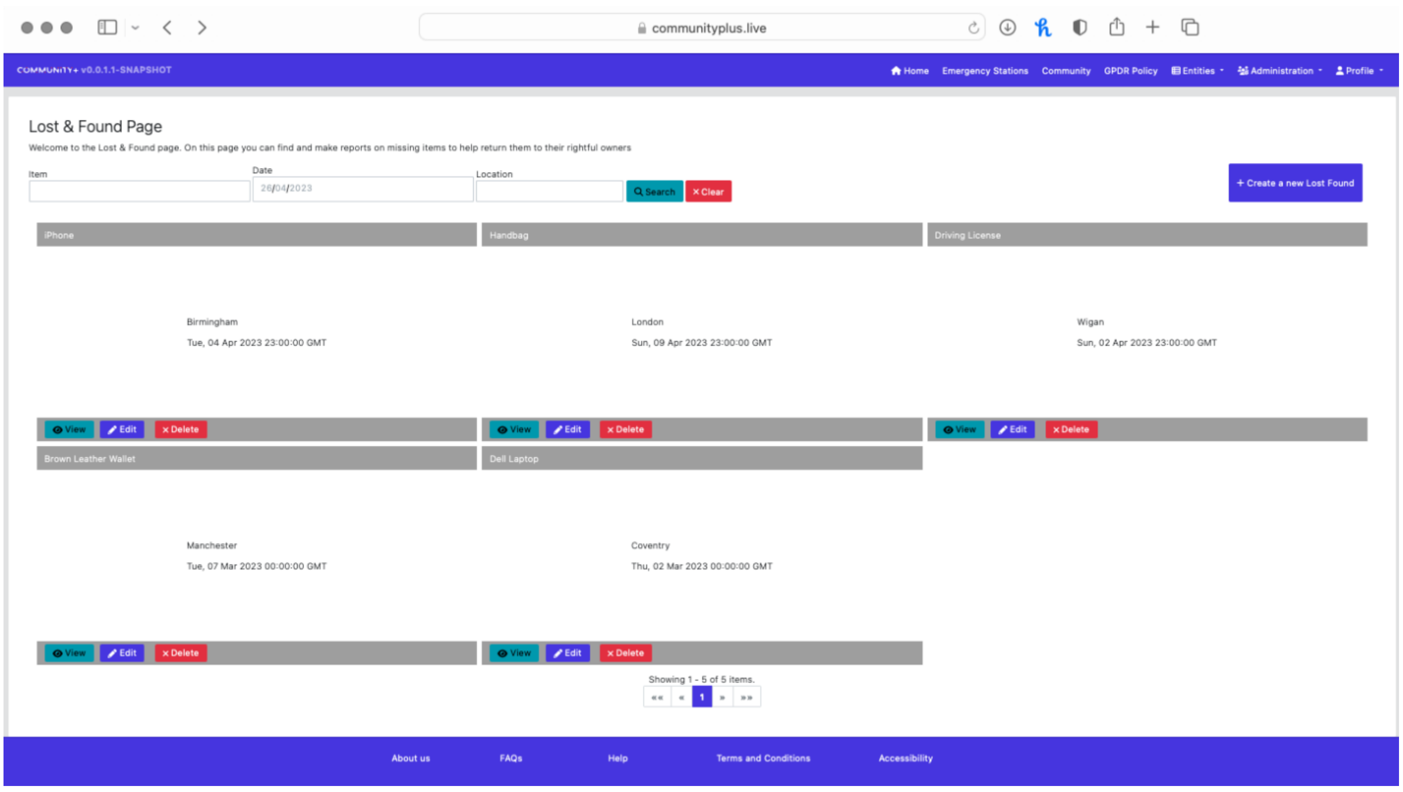
Lakhminder Grewal S3 Submission

Screenshots of my vertically sliced feature in the deployed app:



Lost & Found Page

Welcome to the Lost & Found page. On this page you can find and make reports on missing items to help return them to their rightful owners

