



PPT SUBMISSION

Team Name: Mandala

Problem Statement / Theme:

In today's society, the atrocities on women are increasing day by day. Develop a software or a website for their safety in case of emergencies.

Theme: Travel/Tourism- Women Safety



Team Member Details

Team Leader

Saumyamani Bhardwaz

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Team Member 2

Kunal Pidiha

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Team Member 1

Rohan Godha

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Team Member 4

Tavishi Vemuri

Describe your idea

In today's society, the atrocities on women are increasing day by day. Every second morning or other, we get to hear that once again! another girl was harassed publically, eve-teased, left alone to suffer from never ending pain for the rest of her life after raping her vigorously on the streets of the "developed and educated society".

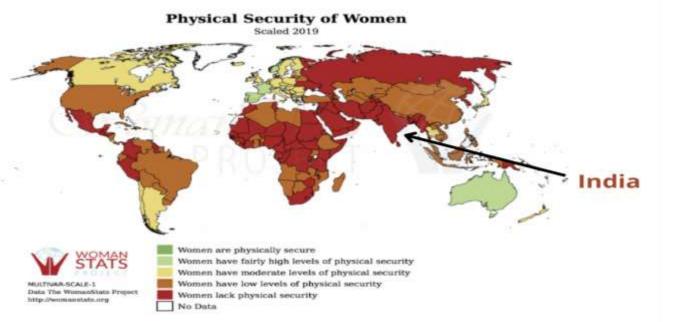
The problem which arises is the need for such a system which can provide a support to those females of the society who have to face this daily, in bus, in sub-ways, on streets and in the office canteen too.



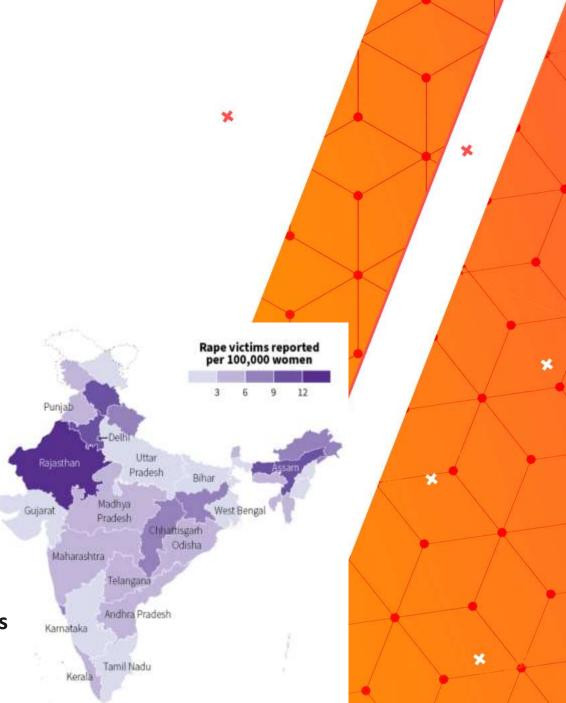
Describe your idea

SECURITY STATS MAP



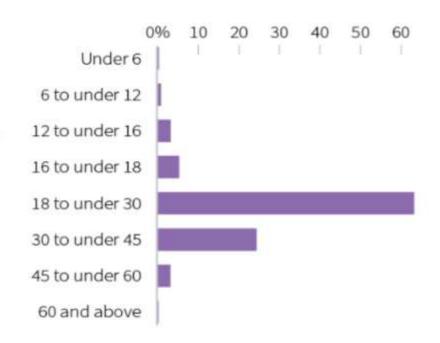


Women Crime Statistics In India

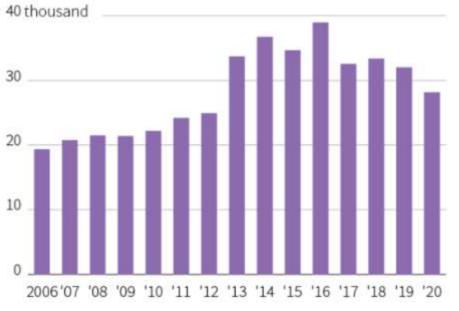


Describe your idea

Rape cases with female victims by age group

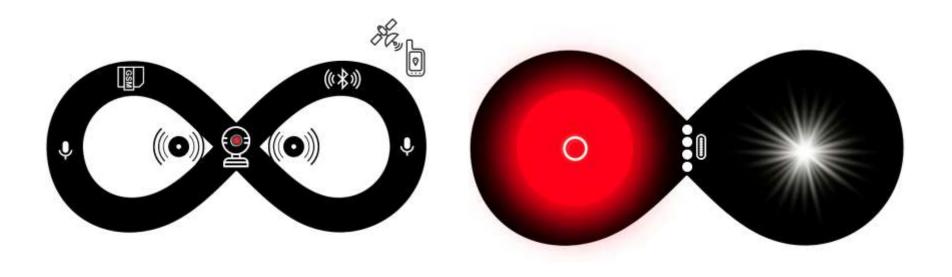


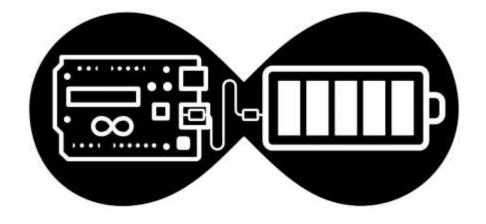
Total rape cases reported by year





Prototype







Solution

We are going to solve this issue by creating such a website along with a locket called "Mandala" which the woman can wear to assist her while she is traveling alone or feeling unsafe.

