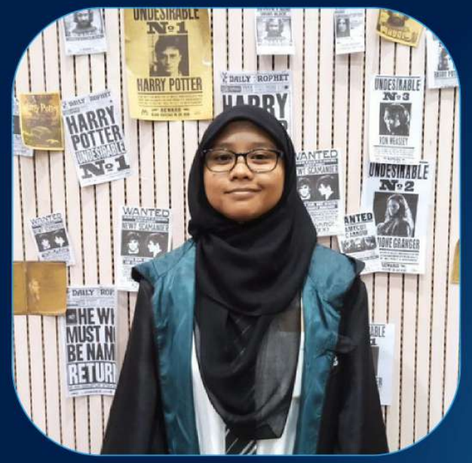
Intelligent Heart Risk Prediciton

Group 7

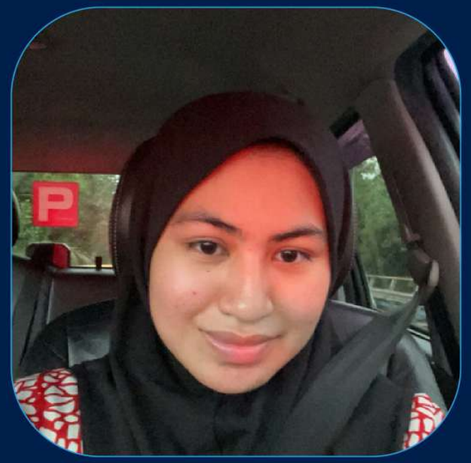
Team

Ain Maisara
2217856

Azliyana
2210620



Alya
2218084



Sofea
2115386

Adlin
2111324

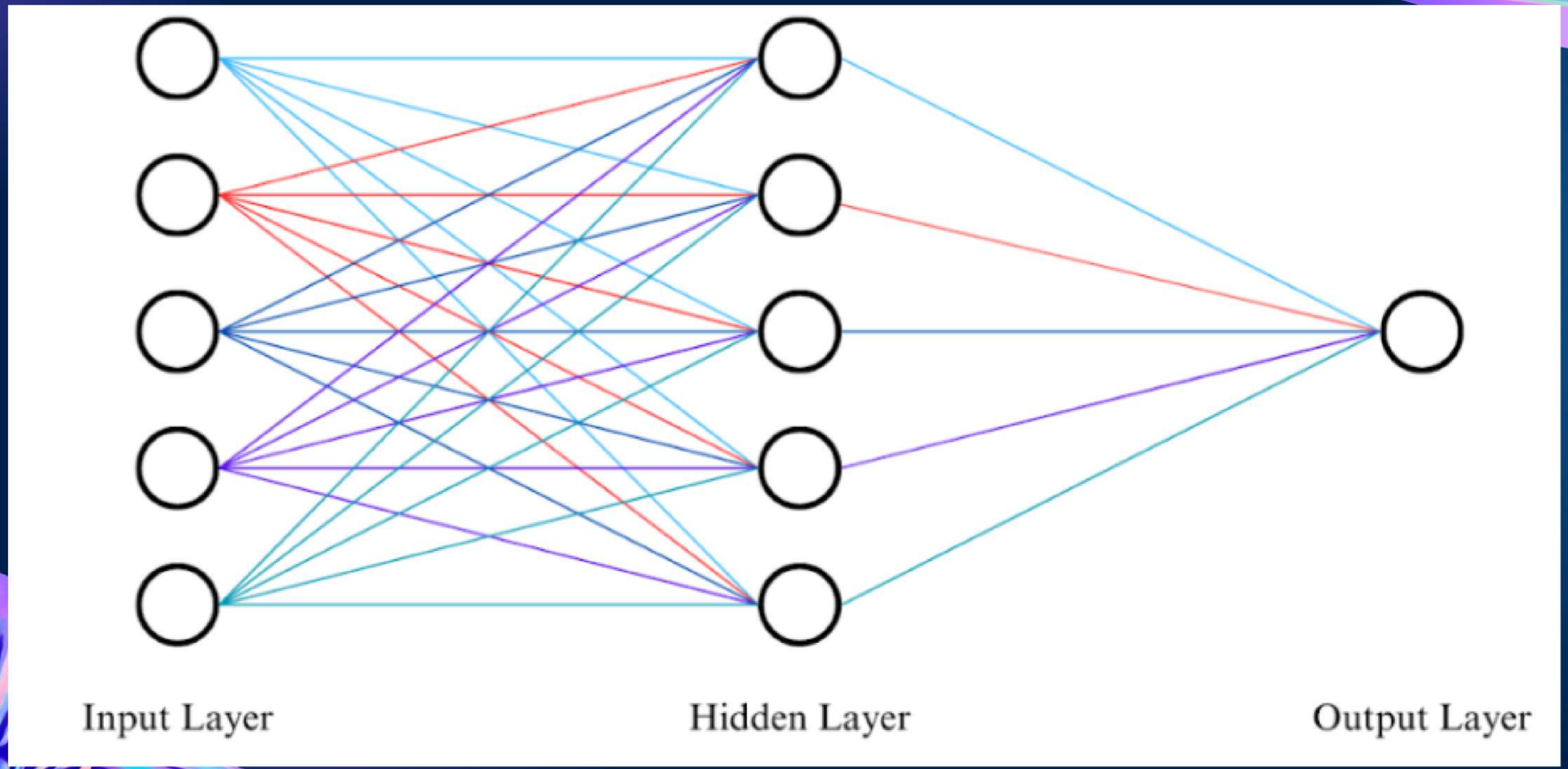
Methodology

We use mainly Neural Network for our project

Aspect Measures

WHAT DO WE DØ?

We simulate a heart risk prediction using Google Colab.
Users are required to initiate input prompts, providing data such as age, sex, heart rate, diabetes, and cholesterol. This input is then utilized by the neural network to predict heart rate values based on its learned patterns and training.


Input Layer
Hidden Layer
Output Layer

DATA

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Patient ID	Age	Sex	Cholesterc	Blood Pres	Heart Rate	Diabetes	Family Hist	Smoking	Obesity	Alcohol Cc	Exercise H	Diet
