

**In the name of Allah,
Most Merciful, Most
Compassionate**



Project Title:
Ai based Thievery Exposure using IOT

Syed Daniyal Ali (BSCS, ID: 1163-2018)
S.M.Ali.Farhan (BSCS, ID: 1298-2018)
Syed Hassan Ali (BSCS, ID: 2656-2017)

Supervisor:
Miss Sadaf-un-Nisa

Co-Supervisor:
Miss Erum Shaheen

Introduction

This security system will be a Mobile Application and hardware combination to be used by individuals as well as organization's security department. This system will be designed to minimize security related issues and provide users a platform to provide self security in emergency and report security department

Problem Statement

1. To detect the intruder through AI based system
2. To send alert to respective devices once detect the intruder
3. To develop a system that works on both wifi and GSM
4. Auto Rooms locked when intruder entered
5. window security using vibration sensor
6. secure equipments from sarbotaging
7. to detect suspecious entry from roof

comparison table of literature reviews

Improvements for Security Conti..

Year	References	Previous Work	Research based Problems	What we do?
2013	https://www.dhs.gov/sites/default/files/publications/CCTV-Tech-HBK_0713-508.pdf	Manual monitoring of cctv camera	Security camera can't detect intruder in real time	Combined with AI and IoT can identify the person which will done by image processing
2016	https://www.researchgate.net/publication/332578743_Web_Based_Home_Security_and_Automation_System	usually build web app or mobile app	Single or 2 platform based apps	will work on Android, iOS, Google Fuchsia, Web platform, macOS, Microsoft Windows, Linux
2018	https://www.theseus.fi/bitstream/handle/10024/158975/Thanh%20Nguyen%20thesis%20-%20Low-cost%20residential%20security%20system.pdf?sequence=1&isAllowed=y	Camera works only on wifi or wired	No backup connectivity	Will work on both Wifi and GSM network (switch to another if one fails)

comparison table of literature reviews

Improvements for Security

Year	References	Previous Work	Research based Problems	What we do?
2020	https://www.ripublication.com/ijaer18/ijaerv13n2_57.pdf	All persons are allow to enter	This system can't maintain record of future visitors	This system allows owner to put the people in three of the categories i.e., family members, trusted people, unauthorized persons (Critical alerts)
2020	https://www.mdpi.com/2571-5577/1/4/42/pdf	Chloroform based intruder engaged system	It is less accurate and chloroform can't easily Insentience the person	use tear gas at an entrance when admin/user identify him as an intruder so tear gas spray on him which can enagae atleast 20 minutes
Null	Not Available	Not Implemented	Intruder can easily come from roofs	we will use motion sensor at roof wall so the intruder motion can detect and alarm activate
Null	Not Available	Not Implemented	1 way security can be bypass	we use 2-way security if intruder managed to bypas tear gas then all doors of house will be locked automatically

