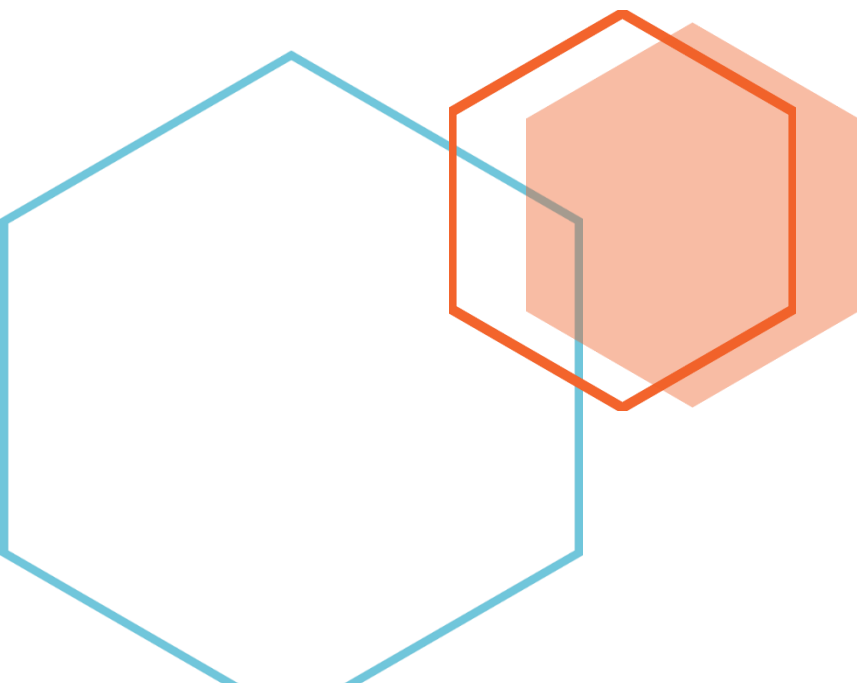# [Compte Rendu]

TP 3 : Android

Développement Mobile et Systèmes Muli-Agents

L'Ecole Normale Supérieure de l'Enseignement Technique de Mohammedia (ENSET)

Classe News.java :

```java
package ma.enset.tp3.model;

import java.io.Serializable;

public class News implements Serializable {
    private String title;
    private String urlToImage;
    private String publishedAt;

    public String getTitle() { return title; }

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

    public String getUrlToImage() { return urlToImage; }

    public void setUrlToImage(String urlToImage) { this.urlToImage = urlToImage; }

    public String getPublishedAt() { return publishedAt; }

    public void setPublishedAt(String publishedAt) { this.publishedAt = publishedAt; }
}
```

Classe des articles :

```java
package ma.enset.tp3.model;

import ...

public class ListNewsResponse {
    private int totalResults;

    @SerializedName("articles")
    private List<News> newsList;

    public int getTotalResults() { return totalResults; }

    public void setTotalResults(int totalResults) { this.totalResults = totalResults; }

    public List<News> getNewsList() { return newsList; }

    public void setNewsList(List<News> newsList) { this.newsList = newsList; }
}
```

MainActivity

```java
package ma.enset.tp3;
import ...
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ListView listViewNews=findViewById(R.id.listViewNews);
        EditText editTextSearch=findViewById(R.id.editTextSearch);
        EditText editTextSearchDate=findViewById(R.id.editTextSearchDate);
        Button buttonSearch=findViewById(R.id.buttonSearch);
        String api = "cc5c8fd08e4c4c289700eae3f90d84e3";
        List<News> data=new ArrayList<>();
        //ArrayAdapter adapter=new ArrayAdapter(this, android.R.layout.simple_list_item_1,data);
        ListNewsAdapter adapter=new ListNewsAdapter( context: this,R.layout.list_news_item,data);
        listViewNews.setAdapter(adapter);
        Retrofit retrofit=new Retrofit.Builder().baseUrl("https://newsapi.org/v2/")
                .addConverterFactory(GsonConverterFactory.create()).build();
        RestServiceAPI serviceAPI=retrofit.create(RestServiceAPI.class);
```

