



NOVA SCHOOL OF  
SCIENCE & TECHNOLOGY

**Interação Pessoa-Máquina**

**2023/2024**

## **NexaGuide**

Stage n: 4 (Computational prototype)



# **NexaGuide**

BEST TRAVEL APP

**Authors:**

55921, Pedro Ribeiro  
56821, Rodrigo Caio  
60795, Vasco Nunes  
59166, Diogo Moreira

**Lab class Nº P2**

**Group Nº 12**

**Professor:**  
Teresa Romão

November 20, 2023

**APK:**

[https://drive.google.com/file/d/1t63u3EpD8IPMy0ulm8D1i\\_YmlOT-9oUy/view?usp=sharing](https://drive.google.com/file/d/1t63u3EpD8IPMy0ulm8D1i_YmlOT-9oUy/view?usp=sharing)

**Github URL:** <https://github.com/DiogoFSM/NexaGuideIPM>

**Briefing:** NexaGuide is a traveling guide application, where you can search for locations to visit and events to attend, based on topics that you like (music, art, history,...) and other filters like distance to your current location. It also allows you to save those locations into collections, so that you can plan your trips and easily find those locations and events. In addition to that, it is also possible to review the locations you visit, in order to help other users decide whether or not to visit a location.

**Scenario 1:** You are traveling in Lisbon and want to explore historical sites. Search for locations to visit in Belém and save “Centro Cultural de Belém” and “Torre de Belém” to a collection named “Places to visit on Saturday”.

**Scenario 2:** You will be traveling in Portugal and want to attend a music festival there. Search for NOS Alive and save it to a collection named “Music in Portugal”.

**Scenario 3:** Go to your collection “Places to visit on Saturday” and give your honest review to “Torre de Belém”.

**Description:**

NexaGuide is a travel guide application designed to assist users in discovering new destinations and participating in events. It simplifies the exploration process by allowing users to search for locations and events based on their specific interests, such as music, art, history, and more. Additionally, users can apply filters, including proximity to their current location, to find convenient options easily.

A key feature of NexaGuide is the capability to save favorite locations into personalized collections. These collections enable users to plan their trips efficiently by accessing and organizing saved locations and events. This functionality aids in creating itineraries and managing destinations in a user-friendly manner.

Beyond aiding in the discovery of new places, NexaGuide empowers users to review and rate the locations they have visited. These reviews are invaluable to the user community, providing insights and recommendations that help fellow travelers make informed decisions about visiting specific locations.

In summary, NexaGuide offers a comprehensive toolset for travel enthusiasts, delivering a personalized exploration experience, itinerary organization, and the sharing of valuable insights within the travel community

## **Incomplete parts**

While the design phase of our prototype included the implementation of a search bar for locating specific events and locations, as well as a functionality for filter-based searches, their integration was not fully developed and as a result searching events or altering filters in the events page will not influence the displayed results. Location filters are partially implemented as well (rating, price and tags are working, but not distance or filtering by city).

There is also a page missing to view the reviews for a location (it is only possible to view your review of the page and the overall rating).

We also wanted to implement other features such as different color/icon markers for different types of locations, photos for events, better reviews (review aspects such as price/cost relation or safety), etc. However, we did not have the time to do it all.

These aspects highlight areas for future development and refinement in subsequent iterations of the prototype.

## **Tools**

In the development of our computational prototype, three key tools were instrumental. Firstly, Flutter, an open-source UI software development kit created by Google which It's known for enabling the crafting of natively compiled applications for mobile, web, and desktop from a single codebase, significantly enhancing development efficiency and consistency across platforms, and we use it to make a mobile application. Secondly, Android Studio, the official integrated development environment (IDE) for Google's Android operating system,

played a pivotal role as it offers a suite of tools that aid in the creation, testing, and debugging of Android apps, providing a robust and user-friendly environment for developers. Lastly, sqflite, a lightweight and reliable SQLite plugin for Flutter, was employed for local data storage solutions.