

User Manual - Tour Visualizer

By: Faris Ashriem, Levi McFetridge, Christian Deguzman

1. Introduction

Tour Visualizer is an interactive 3D web application that allows users to search for music artists and explore their tour events across a virtual globe. The application combines Angular with CesiumJS to provide a highly visual and intuitive way to view tour locations and travel paths.

2. System Requirements

Recommended:

- Desktop or laptop computer
- Modern browser (Chrome, Edge, Firefox)
- Internet connection

Local development requirements:

- Node.js 18+
- .NET 8 SDK
- Angular CLI installed

3. Launching the Application (Local)

To run the Backend:

- Make sure you are in the "/backend/api" directory
- dotnet watch run --urls <http://localhost:3000/>

To run the Frontend:

- Be in the "/frontend/tour-frontend"
- ng serve --proxy-config proxy.config.json

Open the app in the browser:

<http://localhost:4200>

4. Application Overview

The application has three main sections:

1. 3D Globe (Cesium)
 - Shows Earth in 3D
 - Displays artist event locations
 - Shows animated arcs connecting event cities
2. Search Widget
 - Search for artists
 - Display a list of matching results
 - Auto-hides popup on new search
3. Event Cards
 - Show event image
 - Show location and date
 - "View on Globe" button to fly camera to event

5. How to Use the Application

5.1 Searching for an Artist

1. Type an artist name in the search bar
2. Select an artist from the dropdown
3. Event cards will load
4. Previous arcs are automatically removed

5.2 Viewing Event Locations

- Each event loads onto the globe
- Arcs are drawn between events
- Clicking on an event flies the globe camera to that city

5.3 Navigating the Globe

Mouse controls:

- Scroll: Zoom
- Left-click + drag: Rotate
- Right-click + drag: Pan

5.4 Popups

- Search result popup closes automatically once an artist is selected
- Popup re-opens if a new search begins

6. Troubleshooting

- If images do not load, ensure backend is running
- If globe is blank, confirm Cesium assets are accessible
- If search returns nothing, try a more specific artist name