Siren Detection Application

By Sujani Godavarthi

Outline

- Problem
- Emergency Siren Detector
- Solution
- Software Component
- Hardware Component
- GPS
- Market Survey
- Conclusion
- References

PROBLEM

 Detection of police car and ambulance sirens while driving.





•Noise Disturbances like loud music & other sounds, while talking on phone, we cannot hear the police cars.

Emergency Siren Detector

- A small visual device like blinking red light will be located at the dashboard which alerts the driver of the emergency sound is detected.
- A small microphone shall be placed in the engine or truck compartment where specifically pitched sounds and pitch rate of change could be easily detected.

SOLUTION

- The application will provide us information from which direction the siren sound is coming from and an alternative route can be chosen to reach the destination point.
- An alternative solution is that this application can also be implemented in GPS(Global Positioning System) which will be convenient and helpful.

SOLUTION

- For the Disability and Hearing Aid people:
- The app device can provide many features like high volume and give pop up notifications.
- The hearing aid people can fully or partially hear the frequencies of sound and can be on a safer side.
- Senior citizens can also be benefited by using this app.

SOFTWARE COMPONENT

• An application App where in all the ambulance, fire engines, police car, Tornado / Hurricane warnings can be detected.



HARDWARE COMPONENT

IPHONE (IOS)



Global Positioning System(GPS)

- Satellite based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense.
- It was developed and mostly used in military purposes, aircraft and ships. Now widely, can be used in weather conditions, anywhere in the world.

MARKET SURVEY

- The number of subscribers of GPS is anticipated to grow in near future with market revenue touching US\$ 10 billion by 2013.
- Emerging Countries like India and China will continue to witness rapid growth in the adoption of GPS technology.
- India's navigation system market is projected to grow around 16% during the years of 2010-2012 and reach around US\$ 48 Million by 2013.
- Rapidly, GPS is popularly growing all around the world.

CONCLUSION

- This application can be used by everyone and also provide help with people having difficulties.
- Features include high volume, pop up notifications, buzz sounds.

REFERENCES

- Application:
 http://cdn1.staztic.com/screenshots/police-sound-ringtone-143-2.jpg
- Ambulance : http://www.frugal-cafe-blog/frugal-cafe-blogzone/wp-content/uploads/2011/02/nypd-police-car.jpg
- Police Car:
 <u>http://wwwdelivery.superstock.com/WI/223/1566/X10</u>
 <u>oo/PreviewComp/SuperStock_1566-017518.jpg</u>
- http://www.boxoid.org/?p=50