

Predicción de diabetes

El presente documento son ejemplos de ejecuciones de la predicción de diabetes:

Predicción de diabetes

Ingrese el número de épocas: 10000

Ingrese la tasa de aprendizaje: 0.01

Epoch 0, Loss: 0.5240

Epoch 100, Loss: 0.2735

Epoch 200, Loss: 0.1504

Epoch 300, Loss: 0.1017

Epoch 400, Loss: 0.0817

Epoch 500, Loss: 0.0723

Epoch 600, Loss: 0.0671

Epoch 700, Loss: 0.0637

Epoch 800, Loss: 0.0612

Epoch 900, Loss: 0.0592

Epoch 1000, Loss: 0.0574

Epoch 1100, Loss: 0.0559

Epoch 1200, Loss: 0.0546

Epoch 1300, Loss: 0.0534

Epoch 1400, Loss: 0.0524

Epoch 1500, Loss: 0.0515

Epoch 1600, Loss: 0.0507

Epoch 1700, Loss: 0.0500

Epoch 1800, Loss: 0.0494

Epoch 1900, Loss: 0.0489

Epoch 2000, Loss: 0.0484

Epoch 2100, Loss: 0.0480

Epoch 2200, Loss: 0.0476

Epoch 2300, Loss: 0.0472

Epoch 2400, Loss: 0.0469

Epoch 2500, Loss: 0.0466

Epoch 2600, Loss: 0.0463

Epoch 2700, Loss: 0.0460

Epoch 2800, Loss: 0.0458

Epoch 2900, Loss: 0.0455

Epoch 3000, Loss: 0.0453

Epoch 3100, Loss: 0.0451

Epoch 3200, Loss: 0.0449
Epoch 3300, Loss: 0.0447
Epoch 3400, Loss: 0.0445
Epoch 3500, Loss: 0.0443
Epoch 3600, Loss: 0.0441
Epoch 3700, Loss: 0.0439
Epoch 3800, Loss: 0.0438
Epoch 3900, Loss: 0.0436
Epoch 4000, Loss: 0.0434
Epoch 4100, Loss: 0.0433
Epoch 4200, Loss: 0.0431
Epoch 4300, Loss: 0.0430
Epoch 4400, Loss: 0.0428
Epoch 4500, Loss: 0.0427
Epoch 4600, Loss: 0.0425
Epoch 4700, Loss: 0.0424
Epoch 4800, Loss: 0.0423
Epoch 4900, Loss: 0.0421
Epoch 5000, Loss: 0.0420
Epoch 5100, Loss: 0.0419
Epoch 5200, Loss: 0.0418
Epoch 5300, Loss: 0.0416
Epoch 5400, Loss: 0.0415
Epoch 5500, Loss: 0.0414
Epoch 5600, Loss: 0.0413
Epoch 5700, Loss: 0.0412
Epoch 5800, Loss: 0.0411
Epoch 5900, Loss: 0.0410
Epoch 6000, Loss: 0.0409
Epoch 6100, Loss: 0.0407
Epoch 6200, Loss: 0.0406
Epoch 6300, Loss: 0.0405
Epoch 6400, Loss: 0.0404
Epoch 6500, Loss: 0.0403
Epoch 6600, Loss: 0.0402
Epoch 6700, Loss: 0.0402
Epoch 6800, Loss: 0.0401
Epoch 6900, Loss: 0.0400
Epoch 7000, Loss: 0.0399
Epoch 7100, Loss: 0.0398
Epoch 7200, Loss: 0.0397
Epoch 7300, Loss: 0.0396
Epoch 7400, Loss: 0.0395
Epoch 7500, Loss: 0.0394

Epoch 7600, Loss: 0.0394
Epoch 7700, Loss: 0.0393
Epoch 7800, Loss: 0.0392
Epoch 7900, Loss: 0.0391
Epoch 8000, Loss: 0.0390
Epoch 8100, Loss: 0.0390
Epoch 8200, Loss: 0.0389
Epoch 8300, Loss: 0.0388
Epoch 8400, Loss: 0.0388
Epoch 8500, Loss: 0.0387
Epoch 8600, Loss: 0.0386
Epoch 8700, Loss: 0.0385
Epoch 8800, Loss: 0.0385
Epoch 8900, Loss: 0.0384
Epoch 9000, Loss: 0.0383
Epoch 9100, Loss: 0.0383
Epoch 9200, Loss: 0.0382
Epoch 9300, Loss: 0.0381
Epoch 9400, Loss: 0.0381
Epoch 9500, Loss: 0.0380
Epoch 9600, Loss: 0.0380
Epoch 9700, Loss: 0.0379
Epoch 9800, Loss: 0.0378
Epoch 9900, Loss: 0.0378

Precisión del modelo: 0.95

Matriz de confusión:

[[3621 17]

[177 185]]

Reporte de clasificación:

	precision	recall	f1-score	support
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0	0.95	1.00	0.97	3638
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1	0.92	0.51	0.66	362
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accuracy			0.95	4000
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macro avg	0.93	0.75	0.81	4000
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weighted avg	0.95	0.95	0.95	4000
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Ingrese los datos del paciente para realizar una predicción.

Ingrese la edad: 62

¿Tiene enfermedad cardíaca? (No:0/Si:1): 0

Ingrese el índice de masa corporal (IMC): 28.66

Ingrese el nivel de Hemoglobín A1c: 6.8

Ingrese el nivel de glucosa en sangre: 200

Indique su sexo (0:hombre/1:mujer): 0

```
/Library/Frameworks/Python.framework/Versions/3.12/lib/python3.12/site-  
packages/sklearn/base.py:493: UserWarning: X does not have valid feature names, but  
StandardScaler was fitted with feature names  
warnings.warn(
```

El paciente tiene diabetes.

¿Desea hacer otra predicción? (s/n): s

Ingrese los datos del paciente para realizar una predicción.

Ingrese la edad: 54

¿Tiene enfermedad cardíaca? (No:0/Si:1): 1

Ingrese el índice de masa corporal (IMC): 25.19

Ingrese el nivel de Hemoglobín A1c: 6.6

Ingrese el nivel de glucosa en sangre: 140

Indique su sexo (0:hombre/1:mujer): 1

```
/Library/Frameworks/Python.framework/Versions/3.12/lib/python3.12/site-  
packages/sklearn/base.py:493: UserWarning: X does not have valid feature names, but  
StandardScaler was fitted with feature names  
warnings.warn(
```

El paciente no tiene diabetes.

¿Desea hacer otra predicción? (s/n): n

Gracias por usar el sistema de predicción de diabetes. ¡Hasta luego!