

AR Tour Experience

Authors:

Leonidas Mavrotas (NTUA)

Eirini Kaldeli (NTUA)

Version and date: v1.2, 30/4/2026

TABLE OF CONTENTS

Introduction	3
This guide is intended for	3
Before you start you will need	3
Overview of the workflow	3
Step-by-step guidelines	4
How to download the app?	4
How to select a tour?	4
How to download tour's content for offline use?	6
How to select a language?	7
How to enter a tour and navigate?	7
How to view a POI and its content?	9
How to enter an AR Experience?	10
More information	10

INTRODUCTION

This step-by-step guideline provides an overview of the main capabilities provided by the AR Tour Experience mobile app.

By following this guide, you will be able to:

- Load custom AR tours in outdoor heritage contexts created via the AR Tour Builder on a mobile device
- Learn about the main Points Of Interests associated with the tour, based on your GPS location
- Gain access via a multilingual user interface to various assets associated with a POI (including 3D objects, images, text etc)
- View 3D models in overlay AR using the mobile device's camera

THIS GUIDE IS INTENDED FOR

- Visitors interested in exploring a location at their own pace
- Pupils, students, and other guided groups
- Site mediators and tour guides

BEFORE YOU START YOU WILL NEED

- Smartphone with camera (Android) and AR capabilities
- GPS access
- Sufficient internet connectivity (depending on content setup)

You can find more about the supported Android devices with AR capabilities along with a list of devices here: <https://developers.google.com/ar/devices>.

OVERVIEW OF THE WORKFLOW

The overall workflow involves the following steps:

1. The visitor opens the AR Tour Experience app and selects their desired AR tour.
2. As the visitor explores the site, they are prompted about nearby POIs.
3. Moving to a POI, the app presents to the visitor a selection of relevant objects associated with the respective location.
4. The visitor can choose to visualise a 3D object in overlay AR mode, thus being able to inspect hidden or missing elements at the location.
5. The app provides additional rich content (including images, textual documents, links to external resources such as a quiz), allowing the visitor to explore the location context more deeply.

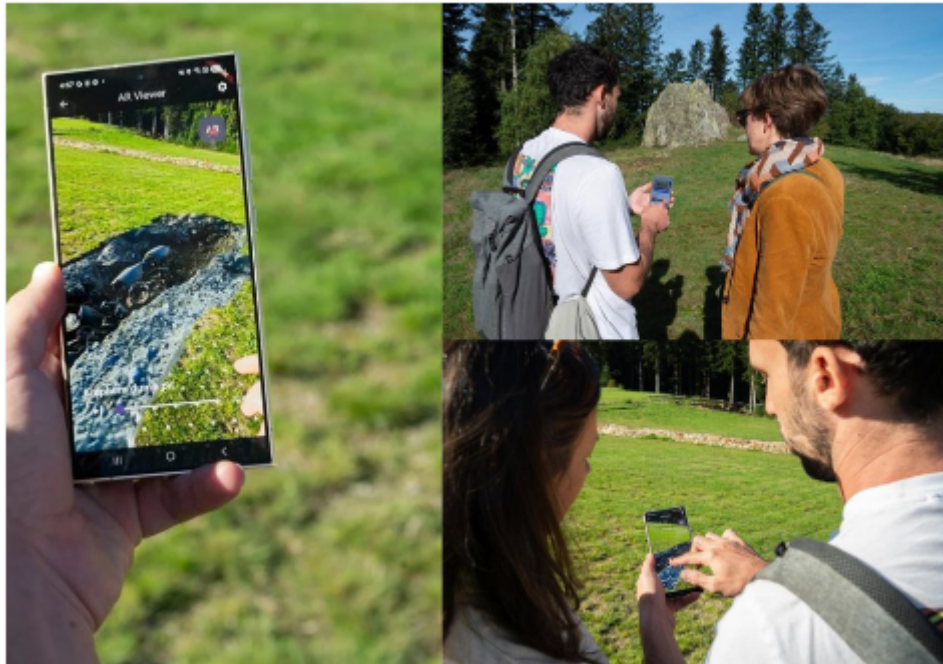


Figure 1 The AR Tour Experience in action in the Bibracte archaeological site.

