

# Coursework Report

Dominic Mccluskey  
40277061@napier.ac.uk  
Edinburgh Napier University - Advanced Web Technologies (SET09103)

## 1 Title of web app:

Europa Universalis 4 info

## 2 Introduction

My intention was for my web app to act as an information source about the game Europa Universalis 4. You can navigate the pages using a navigation bar or "navbar" located at the top of the page. The navbar will change appearance based on what you chose to allow you further options within that category. It also allows you to view a video about what ideas to take, if you want to do a world conquest. You can cycle to the nations tab to find info on that specific nations idea set in the game. Each nation is kept in their relevant pages accessed through the navbar and a url list. For example if you click nations there will be a list of all continents and "formable", if you wanted Australia that would be kept in the formable tab since it is a formable nation, however I also included it in the Oceania continent tab simply because there were no specifically Oceanian nations in the game besides Australia. You can also go to the events tab where "general" and "country specific" will pop up as options. Choosing "country specific" will bring up all nations I made pages for (10 since it is a prototype) and clicking on a nation will bring up a new page showing the user what events that country has access to by being that country, (again a maximum of two per country since its a prototype). Pick the general option instead and it shows events that are not country specific. I added the "comet sighted" event because it has many event paths that "hilariously" all do the exact same thing. You can click on the developer option to get direct links to the developers' official twitter, twitch channel and store.

(Figure 1) is a screenshot from my web app home screen.

## 3 Design

The url hierarchy was designed first before anything. I had an idea of navigation through a navbar and then further complex navigation being done by hyperlinks to specific country pages. (Figure 3) Strategy does not really need to be fleshed out for every country. I thought about adding in a strategy for each nation however that is not really in the spirit of the game. It is about making your own nation thrive and you can do that in numerous different ways so a strategy for individual nations is

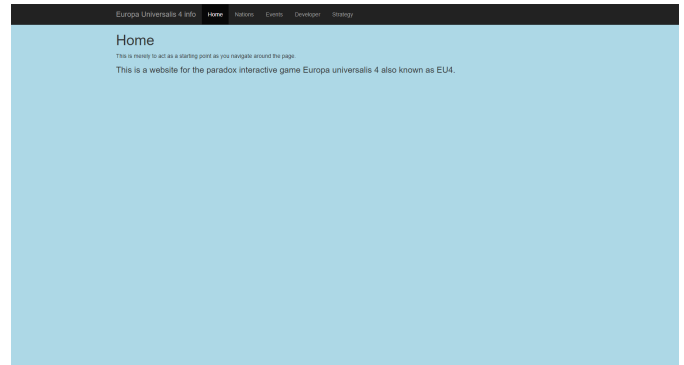


Figure 1: Web app home screen

not an effective use of time or resources. I decided instead to show a video about the strategy of world conquests instead. The developer tab is merely giving links so that someone can visit the official website/twitch channel/twitter of the developers. This is the url hierarchy below.

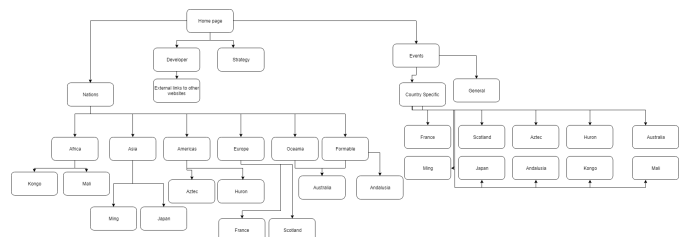


Figure 2: URL hierarchy

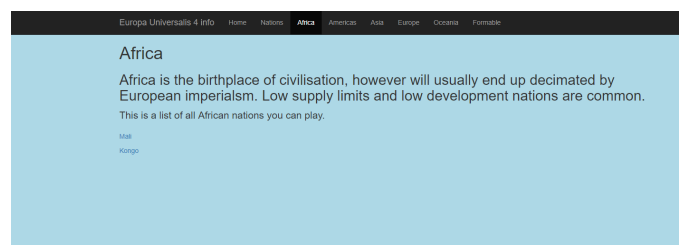


Figure 3: Navigation system

As you can see it can very easily become quite complicated since there is so much data a full version of my web app would need to have. However in terms of in app navigation I think I chose right in its design as it is easy to navigate.

### 3.1 Enhancements

Some things I would add is pictures of the nations' flags in their relevant pages. I would also like to add symbols to represent the individual resources in EU4. I would also like to change the filters for viewing countries. For example inside the Europe category you could click the "Germanic" culture group, and show all Germanic culture countries. This would just be a further extension of my current ideas. I should have also extended the category filtering system for the events page as it would improve accessibility when adding in a lot of different country events. A search function would be a big improvement to add, even though I would feel it would make my navbar and category sorting efforts less useful by comparison.

### 3.2 Critical Evaluation

As I have said before I think the URL hierarchy and design used for the navbar navigation is a really good feature for navigating a lot of data to find what you want exactly without a search bar. It is actually a feature the website I am influenced by (the Europa Universalis 4 wiki), could add to increase their accessibility. Perhaps it is due to them having a search bar instead. I would argue adding both can only help users find what they want to find easier. My web app was designed with modular design in mind. The coursework.py only contains the event handlers calling .html templates where all the relevant information is held. This means that someone could work on making various new html templates for the website and only minor changes to previous base templates and changes to the event handlers would be needed to integrate those new pages to my web app. This improves the maintainability and the adaptability of my web app. It does however mean that things could quickly become more complex inside the template folder. Perhaps a splitting up of the template folder into further sub template folders would be an improvement I could make to make further coding to the web app more manageable. My navbar and aesthetics of my web app, was set up using the bootstrap listed in the workbook given. It was a foundation I could further improve on later in development and I think it worked quite well.

### 3.3 Personal Evaluation

I did have some difficulties in that the similarity of the pages to each other made me lose focus when coding the html. It may just be an issue with the quantitative nature of the data I am listing through my web app. Many pages of a similar type needed to be added and mistaking one for another while coding is almost unavoidable. A lot of my mistakes were down to simple human error and I mitigated that through the use of self made base templates that I could then copy and change minor details. This meant I did not have to code things over and over again, it meant I just had to get things right once, copy it then edit it for the rest of the similar pages. I think I could have put in the extra effort to add images but I just wanted to get everything up and running before I added further aesthetics, then I ran out of time. This would be things like flags and symbols to represent resources. These would also all be clickable to bring you to a page that tells you about that flag/resource. Overall I am impressed with how I did despite not taking the prerequisite course and having no familiarity with python or html or css when I started. I have

built up confidence in using all these coding languages and look forward to finding out new ways to use them.

### 3.4 References

I used the bootstrap method defined in the workbook to create my html pages. I used the Europa Universalis 4 wiki as an info source for the data I listed and as an inspiration for how my website should look like/function: [https://eu4.paradoxwikis.com/Europa\\_Universalis\\_4\\_Wiki](https://eu4.paradoxwikis.com/Europa_Universalis_4_Wiki) I linked a video from an Eu4 based youtube channel called "Siu-King\*\*" It was about the strategy of doing a world conquest campaign and what ideas to take to make it possible. This is the video link: <https://www.youtube.com/watch?v=rcKeR2wTLt0> I put links to the developers' (Paradox Interactive) twitter, twitch channel and official store.