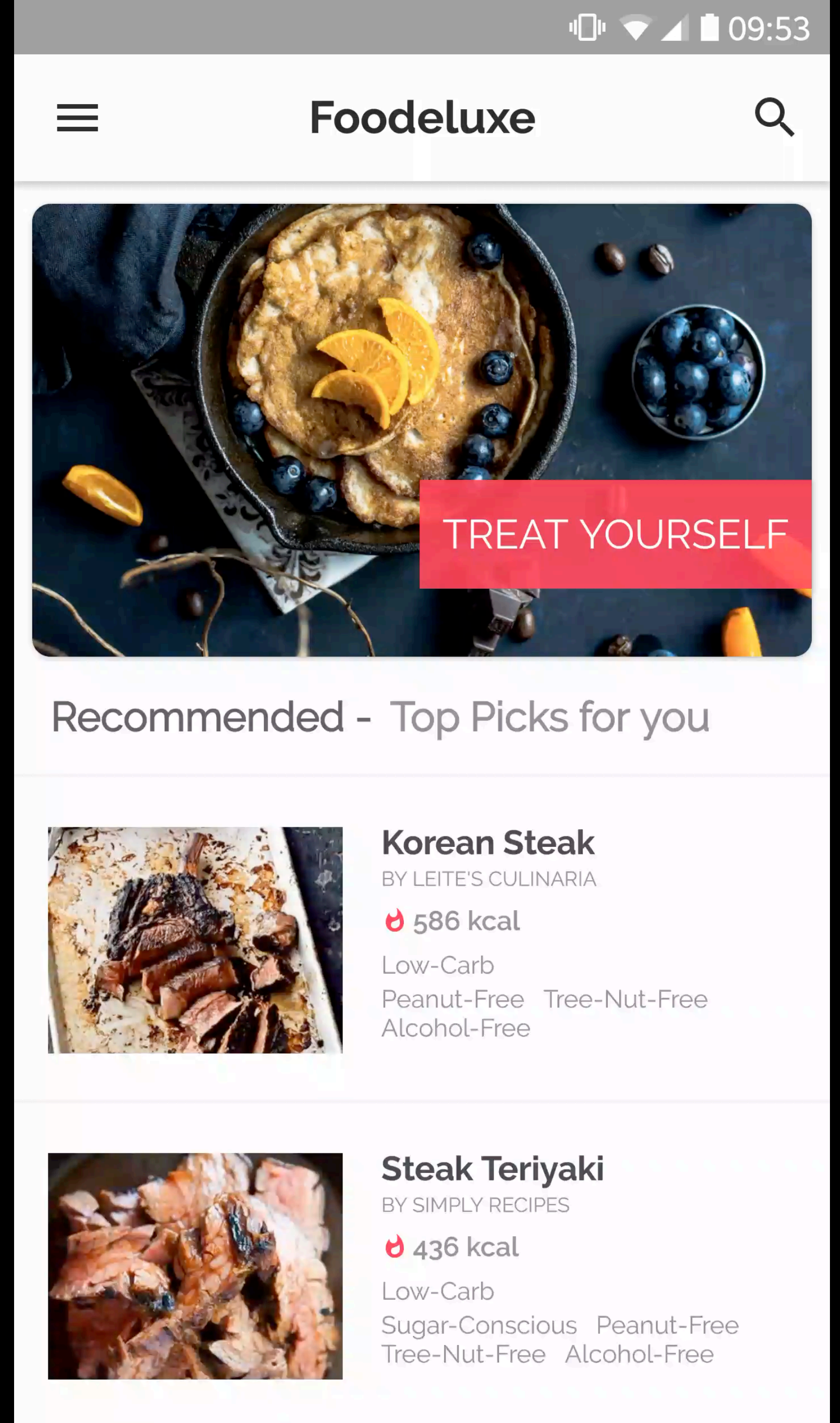


# Application Development for Mobile and Ubiquitous Computing

## Final Presentation

Niclas Zellerhoff, Cedric Partzsch

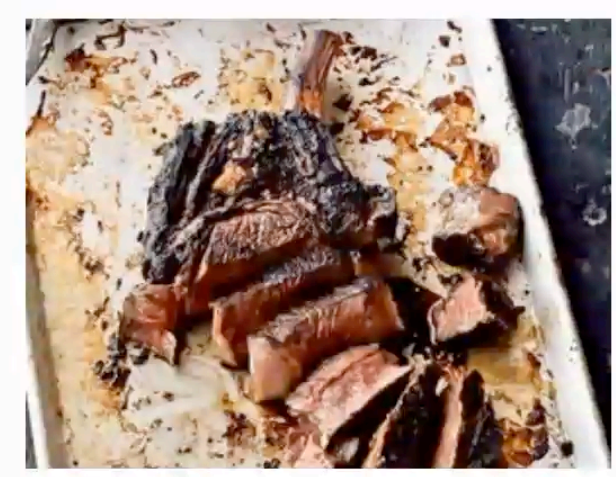






TREAT YOURSELF

## Recommended - Top Picks for you

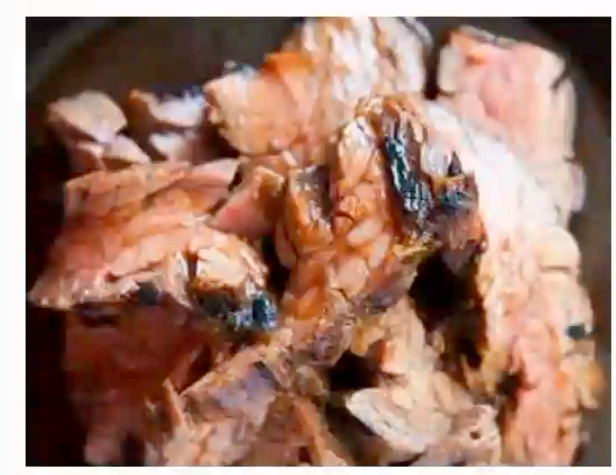


### Korean Steak

BY LEITE'S CULINARIA

586 kcal

Low-Carb  
Peanut-Free Tree-Nut-Free  
Alcohol-Free

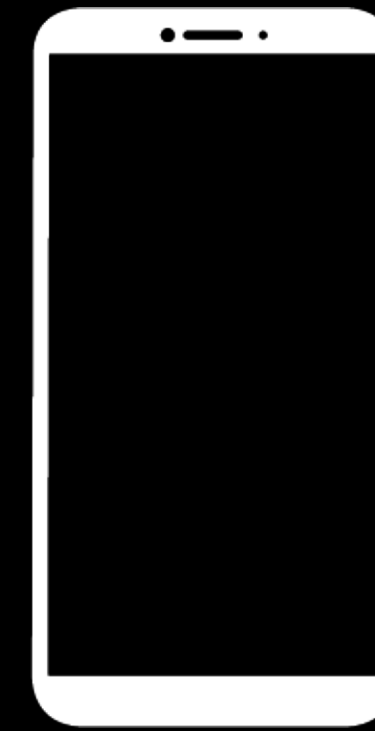


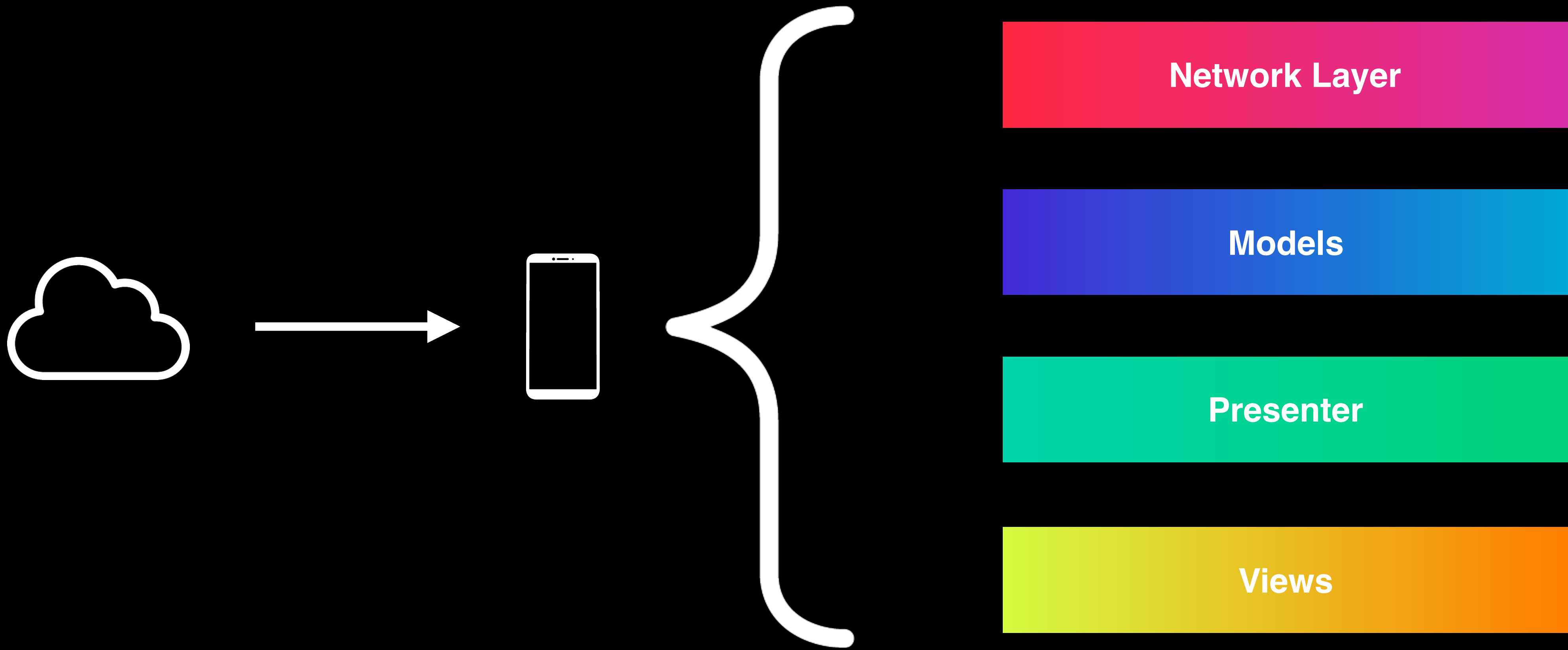
### Steak Teriyaki

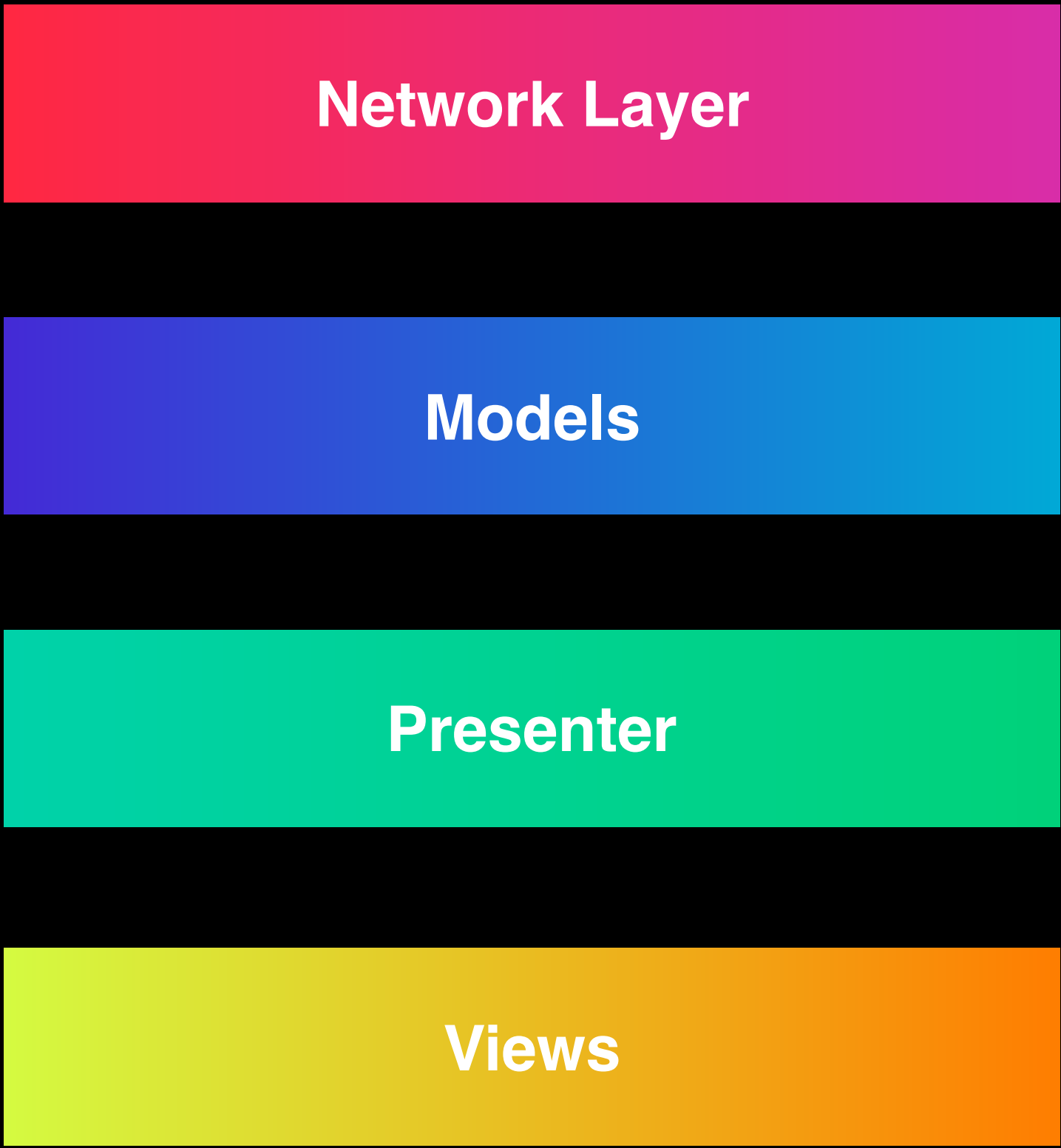
BY SIMPLY RECIPES

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```
▼ foodeluxe
  ▼ commons
    ▼ adapter
      ▼ recipelist
        LoadingDelegateAdapter
        RecipeListAdapter
        RecipeListAdapter
        AdapterConstants.kt
        RecyclerViewTouchHelper
        ViewType
        ViewTypeDelegateAdapter
      extensions
        Extensions.kt
