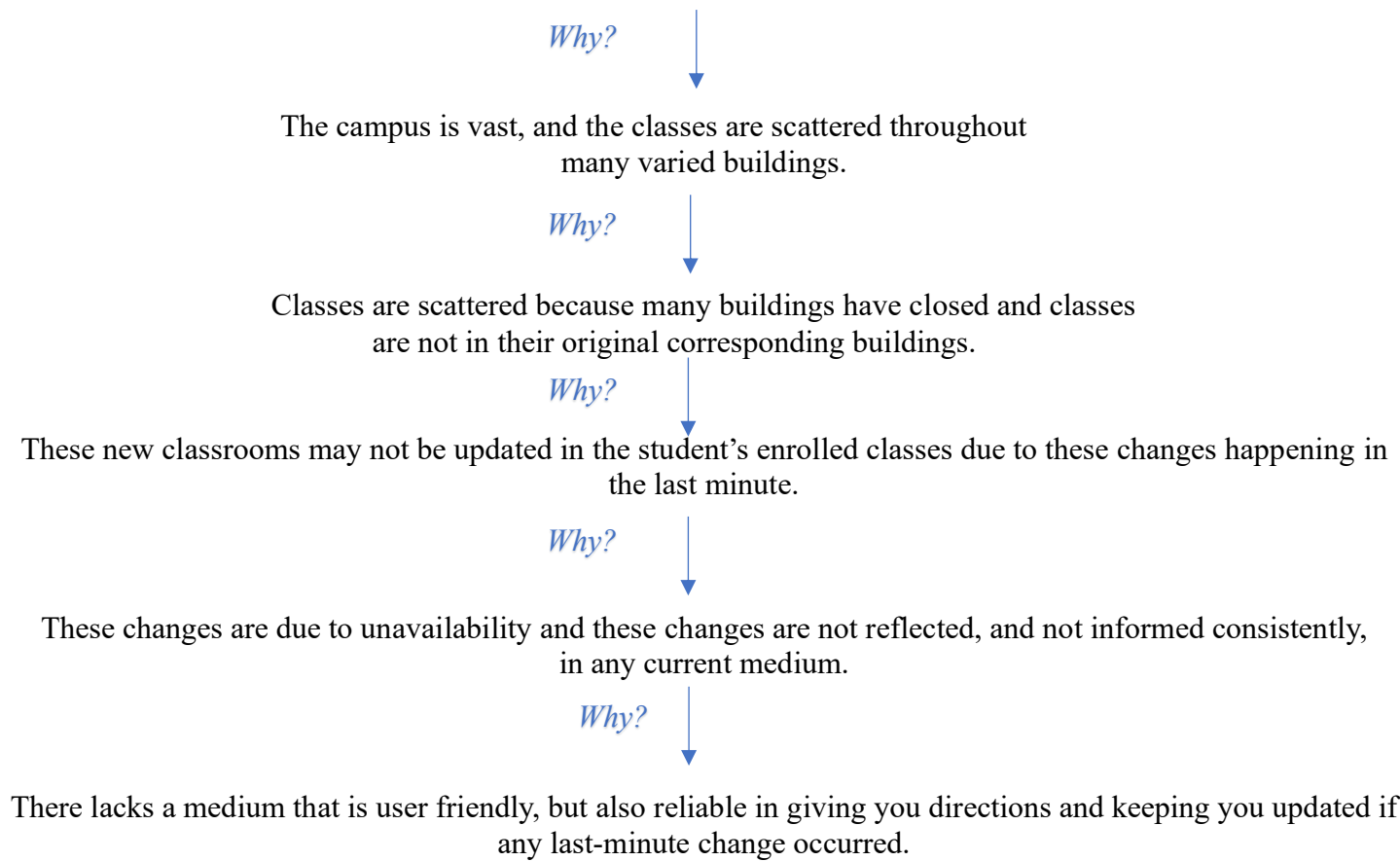| *Topic:* **Local GPS for Mayagüez campus for new students**	*Author:* **Pablo E. Serrano Clemente**	*Date: August 26,2022*

Problem Background:

- - New students come in every new school year to a campus that has been subject to change many times throughout.
- - More notable was the period between 2012 -2016 where the main building for classes for Mathematics was closed for asbestos, and all the Math classes were divided throughout campus causing problems for new and existing students at that time.
- - This year's new students are getting the face-to-face experience, but we still have a demographic of students that started their college career not stepping on campus. When the time comes to go to a specific building, it can prove to be a little overwhelming
- - With all this uncertainty, it may give way for many students to get lost on their way to the classes only depending on an outdated map visible in only the trolley stops and the university's portal. The same map however can still be seen on your phone, but the quality does not increase much.

Target:

-The goal to be reached by winter, more specifically December, is to have an online platform where you sign in with your UPR account to have access to the platform's GPS features, with additional extra QoL features. This will help students' orientation in where they are and where they need to be. With this, they will have a clear plan and the worry of where is anything will diminish greatly.

Causes:

Problem: A student is lost in the campus

Why?

The campus is vast, and the classes are scattered throughout many varied buildings.

Why?

Classes are scattered because many buildings have closed and classes are not in their original corresponding buildings.

Why?

These new classrooms may not be updated in the student's enrolled classes due to these changes happening in the last minute.

Why?

These changes are due to unavailability and these changes are not reflected, and not informed consistently, in any current medium.

Why?

There lacks a medium that is user friendly, but also reliable in giving you directions and keeping you updated if any last-minute change occurred.

Countermeasures:

1. The user can individually search for the building's location instead of having to look through the long list that can be seen on the current campus map.

2. Provide users with the directions to the building's location, showing the route with respect to their current location.

3. The user (student) can check what course is in the classroom they might search for, or vice versa.

4. Users who are faculty will have more credentials in this platform to change any classroom's location, if necessary, and remind students who are enrolled in said class.

5. Student organizations and extracurriculars can also update where they will be meeting.

6. The availability for any building's administrative offices to prevent coming physically and seeing that they are closed if calling did not work.

Check/Evaluate:

- This project's success will depend greatly on the users using it. From students, faculty, extracurricular groups using this platform will facilitate everyone's experience and day-to-day.

- However, the lack of users will result in the lack of updates. This will be the worst case and the project will end up as another outdated medium.

- Best case, the root cause will be solved. As the students will have an easily accessible GPS map to get to the buildings and stay informed.

Act/Standardize:

- For the platform to have a consistent and reliable user base, it's imperative that we spread the word and make it known that this platform exists. More specifically it can be showcased in the university's official site and can be recommended to new students during Orientation Week as an essential.

- On top of that, feedback will be heard and if possible, it can be implemented.

- In the end, all of the participants will have a better understanding of the platform's programming language and will have new knowledge in developing web-based applications.