REVIEW OF THE AUTOBIOGRAPHY AND LIFE OF NIKOLA TESLA

“MY INVENTIONS”

WHAT WE WILL STUDY?

- EARLY LIFE
- FEUD BETWEEN EDISON AND TESLA
- VISIONS AND INNOVATIONS OF TESLA
- HOW ELECTRICITY WORKS?

EARLY LIFE

Nikola Tesla was born an ethnic Serb in the village Smiljan, Lika county, in the Austrian Empire (present day Croatia), on 10 July 1856.His father, Milutin Tesla (1819–1879),was an Eastern Orthodox priest. Tesla's mother was Đuka Tesla(1822–1892).
Tesla was the fourth of five children. He had three sisters, Milka, Angelina and Marica, and an older brother named Dane, who was killed in a horse riding accident when Tesla was aged five. He always gave credit to his mother for his brilliant mind. Nikola completed primary school, followed by middle school. Tesla was able to perform integral calculus in his head, which prompted his teachers to believe that he was cheating.
In his boyhood he suffered from a peculiar affliction due to the appearance of images, often accompanied by strong flashes of light
In 1873, he contracted cholera, was bedridden for nine months and was near death multiple times.
Tesla's father, in a moment of despair, (who had originally wanted him to enter the priesthood) promised to send him to the best engineering school if he recovered from the illness.
In 1874, Tesla evaded conscription into the Austro-Hungarian Army in Smiljan by running away southeast of Lika to Tomingaj. There he explored the mountains wearing hunter's garb.
Tesla said that this contact with nature made him stronger, both physically and mentally. He read many books while in Tomingaj and later said that Mark Twain's works had helped him to miraculously recover from his earlier illness.

BOYHOOD(COLLEGE DAYS)

His visions really had a deep impact on him. In 1875, Tesla enrolled at Austrian Polytechnic in Graz, Austria, on a Military Frontier scholarship. During his first year, Tesla never missed a lecture, earned the highest grades possible, passed nine exams.
During his second year, Tesla came into conflict with Professor Poeschl over the Gramme dynamo, when Tesla suggested that commutators were not necessary.
Tesla found a package of letters from his professors to his father, warning that unless he were removed from the school, Tesla would die through overwork. At the end of his second year,

Tesla lost his scholarship and became addicted to gambling.During his third year, Tesla gambled away his allowance and his tuition money, later gambling back his initial losses a
He did not receive grades for the last semester of the third year and he never graduated from the university.

BOYHOOD

In 1878 Tesla moved to Maribor, where he worked as a draftsman for 60 florins per month. He spent his spare time playing cards with local men on the streets.
In March 1879, Tesla's father went to Maribor to beg his son to return home, but he refused. Nikola suffered a nervous breakdown around the same time.
In 1881, Tesla moved to Budapest, Hungary, to work under Tivadar Puskásat a telegraph company, the Budapest Telephone Exchange.

EPIC JOURNEY STARTS

Tesla arrived in the United States with little more than the clothes on his back and a letter of introduction to famed inventor and business mogul Thomas Edison, whose DC-based electrical works were fast becoming the standard in the country.
Edison hired Tesla, and the two men were soon working tirelessly alongside each other, making improvements to Edison's inventions. EDISON offered a $50,000 bonus to improve his generator and Tesla did it but it turned out to be a practical joke". Thomas Edison himself offering and then reneging on the deal, quipping "Tesla, you don't understand our American humor.
Tesla was very much annoyed with this and quitted immediately which marked THE BEGINNING OF NEVER ENDING BATTLE BETWEEN TWO GENIUSES THAT IS NIKOLA TESLA AND THOMAS EDISON.

THE BATTLE BEGINS

Surely feud with EDISON gave rise to one of the greatest genius of all time and henceforth modernising our world.
In 1885, Tesla received funding for the Tesla Electric Light Company and was tasked by his investors to develop improved arc lighting. After successfully doing so, however, Tesla was forced out of the venture and for a time had to work as a manual laborer in order to survive. His luck would change two years later, when he received funding for his new Tesla Electric Company. The investors showed little interest in Tesla's ideas for new types of alternating current motors and electrical transmission equipment.

INDUCTION MOTOR

In 1887, Tesla developed an induction motor that ran on alternating current(AC), a power system format that was rapidly expanding in Europe and the United States because of its advantages in long-distance, high-voltage transmission.

The motor used polyphase current, which generated a rotating magnetic field to turn the motor (a principle that Tesla claimed to have conceived in 1882),avoiding sparking and the high maintenance of constantly servicing and replacing mechanical brushes.