        InfiniteScrollListener
        RxBaseFragment
      data
        ▼ api
          APIModels.kt
          EdamamAPI
          RecipeAPI
          RecipeRestAPI
        ▼ local
          RecipeDao
          RecipeDatabase
          Config
          Models.kt
        ▼ di
          ▼ recipes
            RecipeApiModule
            RoomModule
            ActivityBindingModule
            ActivityScoped
            AppComponent
            AppModule
            FragmentScoped
            NetworkModule
          ▼ features
            ▼ about
              AboutContract
              AboutFragment
              AboutModule
              AboutPresenter
            ▼ recipedetail
              ▼ adapter
                IngredientAdapter
                RecipeDetailActivity
                RecipeDetailContract
                RecipeDetailFragment
                RecipeDetailModule
                RecipeDetailPresenter
            ▼ recipefavourites
              RecipeFavouritesContract
              RecipeFavouritesFragment
              RecipeFavouritesModule
              RecipeFavouritesPresenter
            ▼ recipesearch
              RecipeSearchContract
              RecipeSearchFragment
              RecipeSearchModule
              RecipeSearchPresenter
          ▼ startpage
            StartpageContract
            StartpageFragment
            StartpageModule
            StartpagePresenter
          App
          MainActivity
          BasePresenter
          BaseView
```

## Network Layer

- ▼ extensions
  - Extensions.kt
  - InfiniteScrollListener
  - RxBaseFragment

- ▼ data

- ▼ api

- APIModels.kt
- EdamamAPI
- RecipeAPI
- RecipeRestAPI

- ▼ local

- RecipeDao
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- ▼ di

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- RecipeApiModule

