Napier lecturer develops food delivery app

A lecturer from Edinburgh Napier University has created a simple app to help local businesses and charities organise home deliveries during the Covid-19 lockdown.

Dr Neil Urquhart, from the School of Computing, based **Foodel** on a simple programme originally designed to teach students about practical uses of artificial intelligence.

The user creates a file of deliveries which is dropped into the app. The app divides the deliveries into rounds, and arranges each round in an efficient order. It also produces maps and schedules.

The app has been used by the Leaf & Bean Café in Edinburgh's Morningside, and Neil is also working with other businesses and charities in a bid to make the technology as user-friendly as possible.

He said: "The routing is driven by artificial intelligence and is based on research carried out here at the School of Computing. The app is free to download from www.foodel.info for any organisation to make use of free of charge, and is one of a number of Edinburgh Napier initiatives designed to support our communities through these troubled times."

Foodel takes its input in a simple spreadsheet and produces GPX and KML files which may be uploaded to maps and GPS devices.

Written in Java, it can be run on Windows as well as Mac OS.

It uses Open Streetmap data and GraphHopper for routing, with the rounds organised using a state of the art Evolutionary Algorithm.

Neil said: "It is designed to be easy to use, but I am happy to be contacted at n.urquhart@napier.ac.uk if support is needed. It is also free to use during the current public health crisis – all I ask is that I get some feedback."