference;
private  ArrayList<BookModels>list;
private ProgressDialog progressDialog;
```

```java
private ActionBarDrawerToggle toggle;
private ActivityMainBinding binding;
private BookAdapters adapters;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        binding = ActivityMainBinding.inflate(getLayoutInflater());
        setContentView(binding.getRoot());
        getWindow().addFlags(WindowManager.LayoutParams.FLAG_KEEP_SCREEN_ON);
        firebaseDatabase = FirebaseDatabase.getInstance();
        databaseReference = firebaseDatabase.getReference().child("books");
//        getSupportActionBar().hide();
//        setSupportActionBar(binding.toolbar);
//        binding.toolbar.setTitle("Note App");

        binding.edittext.addTextChangedListener(new TextWatcher() {
            @Override
            public void beforeTextChanged(CharSequence charSequence, int i,
int i1, int i2) {

            }

            @Override
            public void onTextChanged(CharSequence charSequence, int i, int
i1, int i2) {

            }

            @Override
            public void afterTextChanged(Editable editable) {
                FilterList(editable.toString());
            }
        });


        toggle = new
ActionBarDrawerToggle(this,binding.drawer,binding.toolbar,R.string.start,R.st
ring.close);
        binding.drawer.addDrawerListener(toggle);
        toggle.syncState();

        binding.navigation.setNavigationItemSelectedListener(new
NavigationView.OnNavigationItemSelectedListener() {
            @Override
            public boolean onNavigationItemSelected(@NonNull MenuItem item) {
                binding.drawer.closeDrawer(GravityCompat.START);
                switch(item.getItemId()){
                    case R.id.share:
                        shareapp();
                        break;
                    case R.id.video:

openwebsite("https://www.youtube.com/channel/UCF5oO43y67XYOfJRiPif1rw/videos"
);
                        break;
```

```java
                        case R.id.website:
                            openwebsite("https://coderkharal.blogspot.com/");
                            break;
                        case R.id.developer:
                            Intent intent = new
Intent(MainActivity.this,DeveloperActivity.class);
                            startActivity(intent);
                            break;
                        case R.id.exit:
                            finish();
                            break;
                    }
                    return false;
                }
            });


        progressDialog = new ProgressDialog(this);
        progressDialog.setTitle("Loading");
        progressDialog.setMessage("Wait While Loading...");
        progressDialog.show();

        list = new ArrayList<>();

        adapters = new BookAdapters(list,getApplicationContext());
        binding.BookRecyclerview.setAdapter(adapters);

        databaseReference.addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot snapshot) {
                progressDialog.dismiss();
              for (DataSnapshot snapshot1:snapshot.getChildren()){
                 BookModels models = snapshot1.getValue(BookModels.class);
                      list.add(models);
              }

                adapters.notifyDataSetChanged();
            }

            @Override
            public void onCancelled(@NonNull DatabaseError error) {
                Toast.makeText(MainActivity.this,error.getMessage(),
Toast.LENGTH_SHORT).show();
             }
         });

        StaggeredGridLayoutManager staggeredGridLayoutManager = new
StaggeredGridLayoutManager(2,StaggeredGridLayoutManager.VERTICAL);

binding.BookRecyclerview.setLayoutManager(staggeredGridLayoutManager);

//         GridLayoutManager gridLayoutManager = new
GridLayoutManager(this,2);
//         binding.BookRecyclerview.setLayoutManager(gridLayoutManager);
```

```java
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.ic_launcher_background,"Hello
world"));
//        list.add(new BookModels(R.drawable.ic_launcher_background,"Hello
world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.course,"Hello world"));
//        list.add(new BookModels(R.drawable.ic_launcher_background,"Hello
world"));
    }

    @Override
    public void onBackPressed() {
        if(binding.drawer.isDrawerOpen(GravityCompat.START)){
            binding.drawer.closeDrawer(GravityCompat.START);
        }else{
            super.onBackPressed();
        }
    }

    private void openwebsite(String url){
        Intent intent = new Intent(Intent.ACTION_VIEW, Uri.parse(url));
        startActivity(intent);
    }

    private void FilterList(String s) {
        ArrayList<BookModels> filterList = new ArrayList<>();
        for(BookModels item:list){
            if(item.getTitle().toLowerCase().contains(s.toLowerCase())){
                filterList.add(item);
            }
        }
        if(filterList.isEmpty()){
            Toast.makeText(this, "No data found", Toast.LENGTH_SHORT).show();
        }else{
            adapters.setFilterList(filterList);
        }
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.main_menu,menu);
        return super.onCreateOptionsMenu(menu);
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        switch(item.getItemId()){
            case R.id.share:
```

```java
                shareapp();
                break;
            case R.id.exit:
                finish();
                break;
        }
        return super.onOptionsItemSelected(item);
    }

    private void shareapp(){
        Intent intent = new Intent(Intent.ACTION_SEND);
        intent.putExtra(Intent.EXTRA_TEXT,"our Note app you can learn
different course from these app");
        intent.setType("text/plain");
        startActivity(intent);
    }

    private void showalert(String title,String subtitle){
        new AlertDialog.Builder(this)
                .setTitle(title)
                .setMessage(subtitle)
                .setPositiveButton("Yes", new
DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int
i) {
                        finish();
                    }
                })
                .setNegativeButton("No", new
DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int
i) {
                        dialogInterface.dismiss();
                    }
                }).show();
    }