344	YBI6619	42	Female	218	143/83	79	1	0	1	1	1	4.350541	Average
345	MSW1926	18	Male	304	165/78	95	1	1	1	0	1	12.70827	Average
346	VHL1612	62	Female	173	163/63	64	1	0	1	1	1	11.04507	Average
347	FKI0908	77	Female	286	124/88	64	1	0	1	0	1	1.212993	Unhealthy
348	XUO9577	69	Female	359	99/82	110	1	0	1	0	1	15.84754	Average
349	TEE0405	78	Male	273	166/86	67	1	0	1	1	1	19.90385	Average
350	IDQ6872	82	Female	123	165/78	84	1	0	1	0	0	15.75596	Unhealthy
351	XBZ9674	36	Male	124	145/65	43	1	1	1	0	1	4.097386	Average
352	OIV0569	29	Male	139	158/76	54	1	1	1	0	1	18.50338	Unhealthy
353	MWZ5398	25	Male	244	132/76	103	1	0	1	1	1	8.101512	Unhealthy
354	YRQ9870	84	Female	321	163/106	99	1	0	1	0	1	10.44167	Unhealthy
355	VCY3069	80	Female	263	126/84	59	1	0	1	0	1	14.8033	Average
356	QDJ7359	76	Male	291	107/83	66	1	0	1	0	1	0.500024	Healthy
357	ZJI5100	66	Female	318	137/72	43	1	1	1	0	0	11.94422	Unhealthy