The locket would have the following features:

- -GPS Tracker.
- -ULTRA LUMINENT FLASH.
- -Ease to contact the 5 Family Members in the times of Emergency.
- -Contact the nearest police station.
- -Notifying the nearest women's safety patrolling center.
- -High Volume Buzzer to draw the public's attention.
- -Neon Coloured Light to be easily identified by the rescue team.
- -Identification of Harassment Hotspot Zones.

Solution

Flowchart



Woman senses Threat Woman Presses Safety Button An SOS Message Is Sent To The Nearest Police Station, Woman Press Patrol Unit, 5 Family Members ULTRA LUMINENT FLASH starts glowing which can make the harasser blind. A notification pops up on our tab, giving details about:

- GPS Location.
- Details of the nearest emergency services.
- Harassment History of that place.

Help reaches on time and rescue.

Use Case

Women irrespective of being alone would start feeling safe whenever they want to roam or visit somewhere outside their homes, even at odd hours.

Freedom to move on roads at any hour

When the system will notify the nearest police station, women safety board, family, then the possibility of catching the harraser red-handed will increase.

Safety Ensured

SOCIAL IMPACT

Instant
Action
against
defaulter

This device will provide a sense of safety leading to increased women labour force in male-dominated sector

Increase women work Force

Women's workforce participation will have a ripple effect on WOMEN'S LITERACY RATE.



Use Case

- More Participation of Women in education rising the count of educated women who teach their children values to safe the environment.
- Expansion of women's participation in restoring drylands leads to greener and better earth.

Environmental Sustainability

- Women's participation in protecting and sustainably managing natural resources.
- More number of women get themselves regularly medically consulted removing the risk of diseases which may degrade the environment.

Techstack

Hardware Requirments:-

- GPS module (GYGPS6MV2)
- GSM (SIM900)
- ARM 7 board with controller (LPC2129)
- Bluetooth
- Microphone Voice recorder
- PCB design processor
- Other components

Women Safety Task Force-

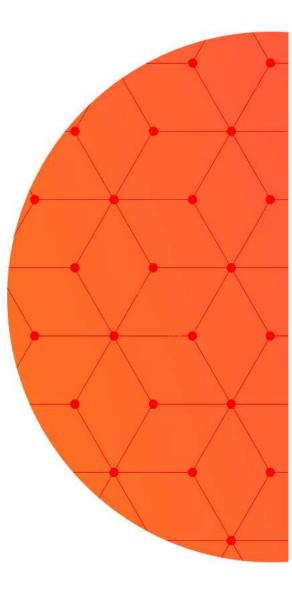
- An emergency squad of 17 members to analyze.
- Night patrolling of the unsafe hotspots.

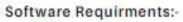
Predictive Policing AI

- The city would be divided into a grid of 1 km squares.
- Based on the data of previous crimes, a forecast would be produced of unsafe hotspot.

Risk Terrian Al Model-

- Based on the data of previous crimes, a forecast would be produced of unsafe hotspot.
- Accuracy is established by accounting features such as subway, bus station, bars, weather etc



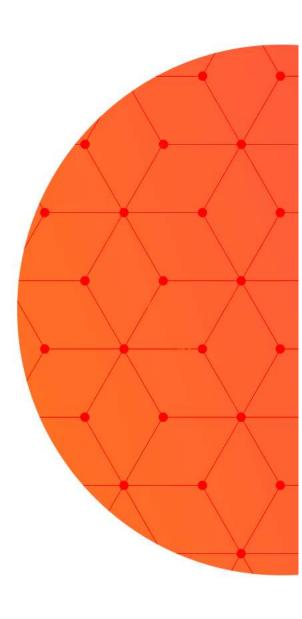


- · Platform:
- Windows XP
- Front End: Java JDK1.5
- · Back End: MS
- SQL Server
- Embedded Kit
- · Android Phone



Techstack

- Our plan is to integrate IoT, and Web Development under one umbrella.
- Once the woman wearing this locket-alike device pushes the SOS button, the
 alert system would get activated and various kinds of safety functionalities like
 sharing location and tracking would start and the rescue team would be there
 to help on the instance.
- All of this would be monitored and handled through our website that we would be creating as a part of this project.





Scalability

- •An emergency squad of 17 members to analyze.
- •Night patrolling of the unsafe hotspots
- •The city would be divided into a grid of 1 km squares.
- •Accuracy is established by accounting features such as subway, bus station, bars, weather, etc.
- •Based on the data of previous crimes, a forecast would be produced of unsafe hotspot.

Feasiblity

- •Based on the data of previous crimes, a forecast would be produced of unsafe hotspot.
- •Accuracy is established by accounting features such as subway, bus station, bars, weather etc

Impact

More Participation of Women in education rising the count of educated women who teach their children values to safe the environment.

Relevance

Can provide a support to those females of the society who have to face this daily, in bus, in subway, on streets and in the office canteen too.

