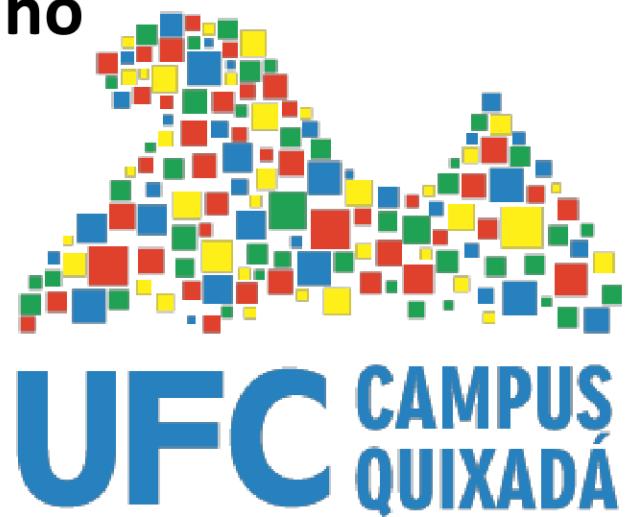


Desenvolvimento de software para Dispositivos Móveis

Container CardView

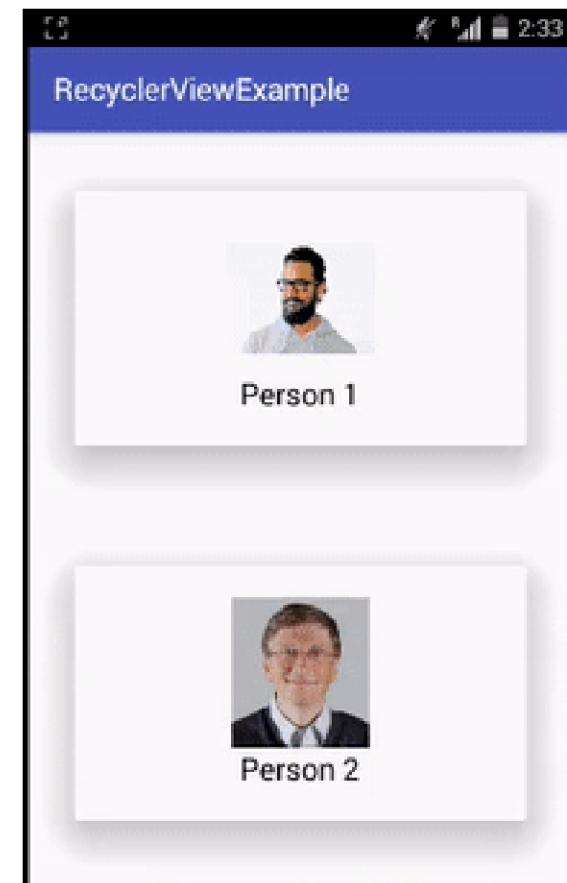
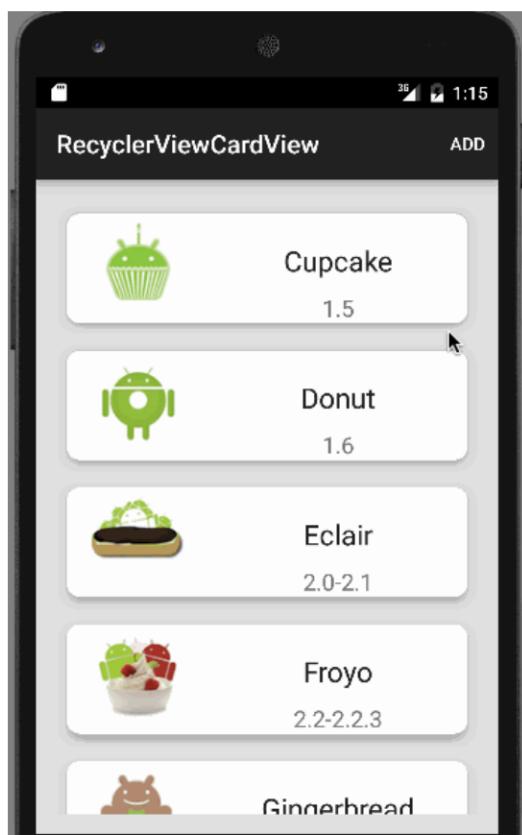


