This project aims to develop a prototype of a Fall Detection Based Alert System (FDBAS) for the Elderly. The Project aims to reduce the detrimental impacts of falls, by providing early and effective surveillance required without compromising the privacy of the user. This fall detection medical alert system allows the user to summon help without having the need to press buttons. This system automatically activates the sensor if the user suffers a fall. This built-in technology has been designed is such a way that it can be worn around the user’s wrist.

This project aims to make the product extremely cheap compared to it’s rivals in the market. The product being cheap and affordable is one of the many key aspects of this project. While other products offer this detection system as an add on, this project is specific built for resolving this specific problem in hand. In fact, the prototype model developed will be much more accurate in detecting a fall compared to most mid-range fall detection devices.

Overall, whether the user is at home or out adventuring, if a fall is detected and the user is unresponsive, a call to emergency services will be placed automatically reducing the detrimental impact of the fall.

The goal of this project is to create a working prototype for an elderly fall detection band with integrated alert system (FDBAS). The Project aims to lessen the negative effects of falls by providing the necessary early and effective surveillance without compromising the user's privacy. The user of this medical alert system with fall detection can call for assistance without having the need to press any buttons. If the user falls, this system immediately activates the sensor that starts a chain action that notifies the concerned person. It is possible to wear this built-in technology around the user's wrist because of the way it has been created.

In comparison to its competitors in the market, this initiative attempts to make the product incredibly affordable. One of the many important elements of this project is the product's low cost and accessibility. While other products include this detection mechanism as an add-on, this project was created specifically to address the issue at hand. In reality, compared to the majority of mid-range fall detection systems, the prototype model produced will be far more accurate in detecting a fall.

Overall, whether the user is at home or on an adventure, if a fall is detected and the user is unresponsive, an automatic call to emergency services will be placed, lessening the negative effects of the accident by reducing the time taken for people to attend to it.