La recherche par key et date :

```java
        buttonSearch.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                data.clear();
                String key=editTextSearch.getText().toString();
                String date=editTextSearchDate.getText().toString();
                Call<ListNewsResponse> callNews=serviceAPI.listNewsByKey(key,date,api);
                callNews.enqueue(new Callback<ListNewsResponse>() {
                    @Override
                    public void onResponse(Call<ListNewsResponse> call, Response<ListNewsResponse> response) {
                        ListNewsResponse listNews=response.body();
                        Log.i( tag: "info",call.request().url().toString());
                        for (News newss:listNews.getNewsList()) {
                            data.add(newss);
                        }
                        adapter.notifyDataSetChanged();
                    }
                    @Override
                    public void onFailure(Call<ListNewsResponse> call, Throwable t) {
                        Log.e( tag: "error", msg: "Erreur de réseau");
                    }
                });
```

Affichage des articles :

```java
package ma.enset.tp3.model;
import ...

public class ListNewsAdapter extends ArrayAdapter<News> {
    private int resource;
    public ListNewsAdapter(@NonNull Context context, int resource, @NonNull List<News> news) {
        super(context, resource, news);
        this.resource=resource;
    }
    @NonNull
    @Override
    public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent){
        View listItemView=convertView;
        if(listItemView==null){
            listItemView= LayoutInflater.from(getContext()).inflate(resource,parent, attachToRoot: false);
        }
        TextView textViewTitle=listItemView.findViewById(R.id.textViewTitle);
        TextView textViewBublishedAt=listItemView.findViewById(R.id.textViewBublishedAt);
        ImageView imageView=listItemView.findViewById(R.id.imageView);
        textViewBublishedAt.setText(getItem(position).getPublishedAt());
        textViewTitle.setText(getItem(position).getTitle());
```

```java
        Runnable thread= new Runnable(){
            @Override
            public void run() {
                try {
                    Log.i( tag: "info",getItem(position).getUrlToImage());
                    URL url=new URL(getItem(position).getUrlToImage());
                    Bitmap bitmap= BitmapFactory.decodeStream(url.openStream());
                    imageView.setImageBitmap(bitmap);

                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        };
        Thread t=new Thread(thread);
        t.start();
        return listItemView;
    }
}
```

Le format d'URL dans RestServiceAPI :

```java
package ma.enset.tp3.service;
import ma.enset.tp3.model.ListNewsResponse;
import retrofit2.Call;
import retrofit2.http.GET;
import retrofit2.http.Query;
public interface RestServiceAPI {
    @GET("everything")
    Call<ListNewsResponse> listNewsByKey(@Query("q") String key,
                                         @Query("from") String date,
                                         @Query("apikey") String api);

}
```

Récupérer afficher les détails de news stockées dans les paramètres de l'Intent. :

NewActivity :

```java
import ...
public class NewActivity extends AppCompatActivity {
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.new_profile);
        Intent intent=getIntent();
        News news=(News)intent.getSerializableExtra( name: "news");
        TextView textView=findViewById(R.id.textViewTitleL);
        ImageView imageView=findViewById(R.id.imageViewProfile);
        textView.setText(news.getTitle());
```

```java
        Runnable thread= new Runnable(){
            @Override
            public void run() {
                try {
                    Log.i( tag: "info", news.getUrlToImage());
                    URL url=new URL(news.getUrlToImage());
                    Bitmap bitmap= BitmapFactory.decodeStream(url.openStream());
                    imageView.setImageBitmap(bitmap);

                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        };
        Thread t=new Thread(thread);
        t.start();
    }
```

Meta

2022-02-20

SEARCH

Title : Facebook blocks RT and Sputnik EU

BublishedAt : 2022-03-01T00:16:33Z

Title : Meta Quest 2 fitness data will be outside of VR

BublishedAt : 2022-03-10T18:00:18Z

Title : Instagram quietly bumps up the daily time limit

BublishedAt : 2022-02-21T21:21:28Z

```java
listViewNews.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
        //Toast.makeText(getApplicationContext(),data.get(i).getLogin(),Toast.LENGTH_SHORT).show();
        Intent intent=new Intent(getApplicationContext(),NewActivity.class);
        intent.putExtra( name: "News",data.get(i));
        startActivity(intent);
    }
});
```

Meta Quest 2 fitness data will be available outside of VR

Another Netflix production was robbed, this time on the set of 'Lupin'