

# Medusa Dempsey

(she/her)

## AirDeska mobile app

## Full-stack mobile app 2023-24

The idea behind AirDeska is simple - what if there was an easier way to work remotely in locations such as cafes, restaurants, and pubs?

AirDeska aims to provide this alongside a robust networking system for professionals to find others to work with in locations that they may already be working in. This app development project is client-led, and myself and the Plytol Ltd team were tasked with converting the proof of concept website (see [here](#)) into a feature-complete mobile app for both the Android and iOS platforms. The project is nearing completion and is expected to release later this summer.

My role on this project was as the lead full-stack developer. I worked extensively on the back-end server, which was written in JavaScript using the Express.js framework and MongoDB as a database. I was also responsible for setting up the hosting for the server, utilising a DigitalOcean Ubuntu cloud virtual machine to host the server. As well as this, I worked on the Flutter front-end, creating such features as the authentication system and the home page feed.

## CheltPubGolf

## Web app 2023

[Link](#)

This web app is designed to track several teams and overall scores during the drinking game “pub golf”, and includes customisation features for pub golf routes and drinks. It began life as a way to keep score during pub golf games with friends, but the site received high praise from our friends that used it, which led myself and my team to evolve it into a public-facing web app. This was the first web app that myself and the Plytol Ltd team worked on, and led to us securing lucrative projects with clients.

My role was primarily as a full-stack developer. I wrote the majority of the web app's front-end code, and configured Firebase hosting as well as the Firestore database and Google Cloud Storage for user uploaded images. The site is written in JavaScript using the React framework and Node, and is hosted through Firebase.

### **Plytol Ltd**

**Website**

[Link](#)

**2023**

Plytol Ltd is a small company set up by myself and two friends to develop websites and mobile apps in our spare time. So far we have developed two major projects (both of which are listed above) and we have plans for many, many more. We also have good connections in multiple industries, and we have been in talks with several organisations to develop apps and websites for them.

The link above is for our website, developed entirely by myself. It is a very simple site and lacks the design of our other websites (we are planning on updating it soon), but I thought it would be worth displaying here anyway. The site was written in React and is hosted on Firebase.

### **Calculator w/ Dijkstra's shunting yard algorithm**

**Website**

[Link](#)

**2023**

This is a simple front-end calculator app that serves as an implementation of Dijkstra's shunting yard algorithm. I developed this completely independently using JavaScript and React, as I was teaching myself React at the time.

### **Digital Student Card**

**Mobile app**

**2022-2023**

Every student knows the pain of getting to university and realising you left your student card at home, meaning you can't be let into the building. Digital Student Card was a proof-of-concept for a digital solution to this - it would utilise smartphone NFT technology to 'digitise' a student card

and allow students to access buildings via their phone. Unfortunately, the source code for this project has since been deleted, but a demonstration video of the system can be seen [here](#).

This project was developed as part of a year-long group project during university. My role on the team was team admin and front-end developer. I worked on the front-end app, which was written in Android Studio, as well as on the scripting code for the NFC reader, which was written in C and then rewritten in C++.

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(Portfolio website coming soon)