- RoomModule

- ActivityBindingModule

- ActivityScoped

- AppComponent

- AppModule

- FragmentScoped

- NetworkModule

- ▼ features

- ▼ about

- AboutContract



## Network Layer

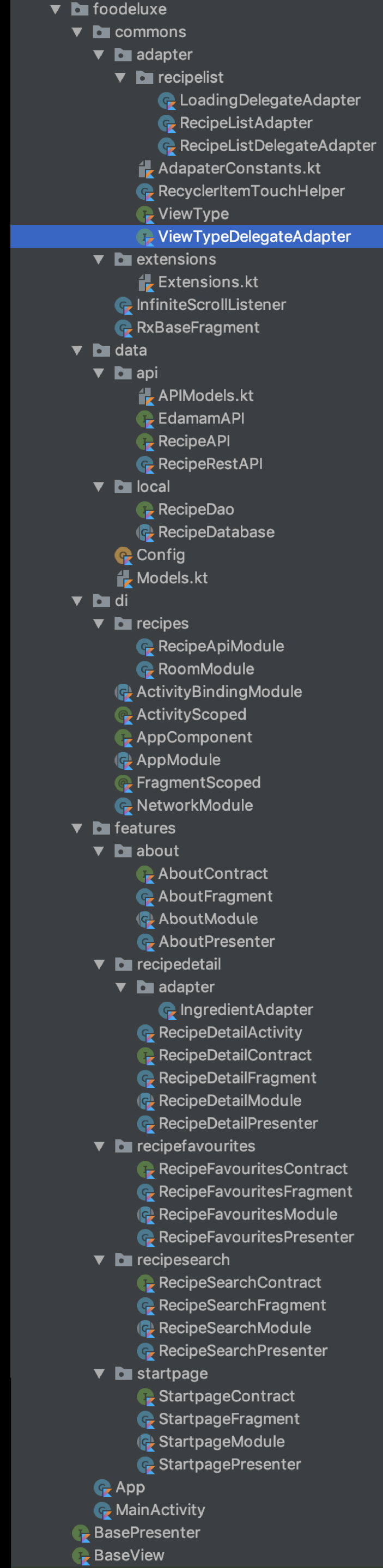
```
@Module
class NetworkModule {
    @Provides
    @Singleton
    fun provideRetrofit(): Retrofit {
        return Retrofit.Builder()
            .baseUrl(Config.baseUrl)
            .addConverterFactory(MoshiConverterFactory.create())
            .build()
    }
}
```

Network Layer

Models

Presenter

Views





## Models

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    - AppComponent
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    - NetworkModule
  - ▼ features
    - ▼ about
      - AboutContract
      - AboutComponent

## Models

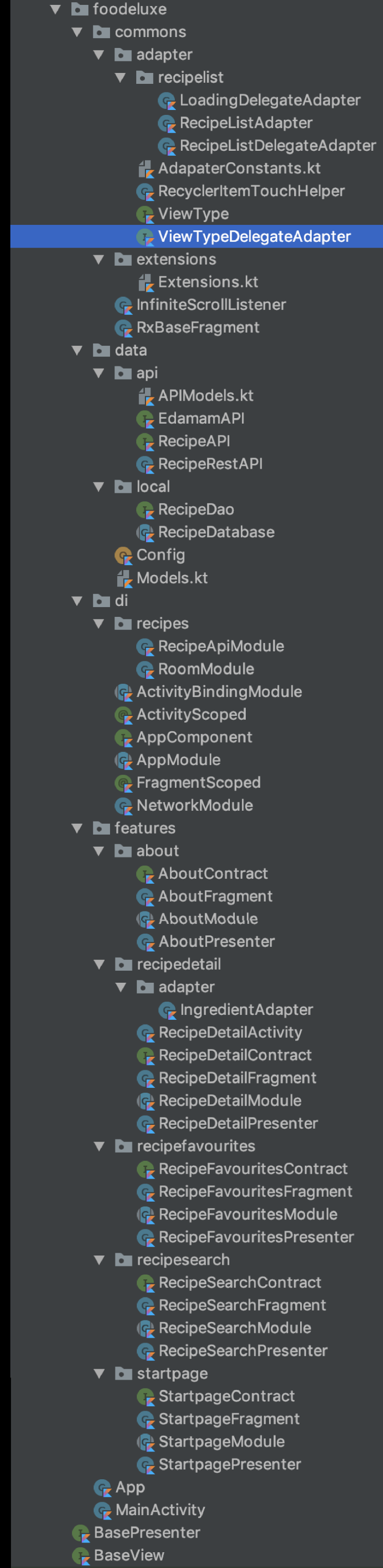
```
class RecipeResponse(  
    val label: String,  
    val image: String,  
    val source: String,  
    val calories: Float,  
    val totalTime: Int,  
    val dietLabels: List<String>,  
    val healthLabels: List<String>,  
    val url: String,  
    val cautions: List<String>,  
    val ingredientLines: List<String>,  
    val totalWeight: Float  
)
```

Network Layer

Models

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Presenter

▼ about

AboutContract

AboutFragment

AboutModule

AboutPresenter

▼ recipedetail

▼ adapter

IngredientAdapter

RecipeDetailActivity

RecipeDetailContract

RecipeDetailFragment

RecipeDetailModule

RecipeDetailPresenter

▼ recipefavourites

RecipeFavouritesContract

RecipeFavouritesFragment

RecipeFavouritesModule

RecipeFavouritesPresenter

▼ recipesearch

RecipeSearchContract

RecipeSearchFragment

RecipeSearchModule

RecipeSearchPresenter

▼ startpage

StartpageContract

StartpageFragment

StartpageModule

StartpagePresenter



## Presenter

