Fact files
Computing heroes

Name	Gladys West
Date of Birth	27th October 1930

Background

Gladys West was born as Gladys Mae Brown. She was raised in Sutherland, Virginia, U.S.A, and spent a lot of her childhood working on her family's farm. Gladys' parents had huge aspirations for their daughter to be a strong and determined woman. Gladys received a full scholarship to study Mathematics at the Virginia State University and graduated in 1952.

Discovery

In 1956, Gladys started working for the Naval Surface Warfare Centre in Dahlgren, Virginia. She was a programmer for large-scale computers and a project manager for data-processing systems used to investigate and analyse satellite data. During the 1970s and 1980s, Gladys programmed a computer that could produce very precise calculations to model the shape of the Earth. This work was used as the basis for what is now referred to as a Global Positioning System (GPS).

Interesting facts

Gladys worked for 42 years and retired in 1998. Upon retiring, Gladys completed a PhD in the field of Public Administration.

Fact files
Computing heroes

Name	Dabbala Rajagopal 'Raj' Reddy
Date of Birth	13th June 1937

Background

Dabbala Rajagopal Reddy was born in Andhra Pradesh, India. Dabbala's father was a farmer and his mother was a homemaker. He had a love for civil engineering and went on to study this subjetc at the Guindy College of Engineering in Madras, India (now known as Anna University, Chennai, India). After finishing his university studies, Dabbala studied a Master's degree in Technology at the University of New South Wales in Sydney. He stayed in Australia after finishing his Master's degree and worked for IBM as an Applied Science Representative. A few years later, Dabbala moved to the U.S.A to complete another Master's degree and a PhD in Computer Science at the prestigious Stanford University.

Discovery

While at Stanford, Dabbala conducted pioneering work on speech recognition, image processing and face recognition, under the term known commonly today as Artificial Intelligence (A.I.). This work continued when he moved to Carnegie Mellon University, where partnerd with Alan Newell, Herbert Simon and Alan Perlis, whom all were winners of the famous Turing Award.

Colleagues

As well as working alongside important pioneers at Stanford, Dabbala collaborated with Edward Feigenbaum and together in 1994 they won the Turing Award (known as the Nobel Prize of Computer Science) for their "design and construction of large-scale artificial intelligence systems, demonstrating the practical importance and potential commercial impact of artificial intelligence technology".

Interesting facts

Dabbala is the first person of Asian origin to receive the Turing Award and is commonly referred to by his friends and colleagues as Raj.

Fact files
Computing heroes

Name	Steve Jobs
Date of Birth	24th February 1955

Date of Death 5th October 2011 (aged 56)

Background

Steve Jobs was adopted by Paul and Clara Jobs who promised his birth parents that they would ensure he went to college (university). His adoptive father was passionate about engineering and DIY an Steve would often joined him doing odd jobs around the home, thus discovering his love of electronics.

Colleagues

Through his love for electronics, Jobs met fellow electronics whizz, Steve Wozniak. The pair became friends and worked together for a number of years.

Discovery

In 1976, Wozniak developed the Apple I computer and Jobs suggested they sell it. Together they founded Apple Inc.

Interesting facts

Steve Jobs famously hated school. Although he started to attend college, he dropped out and did not finish his degree. Steve was notoriously very difficult to work with and in 1985 he left Apple to start a new business. He returned to Apple in 1997 and again became CEO of the company.

Fact files
Computing heroes

Name	Katherine Johnson

Date of Birth 26th August 1918   **Date of Death** 24th February 2020

Background

Born Creola Katherine Coleman in West Virginia, Katherine was the youngest child of the household. Katherine's father was a farmer and handyman and her mother was a teacher. Katherine had a passion for Mathematics and she went on to study this subject at West Virginia University.

Discovery

In 1953, Katherine started working for NASA. Her job involved performing complex mathematical calculations for the organisation's engineers and studying how to use geometry for space travel. She discovered the paths for spacecrafts to orbit Earth and to land on the Moon. Katherine's work led to NASA's astronauts being able to successfully orbit around Earth and beyond!

Interesting facts

Being a curious and inquisitive person, Katherine wanted to learn more about her work and about NASA, leading to her attending NASA's meetings. At the time, only men could attend these meetings. Katherine changed this, forging the path for gender equality in engineering.