



**FPT POLYTECHNIC**



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Conceive Design Implement Operate

## QUẢN LÝ SÁCH

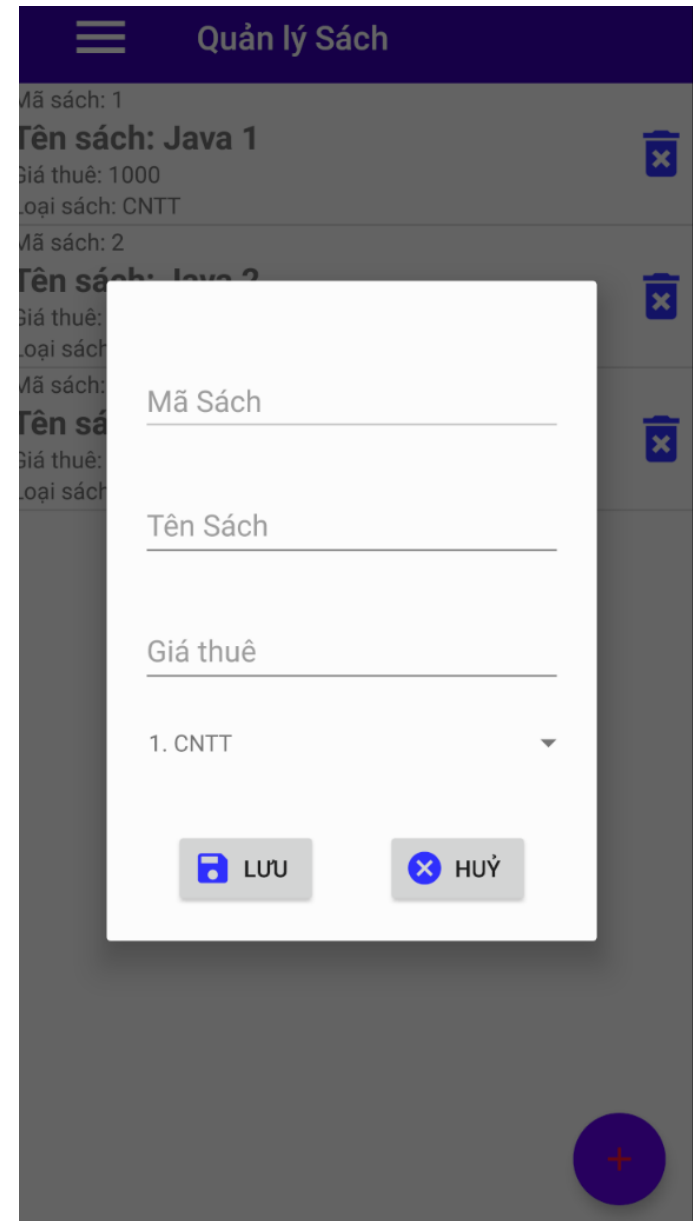
GIẢNG VIÊN: LÊ PHẠM TUẤN KIỆT

- ⊙ Kết thúc bài học này bạn có khả năng
  - ⊙ Viết mã điều khiển cho màn hình quản lý sách



## Sử dụng SachFragment

- ListView: show danh sách Sách (cần custom listview)
- Image: xoá sách (cần AlertDialog xác nhận xoá)
- FloatingActionButton: mở hộp thoại thêm/sửa sách, bao gồm:
  - Spinner: cho phép chọn loại sách (cần custom spinner).
  - Nút [Lưu]: Lưu sách vào SQLite, đóng hộp thoại.
  - Nút [Huỷ]: đóng hộp thoại.



# TẠO ADAPTER VÀ XỬ LÝ CODE CHO SPINNER LOẠI SÁCH

## Controller Code

```
public class LoaiSachSpinnerAdapter extends ArrayAdapter<LoaiSach> {  
  
    private Context context;  
    private ArrayList<LoaiSach> lists;  
    TextView tvMaLoaiSach, tvTenLoaiSach;  
    public LoaiSachSpinnerAdapter(@NonNull Context context, ArrayList<LoaiSach> lists) {  
        super(context, resource: 0, lists);  
        this.context=context;  
        this.lists=lists;  
    }  
  
    @NonNull  
    @Override  
    public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {...}  
    @Override  
    public View getDropDownView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {...}  
}
```

