Problem Solving (A3) Report

1. Identify a Problem	PLAN

- Students use trolley buses around campus on the University of Puerto Rico, Mayagüez to get from one building to another and arrive on time for their classes. One of the problems is that students do not know exactly when the trolley buses are going to pick them up, by sometimes making them wait there for a long period of time. Since students, do not know the location or the arrival time of the trolley buses, they can't decide if they would want to wait or begin to walk towards the building.
- Impact: It causes students to arrive late at their classes.

2. Set the Target	PLAN

- Develop an application by the end of the semester that is capable of tracing the route of the trolley buses through campus and its time of arrival, in which students decide if they want to wait for the trolley bus or walk.

3. Analyze the Causes	PLAN

These are some of the reasons that can cause this type of problem:
- There is not a proper system established of when trolley buses are coming.
- Not enough staff for trolley buses.
- Students arrive late to classes.
- No traceable route in campus.
- Time of arrival unknown.

4. Propose & Implement Countermeasures	PLAN/DO

Countermeasures that can solve this situation:
- Develop an application for trolley buses, that its able to trace the route of each bus and give an estimated time of arrival based on their location. The application should also be able to update its information or data when the buses are about to depart, currently on their way or about to reach a new location.
- By students knowing how far the trolley buses are, the can calculate the time it takes to pick them up and decide if they would want to go ahead walking or wait for the bus.

5. Check/Evaluate	CHECK

- It is expected for the application to work entirely, improving the transportation and communication between trolley buses and students.
- Students will be aware of where the trolley buses are and when will they arrive.
- They will also be able to arrive on time for classes.

6. Act and/or Standardize	ACT

- We can ensure the process works, by receiving feedback from the students.
- This method can be applied to public trolley buses for an everyday use through an entire city.