Prof. Sidartha Carvalho



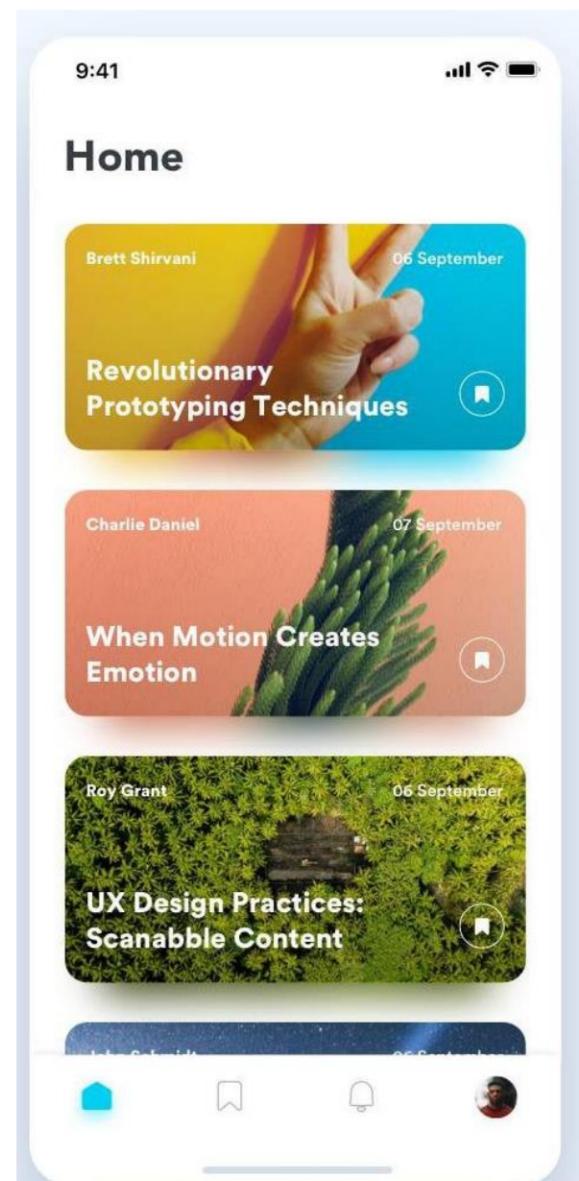
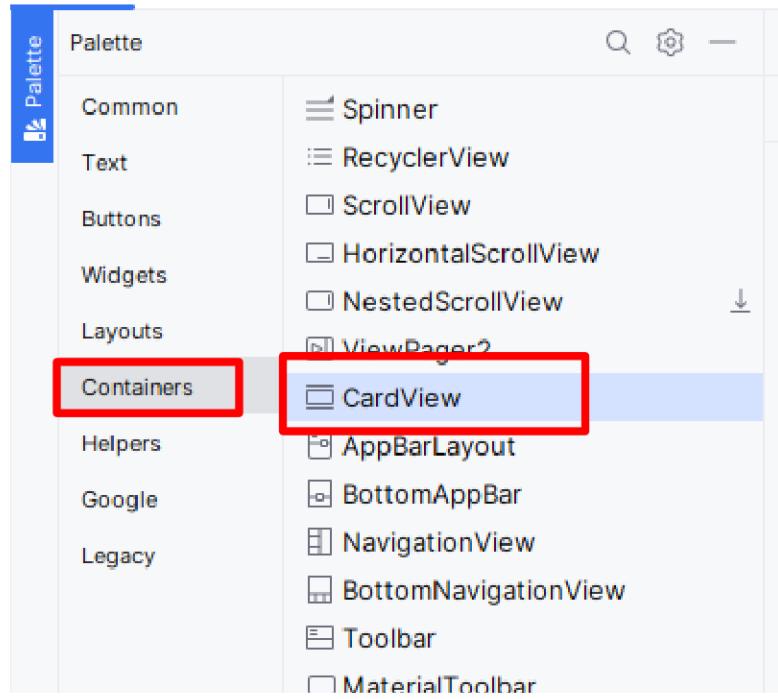
CardView: Widget Android

- Permite separar itens por “cards”, tornando-os mais bonitos e com mais opções de customização.



CardView: Widget Android

- O CardView pode ser usado dentro de um RecyclerView, como um item de layout.



Proposta de App: Quixadá Night Events



Passos para a construção do App

1. Criar o layout do item usando CardView
2. Criar o layout da ActivityMain usando RecyclerView
3. Criar uma classe de modelo para armazenar os dados de cada CardView (Titulo, Descrição e Imagem de fundo)
4. Criar o Adapter e o ViewHolder
5. Criar as notícias e associar ao Adapter na MainActivity

Passo 1

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.cardview.widget.CardView xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="300dp"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    app:cardCornerRadius="50dp"
    app:cardElevation="100dp"
    android:layout_margin="10dp">

    <androidx.constraintlayout.widget.ConstraintLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/card_layout"
        android:background="@drawable/backgroundgradient1">

        <TextView
            android:id="@+id/tv_card_title"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="28dp"
            android:layout_marginBottom="47dp"
            android:text="Titulo do evento"
            android:textColor="@color/black"
            android:textSize="40dp"
            android:textAlignment="center"
            android:textStyle="bold"
            app:layout_constraintBottom_toTopOf="@+id/tv_card_subject"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent" />

        <TextView
            android:id="@+id/tv_card_subject"
            android:layout_width="0dp"
            android:layout_height="0dp"
            android:layout_marginStart="34dp"
            android:layout_marginEnd="34dp"
            android:layout_marginBottom="46dp"
            android:text="Descrição do meu evento."
            android:textSize="20dp"
            android:textAlignment="center"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/tv_card_title" />
    </androidx.constraintlayout.widget.ConstraintLayout>