```
@ActivityScoped
class StartpagePresenter @Inject constructor(private val apiRecipe: RecipeAPI): StartpageContract.Presenter {

    @Nullable
    private var startpageFragment: StartpageContract.View? = null

    override fun takeView(view: StartpageContract.View) {
        this.startpageFragment = view
    }

    override fun dropView() {
        startpageFragment = null
    }
}
```

Network Layer

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## Views

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## Views

```
@ActivityScoped
class StartpageFragment @Inject constructor(): DaggerFragment(), StartpageContract.View{

    @Inject
    lateinit var presenter: StartpageContract.Presenter

    override fun onResume() {
        super.onResume()
        presenter.takeView(this)
    }

    override fun onDestroy() {
        presenter.dropView()
        super.onDestroy()
    }
}
```



## Technical Context: **Network Connectivity - Storing recipes offline**

### **Presenter:**

```
override fun saveItemToRecipeDatabase(item: RecipeItem) {  
    recipeDatabase.recipeDao().insert(item)  
}
```

## Technical Context: **Network Connectivity - Storing recipes offline**

```
@Dao
interface RecipeDao {

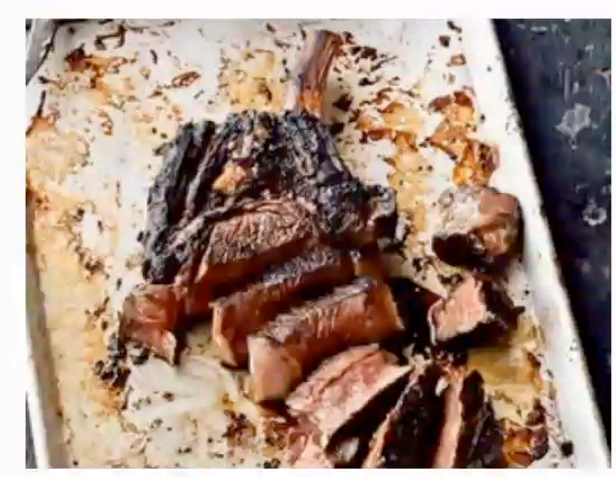
    @Query("SELECT * FROM recipeitem")
    fun getAll(): List<RecipeItem>

    @Insert(onConflict = OnConflictStrategy.REPLACE)
    fun insert(recipe: RecipeItem)