# TAO ADAPTER VÀ XỬ LÝ CODE CHO SPINNER LOẠI SÁCH

```

public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {
    View v = convertView;
    if (v == null){
        LayoutInflater inflater = (LayoutInflater)
            context.getSystemService(Context.LAYOUT_INFLATER_SERVICE);
        v = inflater.inflate(R.layout.loai_sach_item_spinner, root: null);
    }
    final LoaiSach item = lists.get(position);
    if(item != null) {
        tvMaLoaiSach = v.findViewById(R.id.tvMaLoaiSachSp);
        tvMaLoaiSach.setText(item.maLoai + ". ");
        tvTenLoaiSach = v.findViewById(R.id.tvTenLoaiSachSp);
        tvTenLoaiSach.setText(item.tenLoai);
    }
    return v;
}

@Override
public View getDropDownView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {
    View v = convertView;
    if (v == null){
        LayoutInflater inflater = (LayoutInflater)
            context.getSystemService(Context.LAYOUT_INFLATER_SERVICE);
        v = inflater.inflate(R.layout.loai_sach_item_spinner, root: null);
    }
    final LoaiSach item = lists.get(position);
    if(item != null){
        tvMaLoaiSach = v.findViewById(R.id.tvMaLoaiSachSp);
        tvMaLoaiSach.setText(item.maLoai+". ");
        tvTenLoaiSach = v.findViewById(R.id.tvTenLoaiSachSp);
        tvTenLoaiSach.setText(item.tenLoai);
    }
    return v;
}

```

```
public class SachAdapter extends ArrayAdapter<Sach> {  
  
    private Context context;  
    SachFragment fragment;  
    private ArrayList<Sach> lists;  
    TextView tvMaSach, tvTenSach, tvGiaThue, tvLoai;  
    ImageView imgDel;  
    public SachAdapter(@NonNull Context context, SachFragment fragment, ArrayList<Sach> lists) {  
        super(context, resource: 0, lists);  
        this.context=context;  
        this.lists=lists;  
        this.fragment = fragment;  
    }  
    @NonNull  
    @Override  
    public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {...}  
}
```

```
public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {
    View v = convertView;

    if (v == null){
        LayoutInflater inflater = (LayoutInflater)
            context.getSystemService(Context.LAYOUT_INFLATER_SERVICE);
        v = inflater.inflate(R.layout.sach_item, root: null);
    }

    final Sach item = lists.get(position);
    if(item != null){
        LoaiSachDAO loaiSachDAO = new LoaiSachDAO(context);
        LoaiSach loaiSach = loaiSachDAO.getID(String.valueOf(item.maLoai));
        tvMaSach = v.findViewById(R.id.tvMaSach);
        tvMaSach.setText("Mã sách: "+item.maSach);
        tvTenSach = v.findViewById(R.id.tvTenSach);
        tvTenSach.setText("Tên sách: "+item.tenSach);
        tvGiaThue = v.findViewById(R.id.tvGiaThue);
        tvGiaThue.setText("Giá thuê: "+item.giaThue);
        tvLoai = v.findViewById(R.id.tvLoai);
        tvLoai.setText("Loại sách: "+loaiSach.tenLoai);
        imgDel=v.findViewById(R.id.imgDeleteLS);
    }
    imgDel.setOnClickListener((view) → {
        fragment.xoa(String.valueOf(item.maSach));
    });
    return v;
}
```