STEP-BY-STEP GUIDELINES

HOW TO DOWNLOAD THE APP?

You can download and install the app from Google Play: [link](#)

HOW TO SELECT A TOUR?

Upon opening the app, you will see a list of available **archaeological projects**.

1. Tap **the arrow button** on a project card to enter it. You will then see the project's description along with its available tours.
2. Tap **See More** on any tour card to open its detail page, where you can read the full description and browse its Points of Interest (POIs).

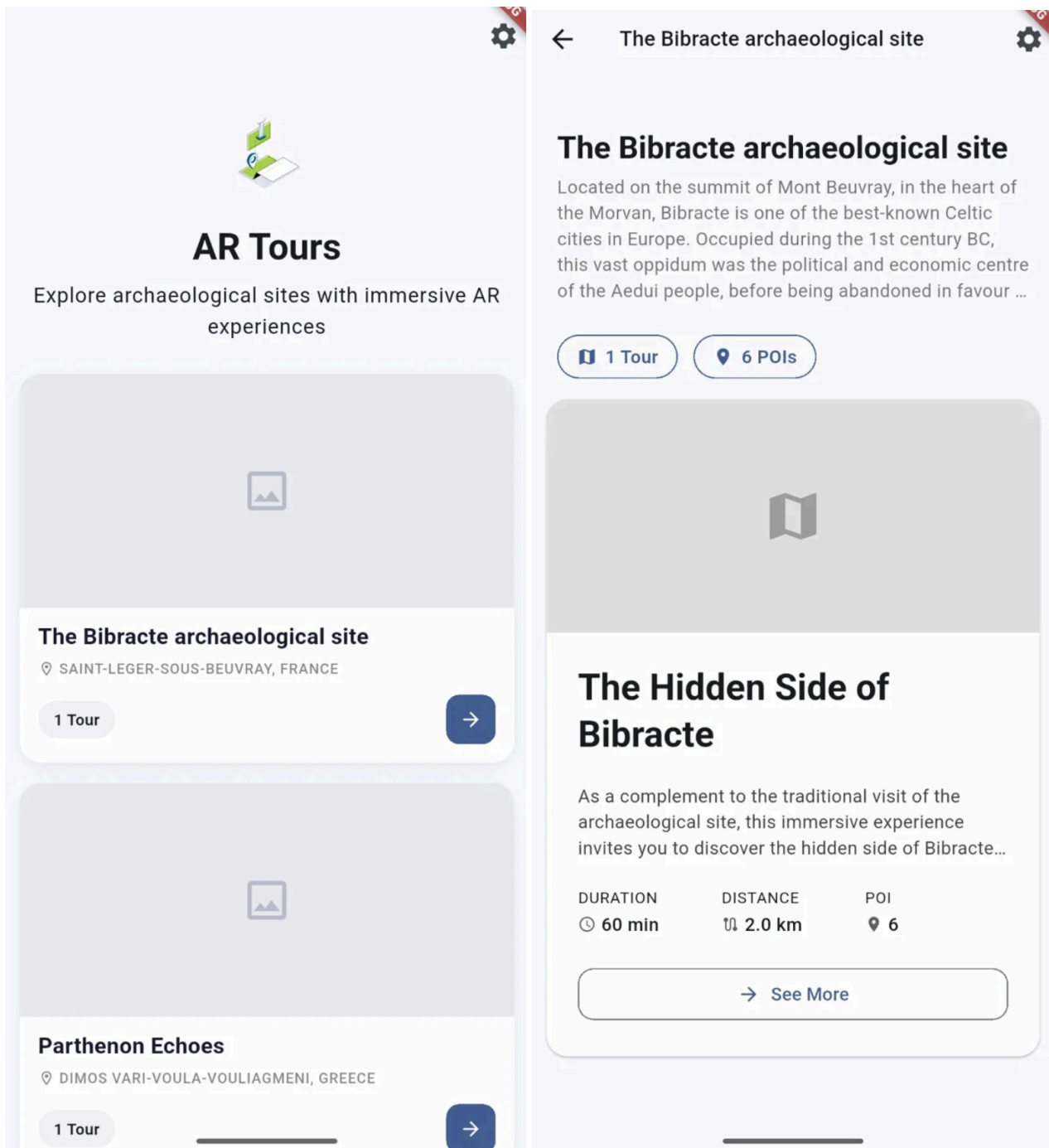


Figure 2 Project cards in the AR Tour Experience

HOW TO DOWNLOAD TOUR'S CONTENT FOR OFFLINE USE?

