



**FPT POLYTECHNIC**



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## **QUẢN LÝ PHIẾU MƯỢN**

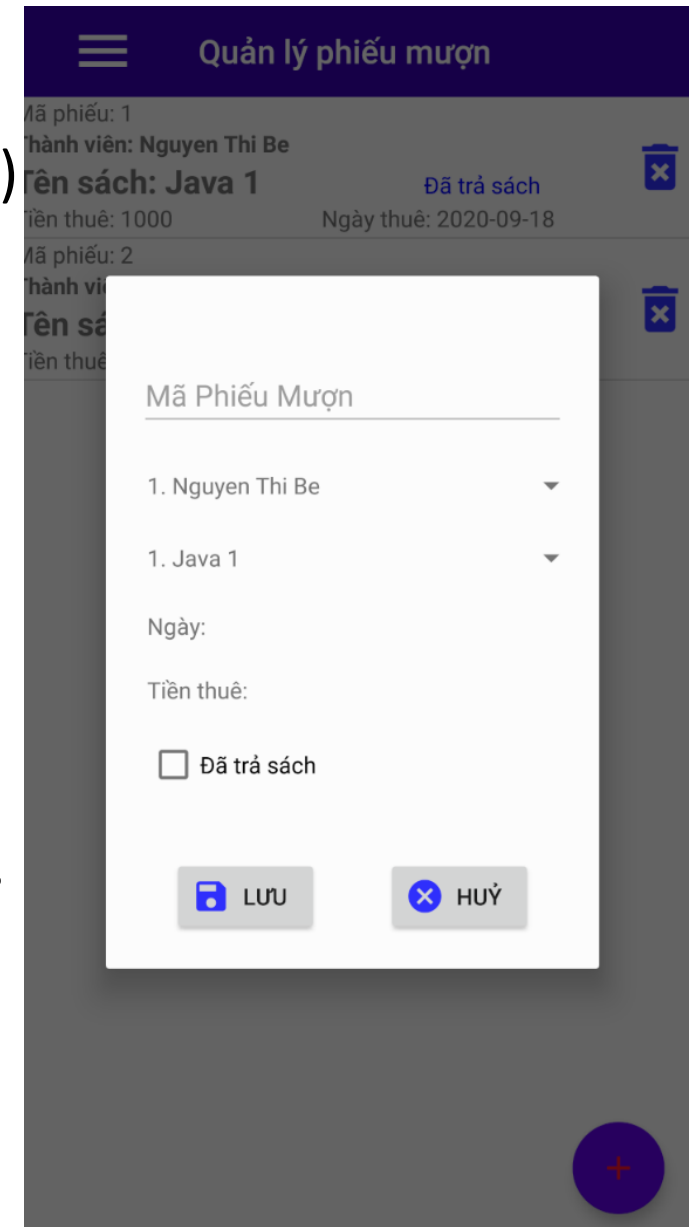
**GIẢNG VIÊN: LÊ PHẠM TUẤN KIỆT**

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



## Sử dụng PhieuMuonFragment

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



```
public class ThanhVienSpinnerAdapter extends ArrayAdapter<ThanhVien> {  
  
    private Context context;  
    private ArrayList<ThanhVien> lists;  
    TextView tvMaTV, tvTenTV;  
    public ThanhVienSpinnerAdapter(@NonNull Context context, ArrayList<ThanhVien> 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) {...}  
}
```

# TẠO ADAPTER VÀ XỬ LÝ CODE CHO SPINNER THÀNH VIÊN

```
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.thanh_vien_item_spinner, root: null);
    }
    final ThanhVien item = lists.get(position);
    if(item != null) {
        tvMaTV = v.findViewById(R.id.tvMaTVSp);
        tvMaTV.setText(item.maTV + ". ");
        tvTenTV = v.findViewById(R.id.tvTenTVSp);
        tvTenTV.setText(item.hoTen);
    }
    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.thanh_vien_item_spinner, root: null);
    }
    final ThanhVien item = lists.get(position);
    if(item != null) {
        tvMaTV = v.findViewById(R.id.tvMaTVSp);
        tvMaTV.setText(item.maTV + ". ");
        tvTenTV = v.findViewById(R.id.tvTenTVSp);
        tvTenTV.setText(item.hoTen);
    }
    return v;
}
```

# TẠO ADAPTER VÀ XỬ LÝ CODE CHO SPINNER SÁCH

## Controller Code

```
public class SachSpinnerAdapter extends ArrayAdapter<Sach> {  
    private Context context;  
    private ArrayList<Sach> lists;  
    TextView tvMaSach, tvTenSach;  
    public SachSpinnerAdapter(@NonNull Context context, ArrayList<Sach> 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) {...}  
}
```