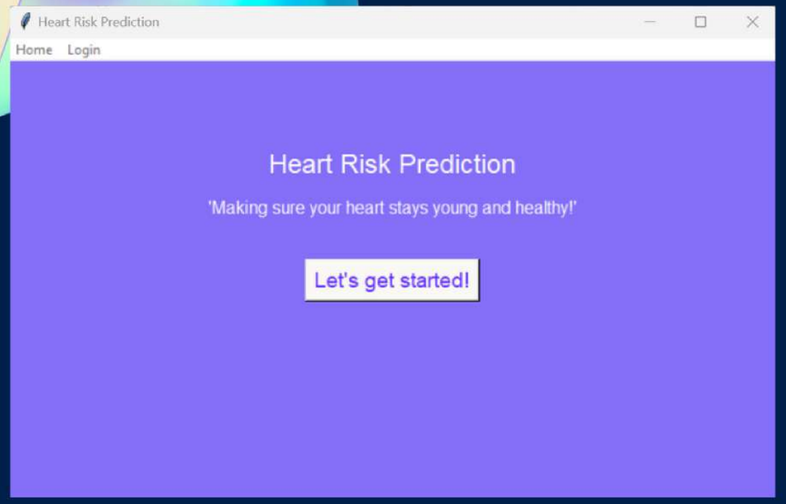
Input & Output

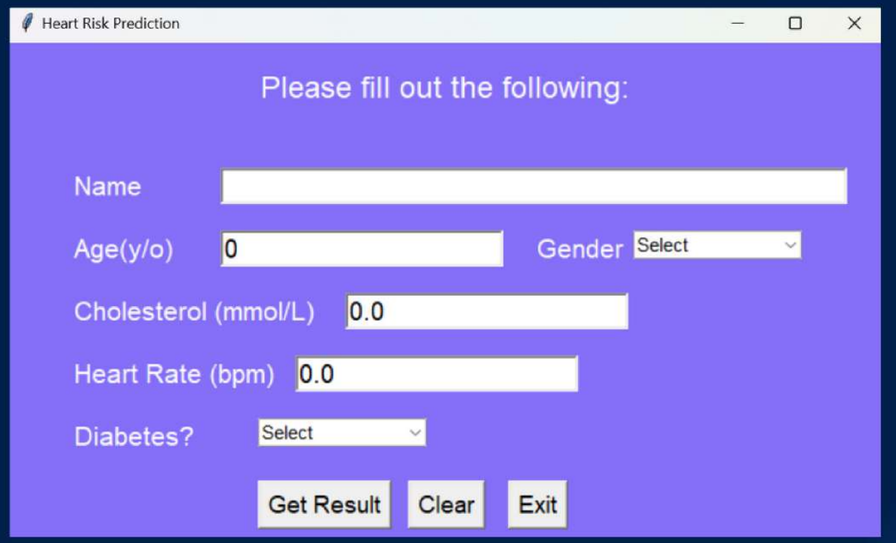
```
else:
    print('LOW')
```

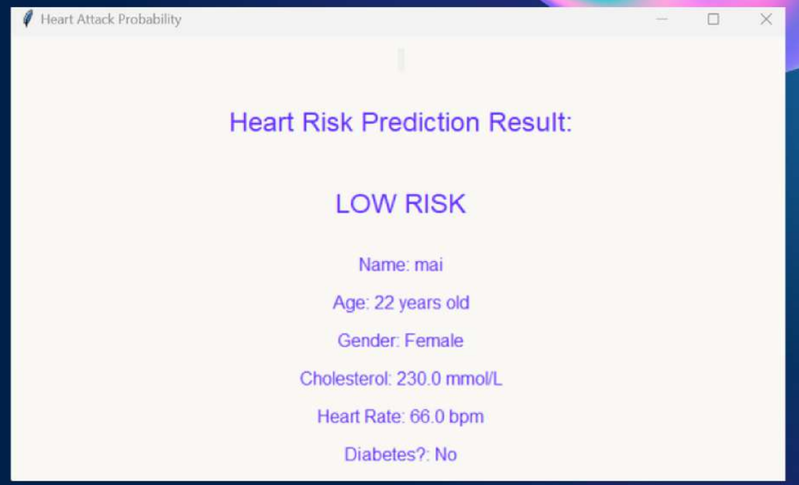
```
HEART RISK PREDICTION
For this prediction please input numbers
REFERENCE
Male= 1  Female=0
Diabetes
No=0 Yes=1
Please input Age Sex Cholesterol Heart_Rate Diabetes in order separated by spaces:
```

```
HEART RISK PREDICTION
For this prediction please input numbers
REFERENCE
Male= 1  Female=0
Diabetes
No=0 Yes=1
Please input Age Sex Cholesterol Heart_Rate Diabetes in order separated by spaces: 69 0 359 110 0
Heart Risk Detection:
HIGH
```

Graphical User Interface







With good data and the right technology, people and institutions today can still solve hard problems and change the world for the better.

To summarize

- Results on prediction are obtained but not fully accurate
- Helps consider heart risk as a precaution
- Take necessary preventive measures
- Carefully select the learning rate and network architecture to reduce error

Thank You