[2024\_25 - Let's Hack Leicester - Student Pack.docx](https://prod-files-secure.s3.us-west-2.amazonaws.com/e04029be-803c-4ea7-8cfe-8e7840cfb150/55296958-9376-48bb-bf10-d5bb4c8bec62/2024_25_-_Lets_Hack_Leicester_-_Student_Pack.docx)

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**Campus essentials locator**

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* interactive map webpage/app that highlights lesser-known/underrated spots on campus such as water dispenser, bike racks, quiet study areas, microwaves etc. Digital “insider guide” to campus that new or busy students would love

**Features that could be implemented:**

* **Point-of-Interest (POI) Mapping**:
  + List specific campus locations for each category, like “Bike Parking,” “Water Refill Stations,” “Microwave Stations,” and “Quiet Study Spots.”
  + Using a simple array or list in C#, store each POI’s name, type, and location (you could keep it basic by referencing nearby buildings).
* **Basic Filtering**:
  + Add a filter system so users can choose to view just one type of location at a time (e.g., only show water dispensers). This could be a simple button-toggling system in your UI.
* **Map Integration (Optional)**:
* **User Contributions (Future Potential)**:
  + As an optional add-on, you could allow users to suggest new POI locations, building a community-driven resource hub.
    - If time allows, integrate a basic map view where users see a visual representation of campus with pins for each POI. If maps are too complex, stick to a list or grid format for simplicity.
* Leaflet for maps on a web page **Backend Logic**: Use C# or Java for handling the app’s backend, like storing and retrieving map points. C# might be easier here since you’re already familiar with it.
* **Frontend/UI**: JavaScript for a web-based map using Leaflet or Unity with C# for a desktop/mobile app. Python could assist in data handling if the team decides to create a database.
* **Data Storage**: A lightweight database like SQLite (manageable with Python or C#) would work for storing the locations and user data. You could even opt for JSON if you want a simple, file-based approach.
* **Leftlet** for maps on a web page —> javaScript
* Unity?

[Untitled](https://www.notion.so/13275d4d685c803881cfdb53ce819c5e?pvs=21)