I don't care that they stole my idea...
I care that they don't have any of their own.
- Nikola Tesla

FINANCIAL TROUBLE

He invented alternating current which is the source of electricity in the modern word but back then it was not and Tesla really had to work hard for its recognition.
George Westinghouse offered to Tesla's polyphase induction motor and transformer designs for $60,000 in cash and stock and a royalty of $2.50 per AC horsepower produced by each motor. Westinghouse also hired Tesla for one year for the large fee of $2,000 ($54,500 in today's dollars) per month to be a consultant at the Westinghouse Electric & Manufacturing Company's Pittsburgh labs.
But things didn’t went very well,Westinghouse was financialy drained in current wars and Tesla broke his royality contract.

CURRENT WAR BETWEEN AC AND DC

EDISON launched propaganda campaign to bring down AC and started electrocuting animal.The first electrocution took place on 1890 which was much more worse than hanging.
By the mid 1890s, Tesla was working on the idea that he might be able to conduct electricity long distance through the Earth or the atmosphere, and began working on experiments to test this idea including setting up a large resonance transformer magnifying transmitter and In 1889 and 1890 Tesla designed Tesla coil and wireless transmission through AC.
the Westinghouse Corporation was chosen to supply the lighting at the 1893 World's Columbian Exposition in Chicago, and Tesla conducted demonstrations of his AC system there.
Later JP Morgan agreed to fund Tesla projects but later withdrew because Marcony already invented radio using Tesla’s ideas.

INVENTIONS

In 1895, Tesla designed what was among the first AC hydroelectric power plants in the United States, at Niagara Falls. The following year, it was used to power the city of Buffalo.

In the 1890 Tesla patented the "Tesla coil," which laid the foundation for wireless technologies and is still used in radio technology today.
He also laid the foundation of remote control technology and transmitters also,AC generator,transformer etc.

NOT AN EASY PATH AT ALL

the early morning hours of March 13, 1895, the South Fifth Avenue building that housed Tesla's lab caught fire. From the 1890s through 1906, Tesla spent a great deal of his time and fortune on a series of projects trying to develop the transmission of electrical power without wires.
He approached Morgan to ask for more money to build the larger system but Morgan refused to supply any further funds. In December 1901, Marconi successfully transmitted the letter S from England to Newfoundland, defeating Tesla in the race to be first to complete such a transmission. He wrote 50 letters pleading for funding.
In June 1902, Tesla moved his lab operations from Houston Street to Wardenclyffe Investors on Wall Street were putting their money into Marconi's system, and some in the press began turning against Tesla's project, claiming it was a hoax. The project came to a halt in 1905, and in 1906, the financial problems and other events may have led to Tesla mortgaged the Wardenclyffe property to cover his debts at the which eventually mounted to $20,000 ($488,600 in today's dollars). He lost the property in foreclosure in 1915, and in 1917 the Tower was demolished by the new owner to make the land a more viable real estate asset.

LATER YEARS

After Wardencyiffe closed Tesla opened offices at 165 Broadway in Manhattan, trying to raise further funds by developing and marketing his patents.
He went on to have offices at the Metropolitan Life Tower from 1910 to 1914; rented for a few months at the Woolworth Building, moving out because he could not afford the rent; and then to office space at 8 West 40th Street from 1915 to 1925.
After moving to 8 West 40th Street, he was effectively bankrupt. Most of his patents had run out and he was having trouble with the new inventions he was trying to develop.
Tesla would walk to the park every day to feed the pigeons. He took to feeding them at the window of his hotel room and bringing the injured ones in to nurse back to health.

DEATH

Tesla's unpaid bills, and complaints about the mess from his pigeon-feeding, forced him to leave the St. Regis in 1923, the Hotel Pennsylvania in 1930, and the Hotel Governor Clinton in 1934.
In 1934, Tesla moved to the Hotel New Yorker, and Westinghouse Electric & Manufacturing Company began paying him $125 per month as well as paying his rent, expenses the Company would pay for the rest of Tesla's life.
Nikola Tesla died on January 7, 1943, at the age of 86, in New York City, where he had lived for nearly 60 years. After suffering a nervous breakdown following the closure of his free energy project.

MAD SCIENTIST(Peculiar Habits)

Tesla was terrified from pierced ears and jwellery.He cant stand a site of it.He was a celibate throughout his life.He also had a phobia of germs and kept washing his hands everytime.
He believed in the supernatural power and also told everyone that he is in contact with the outer space species who guided him which made people that he lost his mind. Tesla rarely slept, and claimed he never dozed for longer than two hours.
Tesla was a vegetarian, but eventually limited himself to a peculiar diet of only milk and also had a strange connection with number 3.Even his hotel room(New york hotel) in which he was there for 10 years until his death also divisble by 3(3327).He did things in multiples of 3
Tesla allegedly had a photographic memory, and could memorize entire books and also he had tremendous love for pegions but for some it was madness..