Over the years I have experienced many bad user interface or User experience (UI/UX) design problems. While many stem from unimaginative programming or software limitations most are caused by a fundamental lack of understanding of how the user engages with the application. One application that continues to struggle, despite having been developed by one of the most user experience focused companies, is Apple Maps. Apple Maps was first launched on September 19, 2012, and was the default mapping application on all Apple products. The initial criticisms of the application mostly focused on inaccuracies in the underlying spatial data and less on the UX of the application itself. Disappointingly, Apple has not shown their typical enthusiasm to improve the user experience.

The primary reason for disappointing UX appears to be a lack of understanding of all the ways users expect to interact with mobile mapping applications. Navigation apps, as most mobile mapping applications are classed, can no longer exclusively focus on driving directions between two locations. Mobile users have become significantly more spatially aware since the launch of the original iPhone in 2007. Google maps showed them to power of searching, or perhaps more accurately researching spatially.

The most significant shortcoming with Apple Maps is in there system of storing, categorising, and sharing locations found on the map. Because most users are comfortable with using the navigation apps for getting around, mobile mapping applications have be come a central location for planning vacations. Users expect to be able to 'pin' their hotel location and then search the surrounding area for activities. Once found, they expect to store these locations. While apple support the storing of locations, the user interface is clunky at best, and in some instances utterly baffling. For example, Apple has chosen to label the folder system where you store collections of locations 'guides', with a separate section tied favourites. There is no clear difference between these two similar systems for storing locations. Favourites is a familiar UI name for bookmarked informations, but guides is a bit confusing, is it being shared with others? Another shortcoming is the lack of collaboration. When planing a vacation with others it would be useful to store points of interest in a shared location, something google maps implemented several years ago. Apple has demonstrate a sophisticated understanding of user interfaces and user experiences, they now need to bring their abilities to develop a better mapping application.

An example of good UI/UX design is the website Kurviger (https://kurviger.de/en). Motorcyclists are a subset of digital navigations application users, with there own set of needs. When traveling for pleasure, it is often the case that the fastest route between two locations is the least enjoyable to ride. Kurviger's simple interface makes creating a route simple, with all the basic functions right on the first page. The map uses OpenStreetMaps as a base using OSM-Liberty to render the tiles is a simple, road network focused way. There are motorcyclist focused points of interested directly on map when it first loads. After a little exploration more advance features are discovered; such as the ability to load several different routing file types (e.g GPX and KML). Once a route has been planed the user can export the route or save it to their cloud storage, making it accessible in phone navigation applications.

While these two applications are similar, they both provide navagation, they are focused on different users and the differences in UI/UX are stark. While Kerviger interface is simple and intuitive to use Apple Map drives users to search submenus for common tasks and uses unconventional naming of tasks.

One of the ideas that could improve travel focused navigation apps, such as Kerviger, would be to build a routing cost layer based on beauty. By using an image classification machine learning algorithm a developer could use a dataset like google StreetView or Mapilary to identify areas of greater or lesser beauty. This could then be used to increate the routing cost to travel through less beautiful routes. This would be an improvement on users experience, allowing them to drive only on roads with the nicest views.