

CAP769-CAPSTONE

Project Topic: -BRAIN STROKE AND PREDICTION

Sl. No.	Name	Reg. No.
1.	Julee Kumari	12101831
2.	Shivani Kumari	12104528
3.	Pinki Kumari	12105380
4.	Satish Kumar Choudhary	12100232
5.	Kumar Ritu Raj	12103786

Abstract

Stroke is a medical condition in which poor blood flow to the brain causes cell death. There are two main types of stroke: ischemic, due to lack of blood flow, and hemorrhagic, due to bleeding. Both cause parts of the brain to stop functioning properly.

Stroke may include an inability to move or feel on one side of the body, problems understanding or speaking, dizziness, or loss of vision to one side. Signs and symptoms often appear soon after the stroke has occurred.

The main risk factor for stroke is high blood pressure. Other risk factors include high blood cholesterol, tobacco smoking, obesity, diabetes mellitus, a previous TIA, end-stage kidney disease, and atrial fibrillation. An ischemic stroke is typically caused by blockage of a blood vessel, though there are also less common causes.

A hemorrhagic stroke is caused by either bleeding directly into the brain or the space between the brain's membranes. Bleeding may occur due to a ruptured brain aneurysm. Diagnosis is typically based on a physical exam and is supported by medical imaging such as a CT scan or MRI scan. A CT scan can

rule out bleeding, but may not necessarily rule out ischemia, which early on typically does not show up on a CT scan.

Attribute Information:-

- 1) gender: "Male", "Female" or "Other"
- 2) age: age of the patient
- 3) hypertension: 0 if the patient doesn't have hypertension, 1 if the patient has hypertension
- 4) heart_disease: 0 if the patient doesn't have any heart diseases, 1 if the patient has a heart disease
- 5) ever married: "No" or "Yes"
- 6) wor_ktype: "children", "Govtjov", "Neverworked", "Private" or "Self-employed"
- 7) Residence_type: "Rural" or "Urban"
- 8) avg_glucose_level: average glucose level in blood
- 9) bmi: body mass index
- 10) smoking_status: "formerly smoked", "never smoked", "smokes" or "Unknown"*
- 11) stroke: 1 if the patient had a stroke or 0 if not

*Note: "Unknown" in smoking_status means that the information is unavailable for this patient

List of Programming and Scripting Language:

- 1. Python:
 - I. Numpy
 - II. Pandas
 - III. Matplotlib
 - IV. Pyplot
 - V. Seaborn
 - VI. Sklearn
 - VII. LogisticRegression
 - VIII. Metrices
 - IX. Warnings
 - X. Flask
 - XI. Flask bootstrap
 - XII. Flask_ngrok
- 2. HTML:
 - I. Elements
 - II. Attributes
 - III. Hyperlinks
 - IV. Input
 - V. Button

- 3. CSS:
 - I. Style
 - II. Colors
 - III. Padding
 - IV. Margins
 - V. Layout
- 4. JavaScript:
 - I. Operations
 - II. Variables
 - III. Data-Types

List of Platform:

- 1. Google Colab
- 2. GitHub
- 3. Browser(Firefox, Chrome, Edge etc.)