**VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY, PUNE**

**INFORMATION TECHNOLOGY DEPARTMENT**

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**SRS**

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**Group number: 60**

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**Title : Women Security Band**

**Introduction:**

Today in the current global scenario, the prime question in every woman’s mind is

safety. Considering the ever rising increase of issues of safety and security in recent past

demands a need of solution. The only thought haunting every girl is when they will be able to

move freely on the streets even in odd hours without worrying about their security. This

approach will help to provide security to weak entities like woman, children and handicap

people.

It will try to avoid those situations by identifying human behaviour and reactions to

different situations like anger, fear and anxiety. Our system will help to identify the situation

and location of victim to inform about critical situation and location to the concerned people,

relatives and police station nearby.

**Requirement Analysis:**

**Problem Statement-**

To develop a easy to carry system which will work automatically without any manual inputs to provide the security for women.

**Importance of the project:**

* In this world of advanced technology and smart electronics it is required to have a

simple and cost-effective safety gadget that helps the victims during unforeseen

dangers which is focused through this system.

* Women will feel safe and protected in the society using this device.
* The atrocities against the women can be brought to an end with the help of our

product.

**Expected outcome from the project**

A wearable security device which will be user-friendly and feature to train the

device according to different users. Module to add and remove authorized people for sending

alerts to them. Location will be considered while sending alerts.

**Functional Requirements:**

**User of the Bracelet:-**

1. System would Identify the critical situation and normal situation automatically.

2. System would get the emergency help automatically when victim is under attack.

3. System would Blink the LED for 10 secs when critical situation detected.

4. Track the nearby victim/friend/relatives in an emergency situation using google map.

5. System would alert the vicinity people.

6.System would get the emergency help when SOS button is pressed manually.

7.Add the contact numbers of friends/relatives on the application to ask help for in emergency.

8. Log in with already provided unique number using mobile application.

9. Save button on System to write those numbers into GSM.

10.Reset button on System to reset all previously saved numbers into GSM.

**Other than victim/ User of the Bracelet:-**

1.Log in with verified mobile number.

2.Track the nearby victim/friend/relatives in an emergency situation using google map.

**External Interface Specifications:**

**1.User Interface:-**

**User of the Band:-**

1.Login.

2.Add the contact numbers of friends/relatives .

3.Tracking the victim using google map.

**Other than victim/ User of the Band:-**

1.Login.

2.Tracking the victim using google map.

**2.Database:-**

Firebase Cloud will be used for the realtime database storage.

**3. Google Maps API** will be used for tracking the user.

**Technical Specification:**

There will be one android app and smart band.

**Hardware Details** :

* Ram : 500MB
* Hard Disk Storage : 100MB
* CPU : 2.5GHz

**Operating System** :

* Android

**Performance:**

* If sim card provided goes out of network then system would not be able to ask for help.
* If battery drained out then the system will not work.

**Languages & Technologies:**

* Languages: C, C++, JAVA ,Firebase database
* IDE: Arduino ,Android Studio