The Meadows- Nottingham | Infrastructure Summary

Introduction to TURAS

Transitioning Towards Urban Resilience and Sustainability (TURAS) is an FP7 funded European-wide research and development programme. The "TURAS" project aims to bring together urban communities, researchers, local authorities and SMEs to research, develop, demonstrate and disseminate transition strategies and scenarios to enable European cities and their rural interfaces to build vitally-needed resilience in the face of significant sustainability challenges. As part of this process, the TURAS project has developed a suite of Geo-ICT tools for the project to demonstrate some of the research topic address over the lifespan of the project.

Design Intent

Welcome to the Meadows, where history matters. The Meadows timeline has been created to capture the history of the Meadows community. The timeline application for the Meadows area in Nottingham aimed to assist the community better capture the history of the area. The tool will act a support tool to crowd-source community information to help recreate the history of the Meadows community.

Principal Elements

It is envisioned that capturing this information will allow the development of the community to be uncovered and shared with all. Users add information about an event in the Meadows, add entry, select a location from the map on the screen, click on the location you are interested in to add an entry. Users can enter the title of the event in the first entry box, enter a brief description of the event, key dates, categories, and upload files relating to the event.

The purpose of the web application is to crowd source information for the local residents. It was built using various JavaScript libraries (like OpenLayers, Timeline.JS) as well as PHP.

1. Tutorial

The application includes a video tutorial on user interaction with the application.

2. Adding and entry

Users are encouraged to add their local knowledge of an area, a site, or a building to the application. They can share documents, imagery or video that better explains the history of a site. User can add a space by clicking the 'add entry' tab and filling out information in the resulting modal which includes a map to pinpoint a location.



3. Interacting with the timeline

Users of application can navigate via the map or the timeline. The map interface showing a geographic map view of the location of those sites can be useful to users who wish to drill down to an area of particular interest. Similarly, other users may wish to experience that through the chronology of events as they occurred and in which century.

Infrastructure

The infrastructure underpinning the dashboard can be considered in three parts:

1. Timeline JS

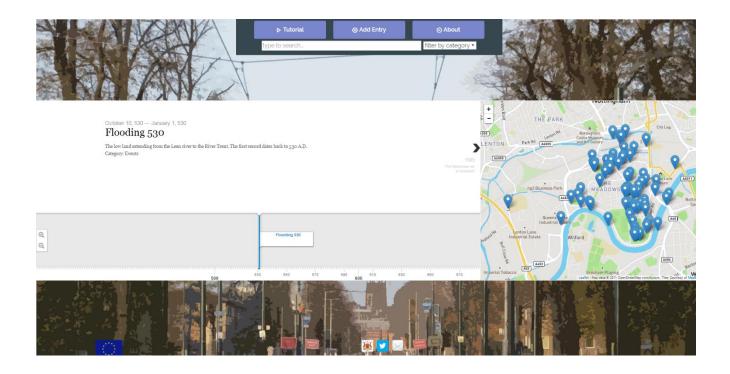
The timeline is built using TimelineJS an open-source tool that enables anyone to build visually rich, interactive timelines.

2. Leaflet

This map component and data is stored and managed using a JavaScript library called Leaflet. This lightweight library provides a range of useful core functionalities for the user to interact with the map.

3. Application

The application is built using a loose mvc architecture and is not tied to any framework or platform. It uses HTML, CSS, PHP and JavaScript to create the functionality, database storage and style of the working application.





Wider Application Dissemination

In order to create the best environment for re-use, modification and visibility of the TURAS Geo-ICT tools we package all code and documentation for each application and have made them directly available to the public in zip file or available on GitHub @ https://github.com/UCDTURAS.

Compressed Archive File

To make the development and coding accessible to the public and researchers interested in
using, adapting, or further developing the TURAS tools, we have packaged the information
(code, development operations and documentation) into a single compressed file which can
be downloaded from the final TURAS interface. This package will contain a computer program
as well as necessary metadata for its deployment.

GitHub Repository

• The aim of the TURAS project is to bring urban communities and businesses together with local authorities and researchers to collaborate on developing practical new solutions for more sustainable and resilient European cities. Following this, we recognise the importance of having a dedicated modern interface with which to disseminate all the Geo-ICT tools developed as part of the project. TURAS has created a GitHub account to allow end-users, technical developers etc to push/pull data code from the TURAS account.

