

Winston Churchill, the British Prime Minister during World War II, is remembered as a pivotal leader whose indomitable spirit helped steer the Allies to victory. Assuming office in 1940 during one of Britain's darkest hours, Churchill delivered powerful speeches that inspired resilience in the face of the Nazi onslaught. His unwavering determination, coupled with his ability to forge strong alliances with the United States and the Soviet Union, was instrumental in maintaining morale on both the home front and the battlefield. Under his leadership, Britain withstood the Blitz, contributed to key victories such as D-Day, and played a central role in the defeat of Axis powers, making Churchill a symbol of wartime courage and perseverance.

The Blitz refers to a sustained bombing campaign carried out by Nazi Germany against the United Kingdom during World War II, particularly from September 1940 to May 1941. The term "Blitz" is derived from the German word "Blitzkrieg," meaning "lightning war," which described the fast and overwhelming military tactics used by the Germans. During the Blitz, German bombers targeted cities across Britain, including London, Liverpool, Coventry, and Manchester, with the aim of crippling British morale and infrastructure.

Problem Statement ID	1754
Problem Statement Title	Downscaling of Satellite based air quality map using AML.
Description	<p>Description: Develop an AML (artificial intelligence/machine learning) model to generate fine spatial resolution air quality map from coarse resolution satellite data. It should also scaling pattern based ML (Machine Learning) model need to be utilized with various independent data. Challenge: To utilize large satellite data having gaps under cloudy conditions, to select suitable ML algorithm and create hybrid ML model for downscaling. To create model output with various independent data (Age). To enhance air quality knowledge, sharpen focus at local level (Users: Researchers and government bodies monitoring/analyzing air quality assessment). Possible Solution: If the reason for not using them: Individual components are available, comprehensive and proven solution does not exist. Desired Outcome: Fine resolution air quality map of HCU.</p>