Item

Date 26/04/2023

Location

iPhone

Birmingham

Tue, 04 Apr 2023 23:00:00 GMT

Handbag

London

Sun, 09 Apr 2023 23:00:00 GMT

Driving License

Wigan

Sun, 02 Apr 2023 23:00:00 GMT

Brown Leather Wallet

Manchester

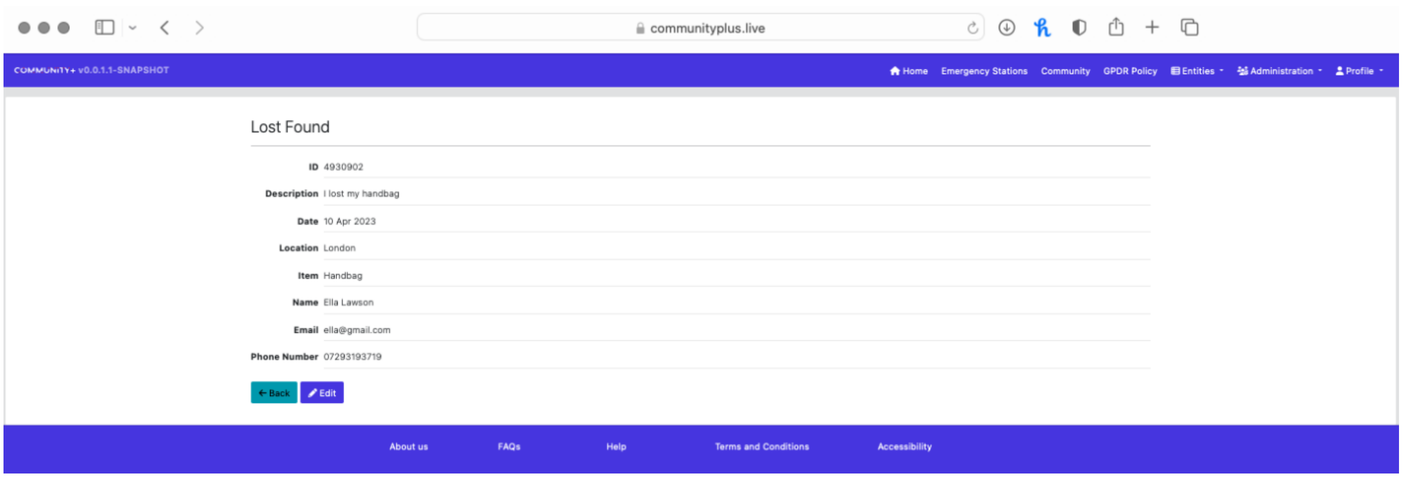
Tue, 07 Mar 2023 00:00:00 GMT

Dell Laptop

Coventry

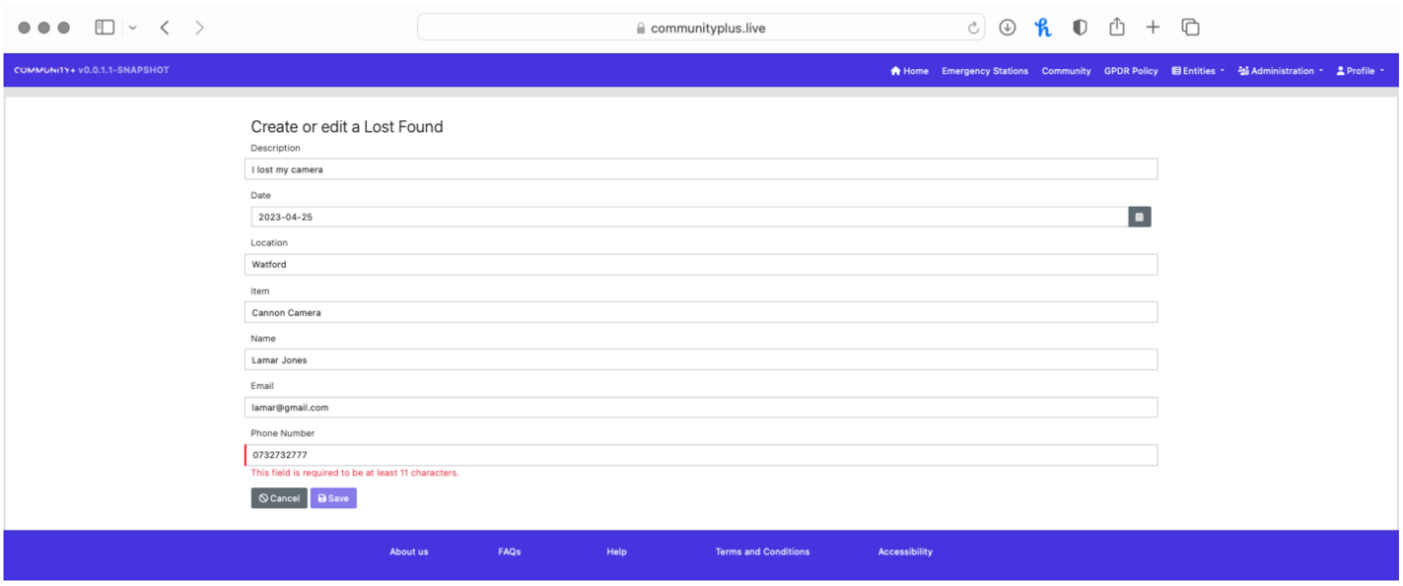
Thu, 02 Mar 2023 00:00:00 GMT

Showing 1 - 5 of 5 items.



Lost Found

ID	4930902
Description	I lost my handbag
Date	10 Apr 2023
Location	London
Item	Handbag
Name	Ella Lawson
Email	ella@gmail.com
Phone Number	07293193719



Create or edit a Lost Found

Description: I lost my camera

Date: 2023-04-25

Location: Watford

Item: Cannon Camera

Name: Lamar Jones

Email: lamar@gmail.com

Phone Number: 0732732777

This field is required to be at least 11 characters.

Description of development and integration with the app:

The lost and found page is a centralised location in the Community+ application where users can report any items that they have lost, edit, or delete their reports, and view reports on missing items that other users have lost to help return missing items to their rightful owners. On creating a report about a lost item, users can include necessary details to help identify and return the item to them, these details include: a detailed description of the item, the date on which the item was lost, a last known location, the type of belonging lost, the name of the person that has lost the item, as well as contact details such as email and number. These details allow other users that may have found a lost item to easily identify the item and get in touch with the owner. To make improve the experience for users that are trying to locate the owners of items they have found, I have added a filter bar, through which users can specify the date, location, and type of item to reduce the number of reports in the catalogue so that owners can be located faster. Furthermore, each report is presented in an easy-to-navigate grid format with a view button so that users can view more details to match an owner, an edit button to change details on a report if required, and a delete button to be used when lost items have been returned.