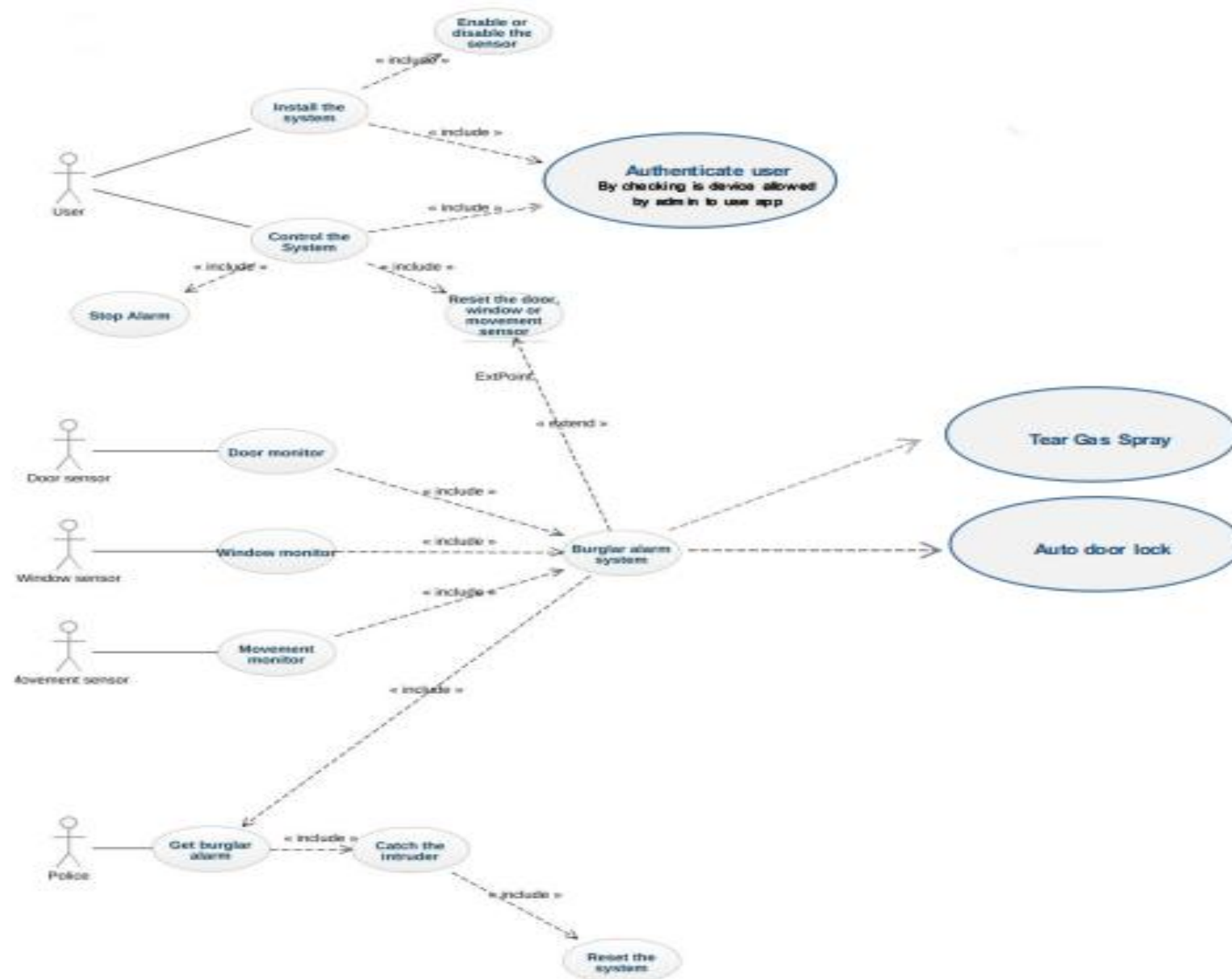
class diagram



Sequence/timeline diagram



uml diagram



Conclusion

- Develop a Mobile Application and also hardware setup that will help the client to access remotely and get security across the home, building and e.t.c.
- This system will be able to prevent intruder to enter or engage him until security(police) is arrived
- This will allow only one admin but, multiple users can use after admin allow.
- This system will be able to record video for evidence and for future record
- This system will maintain daily visitors log
- App provide features like auto-door operation, can two-way-talk with visitors, can also report security department, receive notifications, provide feedback about app and system and so on.
- This system will be multi-level low budget security system with many other features.

References

- [1] https://www.dhs.gov/sites/default/files/publications/CCTV-Tech-HBK_0713-508.pdf
- [2] https://www.researchgate.net/publication/332578743_Web_Based_Home_Security_and_Automation_System
- [3] <https://www.theseus.fi/bitstream/handle/10024/158975/Thanh%20Nguyen%20thesis%20-%20Low-cost%20residential%20security%20system.pdf?sequence=1&isAllowed=y>
- [4] https://www.ripublication.com/ijaer18/ijaerv13n2_57.pdf
- [5] <https://www.mdpi.com/2571-5577/1/4/42/pdf>

The background is a solid dark blue. A diagonal line runs from the bottom-left towards the top-right. To the left of this line is a lighter blue gradient. To the right of the line is a dark blue area with a fine, horizontal hatched pattern.

THANK YOU :-)