}
```

Model page
```java
package com.example.crudoperation;

public class courseModels {
    String title,desc,imageurl;

    public courseModels(String title, String desc, String imageurl) {
        this.title = title;
        this.desc = desc;
        this.imageurl = imageurl;
    }

    public courseModels(){}
```

```java
    public String getTitle() {
        return title;
    }

    public void setTitle(String title) {
        this.title = title;
    }

    public String getDesc() {
        return desc;
    }

    public void setDesc(String desc) {
        this.desc = desc;
    }

    public String getImageurl() {
        return imageurl;
    }

    public void setImageurl(String imageurl) {
        this.imageurl = imageurl;
    }
}
```

Adapter

```java
package com.example.noteapp.Adapters;

import android.content.Context;
import android.content.Intent;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import com.example.noteapp.NoteDetails;
import com.example.noteapp.R;
import com.example.noteapp.models.BookModels;
import com.squareup.picasso.Picasso;

import java.util.ArrayList;

public class BookAdapters extends
RecyclerView.Adapter<BookAdapters.ViewHolder>{
    ArrayList<BookModels>list;
    Context context;

    public BookAdapters(ArrayList<BookModels> list, Context context) {
```

```java
        this.list = list;
        this.context = context;
    }


    @NonNull
    @Override
    public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
        View view =
LayoutInflater.from(parent.getContext()).inflate(R.layout.sample_note,parent,
false);
        return new ViewHolder(view);
    }

    public void setFilterList(ArrayList<BookModels> FilterList){
        list = FilterList;
        notifyDataSetChanged();
    }

    @Override
    public void onBindViewHolder(@NonNull ViewHolder holder, int position) {
     final BookModels models = list.get(position);
     holder.text.setText(models.getTitle());
//     holder.image.setImageResource(models.getImage());
     Picasso.get().load(models.getImage()).into(holder.image);

     holder.itemView.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View view) {
//            Toast.makeText(context, "click image",
Toast.LENGTH_SHORT).show();
             Intent intent = new Intent(context, NoteDetails.class);
             intent.putExtra("pdfurl",models.getUrl());
             intent.putExtra("toolbartitle",models.getTitle());
             intent.addFlags(Intent.FLAG_ACTIVITY_NEW_TASK);
             context.startActivity(intent);
         }
     });
        setAnimation(holder.itemView);
    }

    public void setAnimation(View v){
        Animation animation = AnimationUtils.loadAnimation(context,
android.R.anim.fade_out);
        v.setAnimation(animation);
    }

    @Override
    public int getItemCount() {
        return list.size();
    }

    public class ViewHolder extends RecyclerView.ViewHolder{
        ImageView image;
        TextView text;
        public ViewHolder(@NonNull View itemView) {
```

```
            super(itemView);
            text = itemView.findViewById(R.id.coursetitle);
            image = itemView.findViewById(R.id.courseimg);
        }
    }
}
```

NoteDetails

```java
package com.example.noteapp;

import androidx.appcompat.app.AppCompatActivity;

import android.app.ProgressDialog;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.widget.TextView;

import com.example.noteapp.databinding.ActivityNoteDetailsBinding;
import com.github.barteksc.pdfviewer.PDFView;

import es.voghdev.pdfviewpager.library.RemotePDFViewPager;
import es.voghdev.pdfviewpager.library.adapter.PDFPagerAdapter;
import es.voghdev.pdfviewpager.library.remote.DownloadFile;

public class NoteDetails extends AppCompatActivity implements
DownloadFile.Listener{
    PDFView pdfView;
    TextView text;
    private ActivityNoteDetailsBinding binding;
    private RemotePDFViewPager remotePDFViewPager;
    private ProgressDialog progressDialog;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        binding = ActivityNoteDetailsBinding.inflate(getLayoutInflater());
        setContentView(binding.getRoot());
        progressDialog = new ProgressDialog(this);
        progressDialog.setTitle("Loading");
        progressDialog.setMessage("Wait While Loading");
        progressDialog.show();

        String toolbartitle = getIntent().getStringExtra("toolbartitle");
        getSupportActionBar().setTitle(toolbartitle);

        String url = getIntent().getStringExtra("pdfurl");

        remotePDFViewPager =
                new RemotePDFViewPager(NoteDetails.this, url, this);

    }


    @Override
    public void onSuccess(String url, String destinationPath) {
        progressDialog.dismiss();
```

```java
        PDFPagerAdapter adapter = new PDFPagerAdapter(this,
extractFileNameFromURL(url));
        remotePDFViewPager.setAdapter(adapter);
        setContentView(remotePDFViewPager);
    }

    public static String extractFileNameFromURL(String url){
      return url.substring(url.lastIndexOf('/')+1);
    }

    @Override
    public void onFailure(Exception e) {

    }

    @Override
    public void onProgressUpdate(int progress, int total) {

    }

    @Override
    public void onPointerCaptureChanged(boolean hasCapture) {
        super.onPointerCaptureChanged(hasCapture);
    }
}
```