On the tour detail page, tap the **Download Tour** button to save the tour's content to your device. This allows you to access all tour information, media, and POIs without an internet connection while on-site.

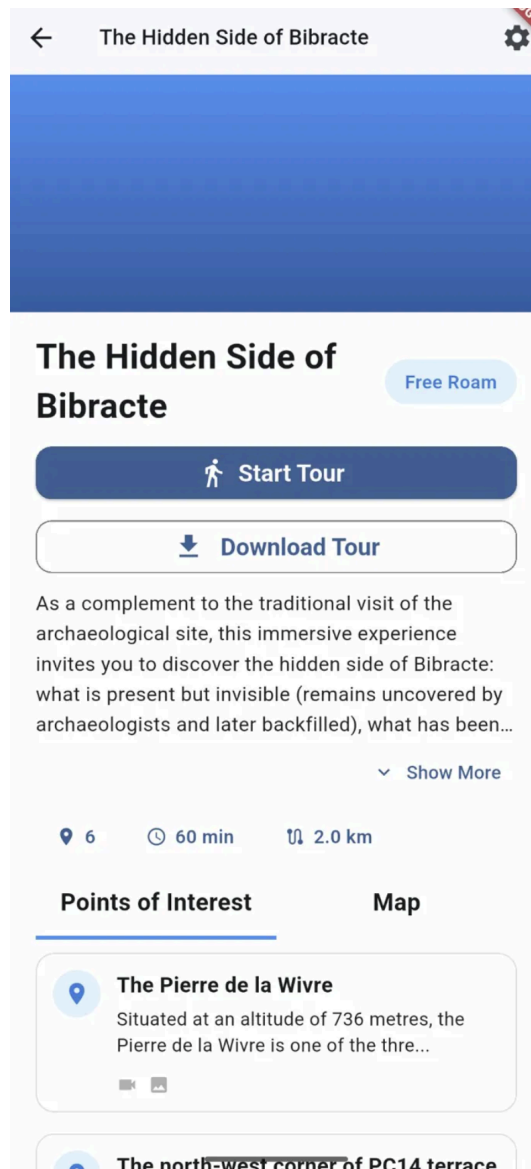


Figure 3 Tour detail page

HOW TO SELECT A LANGUAGE?

1. At any point during an ongoing tour, tap the **Settings** icon (⚙️) in the top-right corner of the screen.
2. A Settings panel will appear where you can select your preferred **language** from the dropdown menu.
3. The app content will update accordingly.

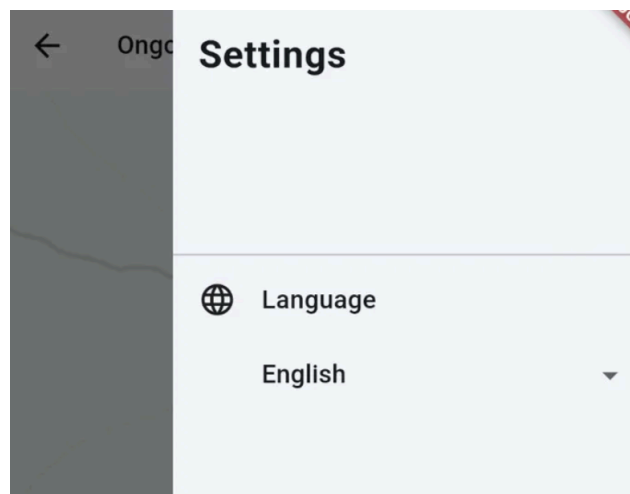


Figure 4 Settings

HOW TO ENTER A TOUR AND NAVIGATE?

On the tour detail page, tap **Start Tour** to begin. You will be taken to an interactive **map view** showing the tour area with all POIs marked as icons on the map. You can:

1. **Tap a POI icon** on the map to select and open it.
2. Tap **All POIs** in the top-right corner to open a full list of all Points of Interest, and tap the location icon next to any entry to center the map on it.
3. Use the **location button** in the bottom-right corner to re-center the map on your current position.