    @Delete
    fun delete(recipe: RecipeItem)
}
```



## Recommended - Top Picks for you

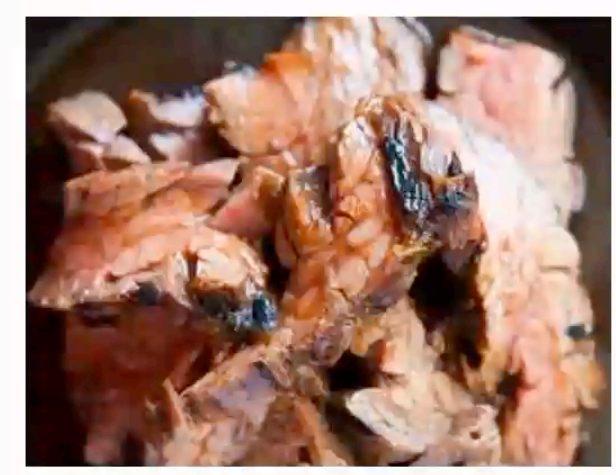


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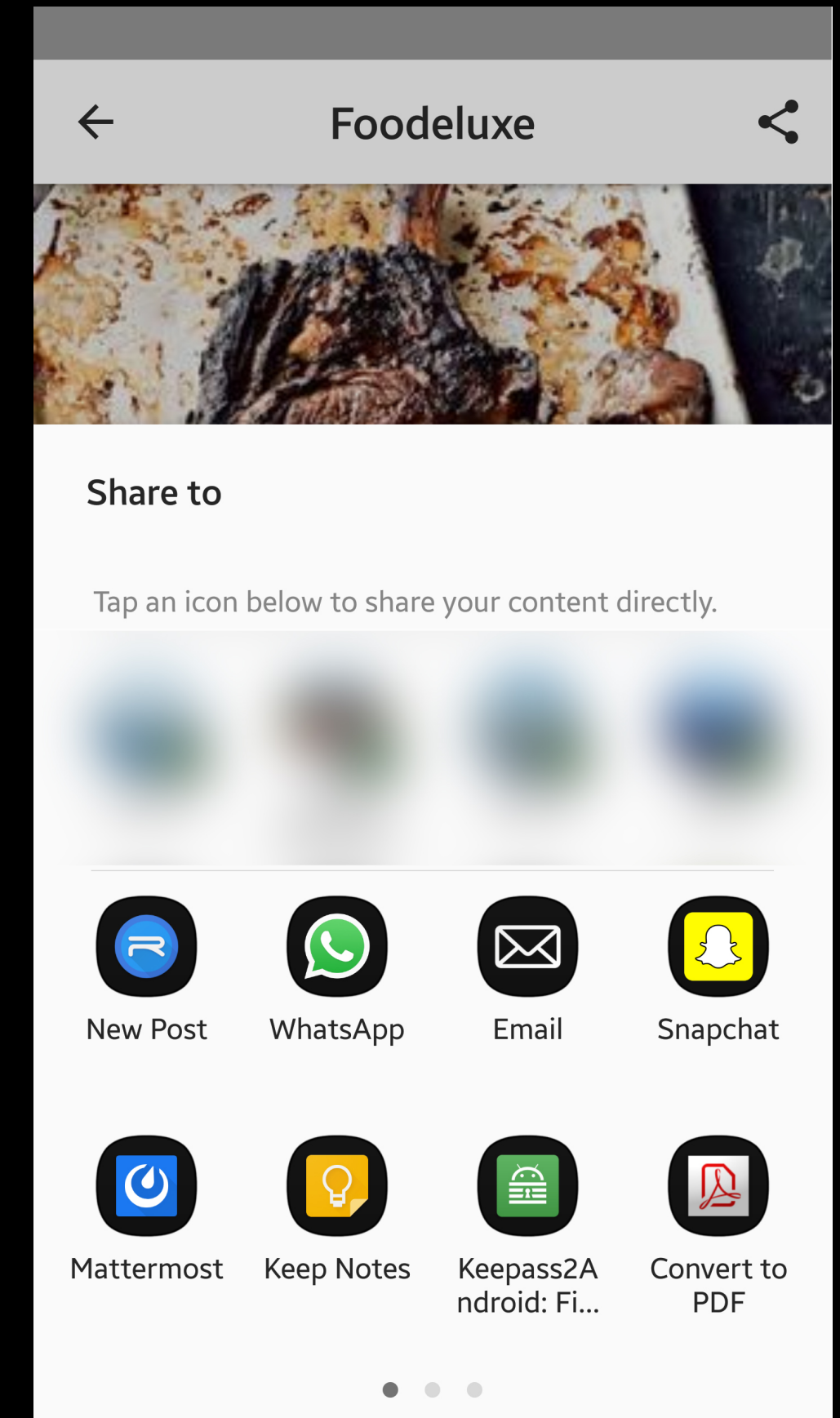
Technical Context:

**Network Connectivity - Infinite Scroll**



# Social Context: **Sharing recipes**

```
val sendIntent: Intent = Intent().apply {  
    action = Intent.ACTION_SEND  
    putExtra(Intent.EXTRA_TEXT, detail.url)  
    type = "text/plain"  
}  
startActivity(Intent.createChooser(sendIntent, title))
```



**Conclusion**



Cloud by Thays Malcher from the Noun Project



Smartphone by Universal Icons from the Noun Project

Thank you.