# TẠO ADAPTER VÀ XỬ LÝ CODE CHO SPINNER 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.sach_item_spinner, root: null);
    }
    final Sach item = lists.get(position);
    if(item != null) {
        tvMaSach = v.findViewById(R.id.tvMaSachSp);
        tvMaSach.setText(item.maSach + ". ");
        tvTenSach = v.findViewById(R.id.tvTenSachSp);
        tvTenSach.setText(item.tenSach);
    }
    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.sach_item_spinner, root: null);
    }
    final Sach item = lists.get(position);
    if(item != null) {
        tvMaSach = v.findViewById(R.id.tvMaSachSp);
        tvMaSach.setText(item.maSach + ". ");
        tvTenSach = v.findViewById(R.id.tvTenSachSp);
        tvTenSach.setText(item.tenSach);
    }
    return v;
}
```

## Controller Code

```

public class PhieuMuonAdapter extends ArrayAdapter<PhieuMuon> {

    private Context context;
    PhieuMuonFragment fragment;
    private ArrayList<PhieuMuon> lists;
    TextView tvMaPM, tvTenTV, tvTenSach, tvTienThue, tvNgay, tvTraSach;
    ImageView imgDel;
    SachDAO sachDAO;
    ThanhVienDAO thanhVienDAO;
    SimpleDateFormat sdf = new SimpleDateFormat( pattern: "yyyy-MM-dd");
}
public PhieuMuonAdapter(@NonNull Context context, PhieuMuonFragment fragment, ArrayList<PhieuMuon> 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.phieu_muon_item, root: null);
    }
    final PhieuMuon item = lists.get(position);
    if(item != null){
        tvMaPM = v.findViewById(R.id.tvMaPM);
        tvMaPM.setText("Mã phiếu: "+item.maPM);
        sachDAO = new SachDAO(context);
        Sach sach = sachDAO.getID(String.valueOf(item.maSach));
        tvTenSach = v.findViewById(R.id.tvTenSach);
        tvTenSach.setText("Tên sách: "+sach.tenSach);
        thanhVienDAO = new ThanhVienDAO(context);
        ThanhVien thanhVien = thanhVienDAO.getID(String.valueOf(item.maTV));
        tvTenTV = v.findViewById(R.id.tvTenTV);
        tvTenTV.setText("Thành viên: "+thanhVien.hoTen);
        tvTienThue = v.findViewById(R.id.tvTienThue);
        tvTienThue.setText("Tiền thuê: "+item.tienThue);
        tvNgay = v.findViewById(R.id.tvNgayPM);
        tvNgay.setText("Ngày thuê: "+sdf.format(item.ngay));
    }
}
```

```
tvTraSach = v.findViewById(R.id.tvTraSach);  
if (item.traSach==1){  
    tvTraSach.setTextColor(Color.BLUE);  
    tvTraSach.setText("Đã trả sách");  
}else {  
    tvTraSach.setTextColor(Color.RED);  
    tvTraSach.setText("Chưa trả sách");  
}  
imgDel=v.findViewById(R.id.imgDeleteLS);  
}  
imgDel.setOnClickListener((view) → {  
    fragment.xoa(String.valueOf(item.maPM));  
});  
return v;  
}
```

## Controller Code