## Controller Code

```
public class SachFragment extends Fragment {
    ListView lv;
    ArrayList<Sach> list;
    FloatingActionButton fab;
    Dialog dialog;
    EditText edMaSach, edTenSach, edGiaThue;
    Spinner spinner;
    Button btnSave, btnCancel;
    static SachDAO dao;
    SachAdapter adapter;
    Sach item;
    LoaiSachSpinnerAdapter spinnerAdapter;
    ArrayList<LoaiSach> listLoaiSach;
    LoaiSachDAO loaisachDAO;
    LoaiSach loaiSach;
    int maLoaiSach, position;

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {...}

    protected void openDialog(final Context context, final int type){...}

    public void xoa(final String Id){...}

    void capNhatLv(){...}

    public int validate(){...}
}
```



```
@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
                        Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View v = inflater.inflate(R.layout.fragment_sach, container, attachToRoot: false);
    lv = v.findViewById(R.id.lvSach);
    fab = v.findViewById(R.id.fab);
    dao = new SachDAO(getActivity());
    capNhatLv();
    fab.setOnClickListener((v) → { openDialog(getActivity(), type: 0); });

    lv.setOnItemLongClickListener((parent, view, position, id) → {
        item = list.get(position);
        openDialog(getActivity(), type: 1); // 1 update

        return false;
    });
    return v;
}
```

```
protected void openDialog(final Context context, final int type){
    //custom dialog
    dialog = new Dialog(context);
    dialog setContentView(R.layout.sach_dialog);
    edMaSach = dialog.findViewById(R.id.edMaSach);
    edTenSach = dialog.findViewById(R.id.edTenSach);
    edGiaThue = dialog.findViewById(R.id.edGiaThue);
    spinner = dialog.findViewById(R.id.spLoaiSach);
    btnCancel = dialog.findViewById(R.id.btnCancelSach);
    btnSave = dialog.findViewById(R.id.btnSaveSach);
    listLoaiSach = new ArrayList<LoaiSach>();
    loaisachDAO = new LoaiSachDAO(context);
    listLoaiSach = (ArrayList<LoaiSach>) loaisachDAO.getAll();
    spinnerAdapter = new LoaiSachSpinnerAdapter(context, listLoaiSach);
    spinner.setAdapter(spinnerAdapter);
    // lay maLoaiSach
    spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
            // TODO Auto-generated method stub
            maLoaiSach = listLoaiSach.get(position).maLoai;
            Toast.makeText(context, text: "Chon "+listLoaiSach.get(position).tenLoai, Toast.LENGTH_SHORT).show();
        }
        @Override
        public void onNothingSelected(AdapterView<?> parent) {
            // TODO Auto-generated method stub
        }
    });
    //kiem tra type insert 0 hay Update 1
    edMaSach.setEnabled(false);
}
```

```
//kiem tra type insert 0 hay Update 1
edMaSach.setEnabled(false);
if (type != 0){
    edMaSach.setText(String.valueOf(item.maSach));
    edTenSach.setText(item.tenSach);
    edGiaThue.setText(String.valueOf(item.giaThue));
    for (int i = 0; i < listLoaiSach.size(); i++)
        if (item.maLoai == (listLoaiSach.get(i).maLoai)){
            position = i;
        }
    Log.i( tag: "demo", msg: "posSach "+position);
    spinner.setSelection(position);
}
btnCancel.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        dialog.dismiss();
    }
});
```

```

btnSave.setOnClickListener((v) → {
    item = new Sach();
    item.tenSach=edTenSach.getText().toString();
    item.giaThue=Integer.parseInt(edGiaThue.getText().toString());
    item.maLoai=maLoaiSach;
    if (validate()>0){
        if (type==0){
            //type = 0 (insert)
            if (dao.insert(item)>0){
                Toast.makeText(context, text: "Thêm thành công", Toast.LENGTH_SHORT).show();
            }else{
                Toast.makeText(context, text: "Thêm thất bại", Toast.LENGTH_SHORT).show();
            }
        }else {
            //type =1 (update)
            item.maSach = Integer.parseInt(edMaSach.getText().toString());
            if (dao.update(item)>0){
                Toast.makeText(context, text: "Sửa thành công", Toast.LENGTH_SHORT).show();
            }else {
                Toast.makeText(context, text: "Sửa thất bại", Toast.LENGTH_SHORT).show();
            }
        }
        capNhatLv();
        dialog.dismiss();
    }
});
dialog.show();

```

```

public void xoa(final String Id){
    AlertDialog.Builder builder = new AlertDialog.Builder(getContext());
    builder.setTitle("Delete");
    builder.setMessage("Bạn có muốn xóa không?");
    builder.setCancelable(true);
    builder.setPositiveButton( text: "Yes", new DialogInterface.OnClickListener() {
        public void onClick(DialogInterface dialog, int id) {
            dao.delete(Id);
            capNhatLv();
            dialog.cancel();
        }
    });
    builder.setNegativeButton( text: "No", new DialogInterface.OnClickListener() {
        public void onClick(DialogInterface dialog, int id) {
            dialog.cancel();
        }
    });
    AlertDialog alert = builder.create();
    builder.show();
}

void capNhatLv(){
    list =(ArrayList<Sach>) dao.getAll();
    adapter=new SachAdapter(getActivity(), fragment: this,list);
    lv.setAdapter(adapter);
}

public int validate(){
    int check = 1;
    if (edTenSach.getText().length()==0 || edGiaThue.getText().length()==0 ) {
        Toast.makeText(getContext(), text: "Bạn phải nhập đầy đủ thông ", Toast.LENGTH_SHORT).show();
        check = -1;
    }
    return check;
}

```

- ☑ Phân tích SachFragment
- ☑ Tổ chức mã Controller
- ☑ Viết mã màn hình SachFragment







**Cảm ơn**