Rupinder Kaur ENT 3952 Prof. Romi Kher

## <u>Assignment #1</u>

#### Is this a real issue?

Not being able to find your keys from your backpack when you're walking or running home is a real safety issue, as I can relate to it. I live in an open area, but it's always been an issue not to find my keys in my bag or purse on time. I've been a victim of being followed home and unable to see my keys on time, but luckily, my parents were by the door to open it to let me in on time. It has been a concern for parents as they are scared their kids won't be able to find their keys on time. Just as this parent asks if it's OK to give her kids the keys, "Do you think it's a good idea to keep a key in the backpack?"<sup>1</sup> Although the comments to this answer may not address the real issue of kids being kids, they most likely won't be able to find their key. Organizations such as the American Red Cross and FEMA provide guidelines and resources for emergency preparedness. While they may not specifically address the issue of keys in children's bags, they emphasize the importance of having essential items readily accessible during emergencies. Although this product may already exist a good amount of parents still hesitate to buy the product as they're unsure if it works and the prices are too high to afford.

<sup>&</sup>lt;sup>1</sup> <u>https://community.babycenter.com/post/a24998307/kids\_and\_house\_keys</u>

### **DESCRIBE** and **DEFINE** this problem.

The problem of individuals being unable to find their keys during emergencies can be the inability to quickly locate and access keys stored within a bag, purse, or other storage location when needed for emergencies such as evacuation, accessing resources, or unlocking doors. This problem arises due to disorganization, lack of preparation, limited visibility, and stress-induced impairment of cognitive function. Addressing this problem involves strategies to improve organization, establish designated vital storage locations, practice emergency procedures, and mitigate the effects of stress on cognitive function during emergencies.

This issue pertains to situations where individuals, whether children or adults encounter challenges finding their keys quickly and efficiently during emergencies. Emergencies like fires, medical crises, or natural disasters require swift action and evacuation. However, the inability to locate keys promptly can impede the ability to access necessary resources like vehicles for evacuation or entry into locked spaces, potentially leading to delays or increased risk.

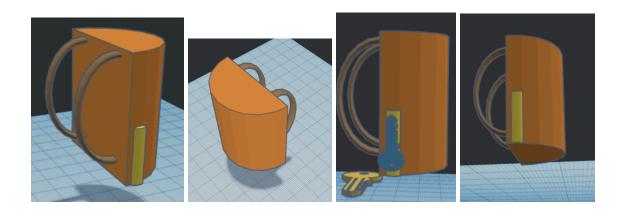
#### How this product will function?

A fingerprint is required to unlatch the key from the backpack or purse. It is attached magnetically to the bag but requires a fingerprint to unlatch but if that unfortunately doesn't work there's a hidden magnet under the bag that is easy and accessible, you could take the magnet and attach it to the key and it should unlatch.

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# DESIGN a unique and innovative physical product using Tinkercad that will solve the problem in a non-trivial manner.





Amazon Backpack link<sup>2</sup>

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