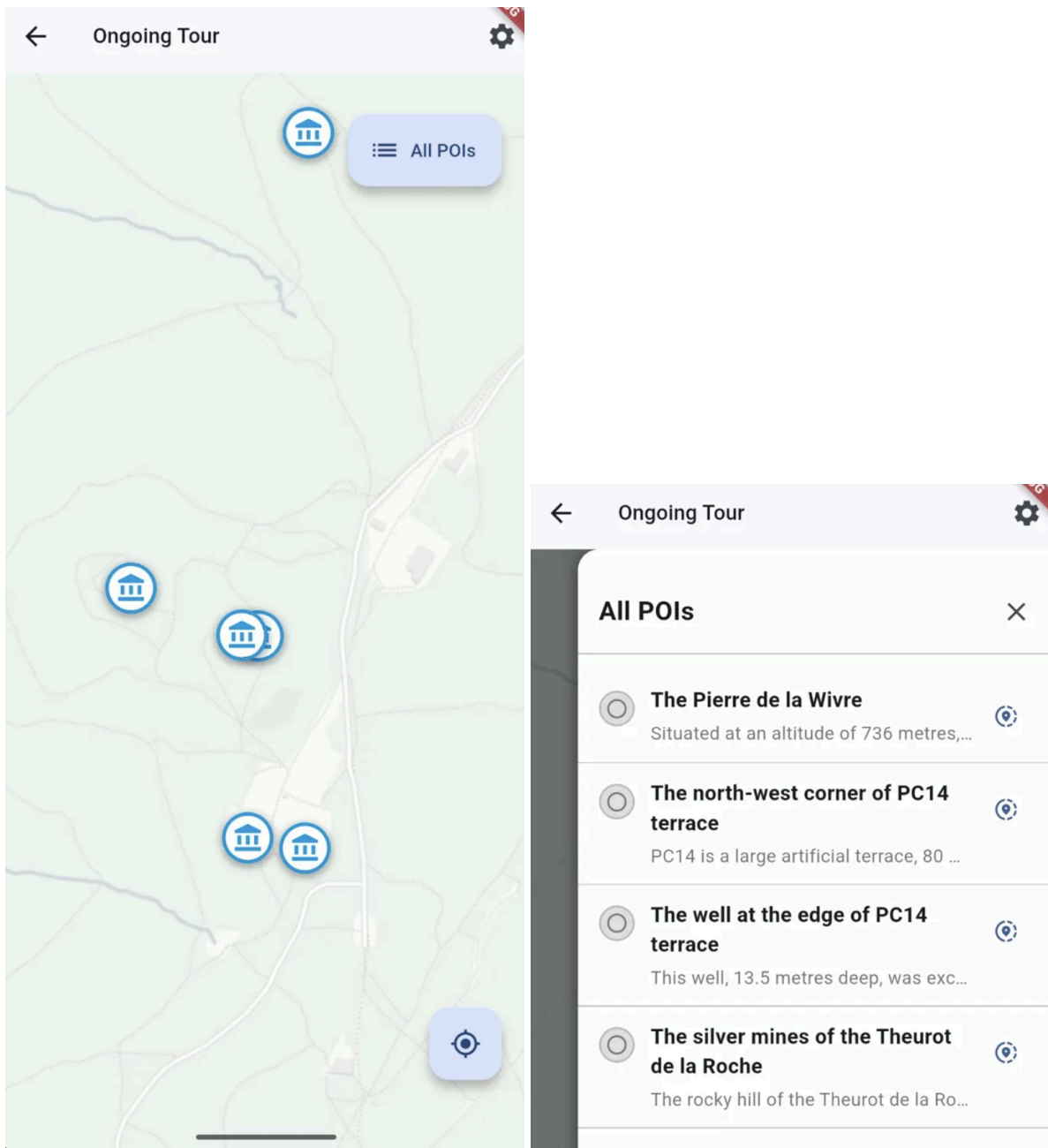


Figure 5 Left: map view. Right: Overview list of POIs

HOW TO VIEW A POI AND ITS CONTENT?

