## **PROJECT SYNOPSIS**

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Class	S4 MCA B
Seminar Title	Lidar Technology

## **Brief Description:**

Lidar, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. The LiDAR prototype was built in 1961 by Hughes Aircraft Company. The company had also built the first laser a year earlier. LiDAR systems and their uses really became known during the Apollo 15 mission of 1971 which used it to map the Moon. After, the scientific uses of LiDAR continued to evolve. Modern LiDAR technology is made up of laser sensors that are deployed from the air or via portable units, such as drones. When the lasers point to the mapped area, they emit short light pulses. These light pulses are then reflected on the surrounding objects and are recorded. The time between the output laser pulse and the reflected pulse can be used to deduce the distance at which the object is located as well as several other technical data about the object.

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