

# Exploring Miscellaneous Concepts

---



**Annapurna Agrawal**

AUTHOR

@annapurna\_23 [linkedin.com/in/annapurna-agrawal](https://www.linkedin.com/in/annapurna-agrawal)



# Overview



**Adding Repository to Project**

**Writing Migrations to Change Database Schema**

**Using TypeConverters**

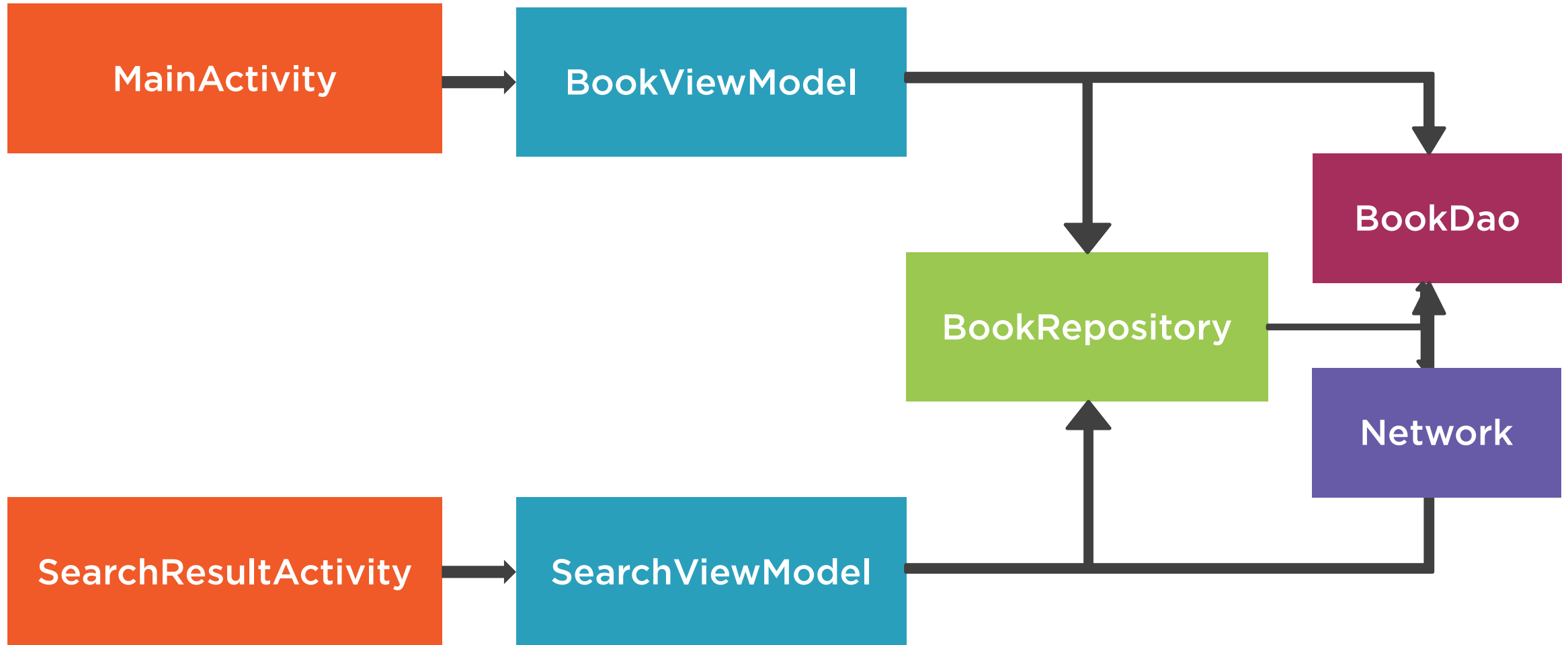


# Adding Repository to Project

---



# Repository



# Repository

**Handles data fetching operations**

**Provides a clean API for data retrieval**

**Implements logic to fetch data from network or cache**



# Demo



## Adding Repository



# Writing Migrations to Change Database Schema

---



# Migration Class

Preserve user data in case of change of entity and database schema

Each migration specifies  
a **startVersion** and **endVersion**





# Demo



## Write Migration

- Add description column
- Make changes in UI



# Using TypeConverters

---



# TypeConverters

Annotated with `@TypeConverter`

Pair of methods that converts a custom class to and from a known type that Room can persist