```
public class PhieuMuonFragment extends Fragment {
    ListView lv;
    ArrayList<PhieuMuon> list;
    FloatingActionButton fab;
    Dialog dialog;
    EditText edMaPM;
    Spinner spTV, spSach;
    TextView tvNgay, tvTienThue;
    CheckBox chkTraSach;
    Button btnSave, btnCancel;
    static PhieuMuonDAO dao;
    PhieuMuonAdapter adapter;
    PhieuMuon item;
    ThanhVienSpinnerAdapter thanhVienSpinnerAdapter;
    ArrayList<ThanhVien> listThanhVien;
    ThanhVienDAO thanhVienDAO;
    ThanhVien thanhVien;
    int maThanhVien;
    SachSpinnerAdapter sachSpinnerAdapter;
    ArrayList<Sach> listSach;
    SachDAO sachDAO;
    Sach sach;
    int maSach, tienThue;
    int positionTV, positionSach;
    SimpleDateFormat sdf = new SimpleDateFormat( pattern: "yyyy-MM-dd");
    @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_phieu_muon, container, attachToRoot: false);
    lv = v.findViewById(R.id.lvPhieuMuon);
    fab = v.findViewById(R.id.fab);
    dao = new PhieuMuonDAO(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){
    dialog = new Dialog(context);
    dialog.setContentView(R.layout.phieu_muon_dialog);
    edMaPM = dialog.findViewById(R.id.edMaPM);
    spTV = dialog.findViewById(R.id.spMaTV);
    spSach = dialog.findViewById(R.id.spMaSach);
    tvNgay = dialog.findViewById(R.id.tvNgay);
    tvTienThue = dialog.findViewById(R.id.tvTienThue);
    chkTraSach = dialog.findViewById(R.id.chkTraSach);
    btnCancel = dialog.findViewById(R.id.btnCancelLPM);
    btnSave = dialog.findViewById(R.id.btnSavePM);
    thanhVienDAO = new ThanhVienDAO(context);
    listThanhVien = new ArrayList<ThanhVien>();
    listThanhVien = (ArrayList<ThanhVien>) thanhVienDAO.getAll();
    thanhVienSpinnerAdapter = new ThanhVienSpinnerAdapter(context, listThanhVien);
    spTV.setAdapter(thanhVienSpinnerAdapter);
    // lay maLoaiSach
    spTV.setOnItemClickListener(new AdapterView.OnItemClickListener() {
        @Override
        public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
            // TODO Auto-generated method stub
            maThanhVien = listThanhVien.get(position).maTV;
            Toast.makeText(context, text: "Chon "+listThanhVien.get(position).hoTen, Toast.LENGTH_SHORT).show();
        }
        @Override
        public void onNothingSelected(AdapterView<?> parent) {
            // TODO Auto-generated method stub
        }
    });
}
```

```
sachDAO = new SachDAO(context);
listSach = new ArrayList<Sach>();
listSach = (ArrayList<Sach>) sachDAO.getAll();
sachSpinnerAdapter = new SachSpinnerAdapter(context, listSach);
spSach.setAdapter(sachSpinnerAdapter);
// lay maLoaiSach
spSach.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
        // TODO Auto-generated method stub
        maSach = listSach.get(position).maSach;
        tienThue = listSach.get(position).giaThue;
        Toast.makeText(context, text: "Chon "+listSach.get(position).tenSach, Toast.LENGTH_SHORT).show();
    }
    @Override
    public void onNothingSelected(AdapterView<?> parent) {
        // TODO Auto-generated method stub
    }
});
//kiem tra type insert 0 hay Update 1
edMaPM.setEnabled(false);
if (type != 0){
    edMaPM.setText(String.valueOf(item.maPM));
    for (int i = 0; i < listThanhVien.size(); i++)
        if (item.maTV == (listThanhVien.get(i).maTV)){
            positionTV = i;
        }
    spTV.setSelection(positionTV);
}
```

```
//kiem tra type insert 0 hay Update 1
edMaPM.setEnabled(false);
if (type != 0){
    edMaPM.setText(String.valueOf(item.maPM));
    for (int i = 0; i < listThanhVien.size(); i++)
        if (item.maTV == (listThanhVien.get(i).maTV)){
            positionTV = i;
        }
    spTV.setSelection(positionTV);
    for (int i = 0; i < listSach.size(); i++)
        if (item.maSach == (listSach.get(i).maSach)){
            positionSach = i;
        }
    spSach.setSelection(positionSach);
    tvNgay.setText("Ngày thuê: "+sdf.format(item.ngay));
    tvTienThue.setText("Tiền thuê: "+item.tienThue);
    if (item.traSach==1){
        chkTraSach.setChecked(true);
    }else {
        chkTraSach.setChecked(false);
    }
}
btnCancel.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        dialog.dismiss();
    }
});
```



```

btnSave.setOnClickListener((v) → {
    item = new PhieuMuon();
    item.maSach=maSach;
    item.maTV=maThanhVien;
    item.ngay= java.sql.Date.valueOf(String.valueOf(now()));
    item.tienThue=tienThue;
    if (chkTraSach.isChecked()){
        item.traSach=1;
    }else {
        item.traSach=0;
    }
    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.maPM = Integer.parseInt(edMaPM.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){
    //Su dung Alert
    AlertDialog.Builder builder = new AlertDialog.Builder(getContext());
    builder.setTitle("Delete");
    builder.setMessage("Ban co muon xoa khong?");
    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", (dialog, id) → {
        dialog.cancel();
    });
    AlertDialog alert = builder.create();
    builder.show();
}

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

```



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





**Cảm ơn**