To develop this feature which spans across all layers of the tech stack, I first worked on the backend in Spring Boot by adding a method in the 'LostFoundRepository' interface which defines a method called 'getByFilters' that interacts with the database to fetch full entities based on the filter criteria entered by the user. I then created a class called 'LostFoundService' for methods to add, update, get and delete lost and found reports. I also made an implementation of this interface called 'LostFoundImpl' to include methods for CRUD operations on the LostFound entity. Then, I worked on the REST controller that can access the service and respond to any requests from clients.

To develop the front-end of the Lost & Found page, I used angular. Using the lost-found.component.html file I was able to develop the front-end of the page to show the search bars for each filter criteria, display the reports in a grid layout whilst showing only key details, and include warning and error messages for when no lost items are found from the search criteria. I then made the relevant changes to the angular component which uses 'LostFoundService' to load data from the backend and provide functionality to navigate the filter, reports, and pages. I included a 'filterBy()' method based on the three parameters which checks whether the parameters are defined, and sets their default value to an empty string if they are not. If the parameters are defined it calls the 'filter()' method of the 'LostFoundService' class and passes the parameters as arguments, if successful the 'onResponseSuccess()' method is called with the response as an argument. To produce a cleaner layout of the table, I changed the lost-found.component.html file to display the entities in a table with a header displaying their item name, as well as the location and date underneath with a footer to contain three buttons to view, edit and delete the lost item report using Bootstrap.

The lost and found page integrates into the app as its own centralized page which is separate from the other pages and can be located through the menu.

Commits:

https://git.cs.bham.ac.uk/team-projects-2022-23/team20-22/-/commit/29ebb924203a2e0607347ed3681337524b7c155b

https://git.cs.bham.ac.uk/team-projects-2022-23/team20-22/-/commit/f3e6fac6203c3ad6d9649d6bce430cd65b2db642