# Demo



## Storing Date in Room Database

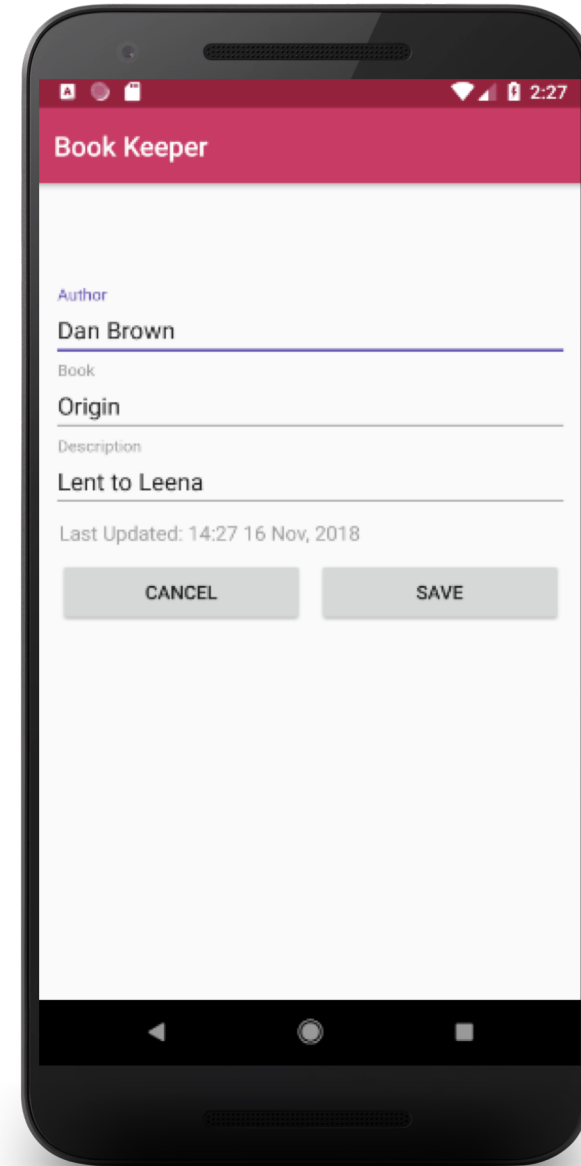
- Using TypeConverter for converting date to and from long type
- Writing migration to update the schema
- Updating the UI



# Using TypeConverters

**Origin**

Last Updated: 14:27 16 Nov, 2018



A smartphone mockup displaying the 'Book Keeper' app. The app has a pink header bar with the title 'Book Keeper'. Below the header, there are four input fields with labels: 'Author' (containing 'Dan Brown'), 'Book' (containing 'Origin'), 'Description' (containing 'Lent to Leena'), and 'Last Updated' (containing '14:27 16 Nov, 2018'). At the bottom of the form are two buttons: 'CANCEL' and 'SAVE'. The phone's status bar at the top shows the time as 2:27 and various icons. The Android navigation bar is visible at the bottom.

Book Keeper

Author  
Dan Brown

Book  
Origin

Description  
Lent to Leena

Last Updated: 14:27 16 Nov, 2018

CANCEL SAVE



# Summary



## Added Repository to Project

- Responsible for fetching the data
- Reduced a lot of code

## Wrote Migrations to Change Database Schema

- Added description and last\_updated fields for books

## Used TypeConverters to save date and time



**Thank You!**

