How you approached the development of each component of your app.

I first had the idea of the tourism app and then I tried looking for inspiration for what people would look for in a tourism app. Through this I figured what the essential parts were.

Features/Components:

1. Map
2. Flag
3. Country Name
4. Landmark Image
5. Description
6. Anthem
7. Scheduler to plan trips
8. Viewing previously planned trips

For each of these components I looked at the most effective and user-friendly way of development. The top of the screen has three components. The flag, country name and map. By clicking on the country, a list of 5 countries pops up which the user can select from.

The middle section has a landmark image, description, and translation. The user can move through the cities of each country with arrows which changes. Pressing the translation button translates the description into irish.

The bottom section has three components which are the anthem, view trips, and book trips. The anthem button plays the national anthem for each country, the book trip makes select a place, date, and time, which is saved and can be viewed in the view trips activity.

Reasons behind design decisions made e.g. efficiency, user experience etc.

In the designs of things, I have split the main activity into three sections for ease of navigation, which are top middle and bottom. This creates zones for the user to compartmentalize the activity on the screen.

Tests that were carried out to ensure the app works correctly.

The tests I put the app through are that I ran the app through the virtual machine pixel 2 (api 30), Pixel 3A (api 32), and tested on my personal Samsung galaxy S9 and Samsung J3. In all these tests the all the components in the app were 100% functional, including the SQLite database.

Challenges faced during the development and how these were overcome.

One of the many challenges faced was the loading images from the SQLite database so I left that attempt and instead saved the images as URLs which will load depending on the country that is selected.

Another challenge faced was storing and playing the anthems for the countries. I had to do a lot of online research for this to be able to master how to play the music and pause it.

What interesting things you learned about Android during the course of developing the app.

Through using android studio so far unlike the traditional programming we have been doing so far in the course work, android development is all very built-in and everything has a function to access it already, we just have to find it and know how to use it.