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| Team ID | PT2022TMID11856 |
| Project Name | Women and Children Safety Hand Band With the help of own Satellite in IoT(Internet of things) |
| Maximum Marks | 2 Marks |

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| Serial Number | Objective | Technologies | Advantage | Limitation and  future  enhancement |
| [1]  SSSFWI | This System can detect the location and health condition of person that will enable us to take action accordingly. This also enables in reduced power use and that the watch can be installed with which comes in handy for several days on a single shot of charge. | GPS receiver, Body  Temperature Sensor, GSM,  Pulse rate sensor, and  Bluetooth 4.0 BLE(Bluetooth  Low Energy) | The Smart band integrated with Smart phone has an added advantage so as to reduce the cost of the device and also in reduced  size | With further research and innovation, this project can be implemented in different areas of security and surveillance. The system can perform the real time monitoring of desired area and detect the violence with a good accuracy. |
| [2]  IUFWSA | At the point where the device is authorized, it uses GPS (Global  Positioning System) to track the stream territory and sends an emergency message using GSM (Global  Mobile  Correspondence  System) to the registered adaptive number and shuts down the station house. In crisis cases, the neurostimulator can pass on non-lethal electrical stun to isolate the aggressor, a signal is used as an alarm. | Microcontroller  (ATmega2560), GSM module (SIM800) (subscriber identity module), GPS module (Neo6M), IoT module (ESP-12E), Neuro Stimulator, Buzzer, and Vibrating Sensor. | The alarm is used to alert the accommodating individuals all legitimately that they will comprehend that someone is stuck | As this device uses  GSM module, mobile network is most needed. Hence it will not work properly in isolated area. |
| [3]  ISSGFWS | This is used when , the user face any Kind of harassment or if user feel something happened to be endanger user can press the button located on the watch, when user fall in down, the various information such as location, body posture, pulse rate and SMS alert are sent to the predefined number. We can get the exact location of the victim . | GSM, Raspberry Pi, GPS module | The location sends the longitude and latitude of the victim so that, police can easily find the victim and the incident can be easily avoided and can save the women, punish the culprit. | If the women/girl is in the out of network coverage area the mobile signals will not help to send the SMS alter , and even the location of the women/girl will not be sent to the police. |
| [4]  RSWDFWS | This system provides a buzzer alert.The system uses Global Positioning System (GPS) to locate the user, sends the location of the user through SMS to the | GPS, GSM, GPRS, USB Web Camera | It works as an alert as well as a security system. It provides a buzzer that alert to the people | This device will send the email with the captured image and alert message. If there is lack of internet facility where the person is struck on |

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|  | emergency contact and police using the Global  System for Mobile Communications  (GSM) / General Radio Packet Service (GPRS) technology. The device also captures the image of the assault and surroundings of the user or victim and sends it as an E-mail alert to the emergency contact soon after the user presses the panic button present on Smart wearable device system. |  | who are nearby to the user | then it can’t able to send the email. |
| [5]  SSDFWBI | This device creates an emergency alarm, send SMS with live image or video streaming link and location for asking help to nearby friends through cell phone number. Also collect evidence of the victim’s situation and store them directly to the webserver for future use. | Raspberry pi, Buzzer, Camera, Flex Sensor, GSM, GPS modules | Women can use this compact device with their undergarments easily and comfortably. | As this device sends the live image and video streaming link to the connected cell phone number. If the user cannot have proper internet facility or the person whose number is connected to the device does not turn on the internet then they also cannot able to get the live image and video streaming link on time. |
| [6]  DDFIWDSS | This device analyse the physiological signals .The physiological signals that are analysed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer. This device is programmed to continuously monitor the subject parameters and take action when any dangerous situation presents itself. It does so by detecting the change in the monitored signals, following which appropriate action is taken by means of sending | Temperature sensor(LM),Triple axis  Accelerometer(ADXL335E),Skin  Resistance Sensor(Copper  Strips) | Real-time monitoring of raw data | This device will send the  notifications/alerts to designated individuals. In some cases if there is any network issues then the notification cannot be able to send on time which in turn will not able to help the user. |
|  | notifications/alerts to designated individuals. |  |  |  |
| [7]  DIWSSI | In this project, when a woman senses danger she has to hold ON the trigger of the device. Once the device is activated, it tracks the  current location using  GPS(Global  Positioning System) and sends emergency message using GSM(Global System for Mobile communication) to the registered mobile number and near by police station | Microcontroller(ATmega2560) , GSM module (SIM900), GPS module(Neo-6M),IoT module(ESP-12E),Neuro  Stimulator, Buzzer and  Vibrating Sensor | Continuous location tracking and updated into the webpage | This device uses GSM module, So mobile network in most needed. Hence it will not work properly in isolated area. |
| [8]  DSSDFWI | IoT based safety device that relies on providing security to women by fingerprint-based method of connectivity to the device and alerting nearby people and police when a women is not safe. An unsafe situation is sensedby fingerprint verification for a minute then it will automatically alert nearby people and police if the device senses no signal.It contains a shockwave generator. Additional features such as sending group messages, audio recording are also part of the proposed design. A mobile app is designed for women safety where safe locations from victim’s current location will be shown on the map so that women can reach the safe place from her current location | Shockwave generator, GSM module, LCD, Fingerprint  Sensor | shockwave  generator is also designed that women can use to attack the perpetrator | If the device which is continuously communicating gets switched off then this device will not be much helpful. |