Software Development for Mobile Devices

# Submission for Assignment A5.1P

## App Screenshot

|  |  |
| --- | --- |
| Activity | Screen |
| MainActivity |  |

## Source code

### Book Adapter

public class BookAdapter extends RecyclerView.Adapter<BookAdapter.BookViewHolder> {  
 private List<Book> bookList;  
  
 public class BookViewHolder extends RecyclerView.ViewHolder {  
 public TextView title;  
 public ImageView logo;  
 public RatingBar ratingBar;  
 public BookViewHolder(View view) {  
 super(view);  
 title = (TextView) view.findViewById(R.id.*txtTitle*);  
 logo = view.findViewById(R.id.*imgViewIcon*);  
 ratingBar = view.findViewById(R.id.*ratingStar*);  
 }  
 }  
  
 public BookAdapter(List<Book> moviesList) {  
 this.bookList = moviesList;  
 }  
  
 public BookViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {  
 View itemView = LayoutInflater.*from*(parent.getContext())  
 .inflate(R.layout.*book\_row*, parent, false);  
  
 return new BookViewHolder(itemView);  
 }  
  
 @Override  
 public void onBindViewHolder(BookViewHolder holder, int position) {  
 Book book = bookList.get(position);  
 holder.title.setText(book.getTitle());  
 holder.logo.setImageResource(book.getImageRef());  
 holder.ratingBar.setRating(book.getRating());  
 }  
  
 @Override  
 public int getItemCount() {  
 return bookList.size();  
 }  
  
}

### MainActivity

public class MainActivity extends AppCompatActivity {  
  
 private List<Book> bookList = new ArrayList<>();  
 private RecyclerView recyclerView;  
 private BookAdapter mAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 initializeUI();  
 }  
  
 private void initData() {  
 bookList.add(new Book("Java programming", R.drawable.*java*, 1));  
 bookList.add(new Book("C programming", R.drawable.*cplus*, 2));  
 bookList.add(new Book("C# programming", R.drawable.*csharp*, 3));  
 bookList.add(new Book("Go programming", R.drawable.*go*, 4));  
 bookList.add(new Book("Python programming", R.drawable.*python*,5));  
 bookList.add(new Book("Better business", R.drawable.*betterbusiness*, 1));  
 bookList.add(new Book("Business bible", R.drawable.*bookbible*, 2));  
 bookList.add(new Book("Meditation handbook", R.drawable.*handbook*, 3));  
 bookList.add(new Book("Meditation", R.drawable.*meditation*, 4));  
 bookList.add(new Book("How to start a business", R.drawable.*savemoney*,5));  
 mAdapter.notifyDataSetChanged();  
 }  
  
 private void initializeUI() {  
 recyclerView = (RecyclerView) findViewById(R.id.*recyclerView*);  
 mAdapter = new BookAdapter(bookList);  
 RecyclerView.LayoutManager mLayoutManager = new LinearLayoutManager(getApplicationContext());  
 recyclerView.setLayoutManager(mLayoutManager);  
 recyclerView.setItemAnimator(new DefaultItemAnimator());  
 recyclerView.addItemDecoration(new DividerItemDecoration(this, LinearLayoutManager.*VERTICAL*));  
 recyclerView.setAdapter(mAdapter);  
 initData();  
 }  
}

### Book

public class Book {  
  
 private String title;  
 private int imageRef;  
 private int rating;  
  
 public Book (String title, int imageRef, int rating) {  
 this.title = title;  
 this.imageRef = imageRef;  
 this.rating = rating;  
 }  
  
 public String getTitle() {  
 return title;  
 }  
  
 public int getImageRef() {  
 return imageRef;  
 }  
  
 public void setTitle(String title) {  
 this.title = title;  
 }  
  
 public void setImageRef(int imageRef) {  
 this.imageRef = imageRef;  
 }  
  
 public int getRating() {  
 return rating;  
 }  
  
 public void setRating(int rating) {  
 this.rating = rating;  
 }  
}