</androidx.cardview.widget.CardView>
```



Passo 2



Passo 2

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <ImageView
        android:id="@+id/iv_logo"
        android:layout_width="409dp"
        android:layout_height="185dp"
        android:layout_marginTop="4dp"
        android:layout_marginBottom="1dp"
        android:scaleType="fitXY"
        app:layout_constraintBottom_toTopOf="@+id/rv_news"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/logo" />

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/rv_news"
        android:layout_width="0dp"
        android:layout_height="0dp"
        android:layout_marginStart="1dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="1dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/iv_logo" />
</androidx.constraintlayout.widget.ConstraintLayout>
```



Item 0
Item 1
Item 2
Item 3
Item 4
Item 5
Item 6
Item 7
Item 8
Item 9



Passo 3

```
package br.ufc.quixada.cardviewwithrecyclerview;

public class NewsModel {

    String title;
    String description;
    int backgroundImage;

    NewsModel(String title, String description, int backgroundImage) {
        this.title = title;
        this.description = description;
        this.backgroundImage = backgroundImage;
    }

    public String getTitle() {
        return title;
    }

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

    public String getDescription() {
        return description;
    }

    public void setDescription(String description) {
        this.description = description;
    }

    public int getBackgroundImage() {
        return backgroundImage;
    }

    public void setBackgroundImage(int backgroundImage) {
        this.backgroundImage = backgroundImage;
    }
}
```

Criar uma classe de modelo para armazenar os dados de cada CardView (Titulo, Descrição e Imagem de fundo)

Passo 4

```
public class NewsAdapter extends RecyclerView.Adapter<NewsAdapter.NewsViewHolder>{  
  
    private List<NewsModel> newsList;  
  
    public NewsAdapter(List<NewsModel> newsList){  
        this.newsList = newsList;  
    }  
  
    @NonNull  
    @Override  
    public NewsViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
        View itemView = LayoutInflater.from(parent.getContext()).inflate(R.layout.card_item_layout, parent, false);  
        return new NewsViewHolder(itemView);  
    }  
  
    @Override  
    public void onBindViewHolder(@NonNull NewsViewHolder holder, int position) {  
        NewsModel news = newsList.get(position);  
        holder.tv_title.setText(news.getTitle());  
        holder.tv_subject.setText(news.getDescription());  
        holder.card_layout.setBackgroundResource(news.getBackgroundImage());  
    }  
  
    @Override  
    public int getItemCount() {  
        return newsList.size();  
    }  
}
```

Adapter

Passo 4

```
public static class NewsViewHolder extends RecyclerView.ViewHolder implements View.OnClickListener {  
  
    TextView tv_title, tv_subject;  
    ConstraintLayout card_layout;  
  
    public NewsViewHolder(@NonNull View itemView) {  
        super(itemView);  
  
        tv_title = itemView.findViewById(R.id.tv_card_title);  
        tv_subject = itemView.findViewById(R.id.tv_card_subject);  
        card_layout = itemView.findViewById(R.id.card_layout);  
  
        tv_title.setOnClickListener(this);  
        tv_subject.setOnClickListener(this);  
        card_layout.setOnClickListener(this);  
    }  
  
    @Override  
    public void onClick(View v) {  
        Toast.makeText(v.getContext(), "Você clicou no item: " + tv_title.getText(), Toast.LENGTH_SHORT).show();  
    }  
}
```

ViewHolder (no mesmo arquivo do Adapter)

Passo 5

```
recyclerView = findViewById(R.id.rv_news);
newsList = new ArrayList<>();

NewsModel news1 = new NewsModel("Matulão",
    "O restaurante estilo barzinho Matulão está com a cantora Stefani esta noite! Venha conferir o melhor do forró romântico.",
    R.drawable.backgroundgradient1);

NewsModel news2 = new NewsModel("Broiler",
    "Restaurante estilo barzinho. Acontece todos os finais de semana.",
    R.drawable.backgroundgradient2);

NewsModel news3 = new NewsModel("Cangaço",
    "Bar com vários paredões de som, acontece todas as sextas e sábados.",
    R.drawable.backgroundgradient3);

NewsModel news4 = new NewsModel("Portal da Lagoa",
    "Bar e restaurante com música brasileira e karaoke, neste final de semana teremos Karaoke.",
    R.drawable.backgroundgradient1);

NewsModel news5 = new NewsModel("Abrigo bar e restaurante",
    "Tem que chegar cedo para pegar uma mesa.",
    R.drawable.backgroundgradient2);

newsList.add(news1);
newsList.add(news2);
newsList.add(news3);
newsList.add(news4);
newsList.add(news5);

newsAdapter = new NewsAdapter(newsList);

recyclerView.setLayoutManager(new LinearLayoutManager(this));
recyclerView.setAdapter(newsAdapter);
```

MainActivity.java

Quixadá Night Events



Exercício

- Criar um aplicativo Android similar ao Night Events Quixadá.
 - Deve usar CardView e RecyclerView
- Pode alterar a proposta do aplicativo, use a imaginação. A depender da sua nova proposta de aplicativo, use as imagens, cores e organizações que preferir.

Referências

- <https://developer.android.com/>
- <https://developer.android.com/courses/fundamentals-training/>

Dúvidas?



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