Tapping on a POI opens its dedicated page, where you can read its historical description and explore all associated media, organised by type:

- **Photos** — Archaeological photographs and artefact images.
- **Videos** — Documentary or contextual video clips.
- **3D Models** — Interactive 3D reconstructions viewable directly in the app.
- **Quiz** — An optional quiz to test your knowledge about the site.

Scroll down to browse all available content, and tap any media item to open it in full view.

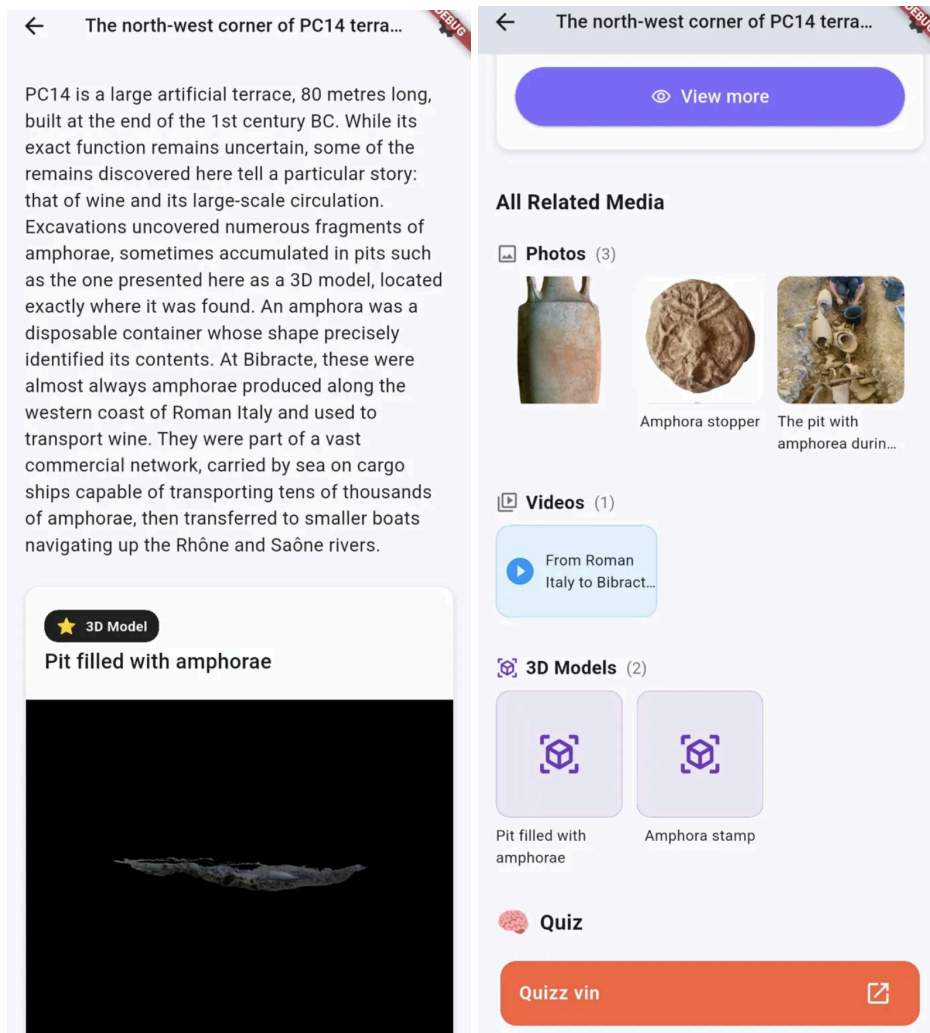


Figure 6 Associated media

HOW TO ENTER AN AR EXPERIENCE?

When viewing a **3D Model**, you will be taken to the **3D Model Viewer** screen, where you can rotate and inspect the model interactively. To place the model in the real world using Augmented Reality, tap the **AR** button in the top-right corner of the viewer. Your camera will activate and allow you to position the 3D model in your physical surroundings for an immersive, true-to-scale experience.

MORE INFORMATION

- Source code on GitHub:
<https://github.com/EUreka3D-XR/AR-Tour-Experience>
<https://github.com/EUreka3D-XR/AR-Tour-Builder-backend>
- Demo video at the Bibracte archaeological site (Jan 2026): [Link](#)