ParkAtDCU Bonus Functionality
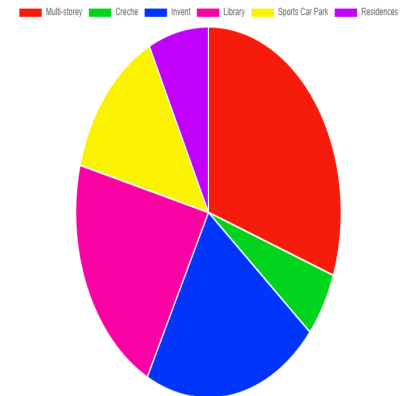
- **Added Piecharts as a visual display for real time information of each campu**s

In the carpark page that I created, as you type in a campus and information about the parking is displayed, I have added a pie chart to each car park that is based on real-time information about parking spaces available. This pie chart shows which area has the most parking spaces available, and they are all color-coded to differentiate.

Views.py source code

```
        labels.append(carpark.name)
        data.append(spaces_available)
context['campus'] = campus_name
context['carparks'] = carpark_info
context['labels'] = labels  # labels and data for pie chart display
context['data'] = data


return render(request, "parkatdcu/carparks.html", context)
```


- **Made social media section, with animated hover**

Made a social media section that can be used to access social media platforms of dcu for potential students looking to see social media posts of dcu or possibly getting in contact with dcu. I made 3 containers, one to access DCU's Twitter, Facebook, and Tiktok; embedded in each container is the link to access the social media platform. I implemented an animated hover to boost interactivity with the user when accessing these social media platforms.

- **Added bus stops page, with real time data**

I created a Bus Stops page that displays data for the bus stops of DCU. I did this because people wanting to get transport to DCU may not only want to use DCU carparks, they may also want to access the bus stops. I made this page by integrating external data such as where the campus bus stop is located, the bus stop number, and the types of buses that operate at the bus stops. I also provided the Dublin bus logo, which has a link embedded in it that directs the student to real-time information about the bus stops. I also provided an interactive map that allows the user to direct to whichever location around DCU, with the main dcu bus stop located already.

- **Made book opening feature with campus and description of campus.**

I made a section in the maps page with 3 containers. These 3 containers have each campus and a background description of the campus. When accessing each of these containers it is made with a opening book animation as if the user is opening a book to access this information of the campus.

Main.css source code

```
.car:hover{  z-index: 1000;
        transform: perspective(2000px) rotate(-10deg);
        box-shadow: inset 20px 0 50px  rgba(0, 0, 0, .5);
}

.car:hover .imgbox{
            transform: rotateY(-135deg);
}
```