Science Journal Review

Now that you're researching different sources for your Capstone project, we will also be practicing looking into scientific journals. It is recommended that you look into an area of research that is in some way related to your Capstone project. You won't necessarily be required to use it as a source, it will just make this assignment more relevant to your other class.

- 1. Find a scientific scholarly journal using the <u>ProQuest</u> (or <u>Google Scholar</u>) <u>process that Ms. Tovar showed</u> you earlier this semester. Ideally, you will watch to search terms and concepts that are related to your Capstone project, but you are not required to do that. Once you have looked for a journal that is interesting or acceptably straight forward, begin answering the questions below.
- 2. Submit a link to the journal pdf or page where it can be accessed.

https://d1wqtxts1xzle7.cloudfront.net/50872432/Real_Time_Vehicle_Tracking_Using_Arduino_Mega-libre.pdf ?1481670995=&response-content-disposition=inline%3B+filename%3DReal_Time_Vehicle_Tracking_Using_Arduino.pdf&Expires=1675190967&Signature=VThSnv2C51R9GtaAeynHpYelAUR3neSJZpwYKx99ycSjBu e~YeGkrRinO~QlZbLBtEdHQuBYsGUQzIRsKp02tPG5639PdFVYp0sE3OE8NZEGbkmThq54vClZFqrznDY S62iD4wDJmocNxpKObCmx6KFLStnZfkA2ioll62z~cGH9mjir2VuakVXutJaCcJVae1-9KgiQVVkVVhlcobci mUQH~mOpG1yW9pY-pjBc5C8EXsiHU89lmha9EHG~6cUTRcQ6J4OaN3puBjzKmy0MtwoDfstgZbuW-9sjBoMxq-ahAZ9G7OjvTKNv8AcSlQRR1JwNuF5LwDRTFfKhCmyVYA__&Key-Pair-Id=APKAJLOHF5GGS LRBV4ZA

3. What topic or search term did you search for when you came across this article or journal?

I searched "GPS tracker"

4. What field is the article addressing? (e.g. what field of physics/engineering/science does the journal speak about?)

It addresses electrical engineering

5. Describe the research question being addressed? (Sometimes the title of the journal is the question itself. If so, please state it.)

Real Time Vehicle Tracking Using Arduino Mega

6. How many trials or participants were conducted for this journal? (Sometimes this is stated as 'N =')

This is a proposed method that hasn't been actually tested. There are no trials/participants in this journal

7. Describe the researchers' methodology. (This does not need to be given in excruciating detail, just the main points)

The methodology is to mount an Arduino MEGA2560 to a vehicle, which can send the longitude/latitude to a phone. So a phone would send a message that would transmit through a service provider to the vehicle's GPS. If the password/security checks match then the location would, with various software, locate the car on a map (which could be displayed on apps such as google maps). This is possible with a GPS that can connect to a GSM network, a GSM antenna, and software that allows the user to monitor and give feedback on location,

when the engine stops/starts, surpasses a speed limit cap, shut down the engine in case of an emergency (such as theft).

8. What were the results of the study or experiment?

There were no actual results in this paper, as it is a proposed method. However, given the thoroughness and conclusions based on the method as well as the many citations it used in the end, it is safe to assume that this design works.

9. Describe in 3-4 sentences why the results are significant.

If this system actually works, then businesses and personal consumers would be able to track their cars. This can prevent the theft of expensive property people own. It also has features to prevent accidents which can save lives. Also, this can send out locations to your whereabouts in the case that an accident does occur, creating a more rapid response that could save the lives of people in an emergency.

10. Add the correctly formatted APA reference.

Alshamsi, H., Këpuska, V., & Alshamsi, H. (2016). Real time vehicle tracking using arduino mega. *International Journal of Science and Technology*, *5*(12), 624.