Michael Han

101157504

COMP3106A

Assignment 2

1. This agent is a model based reflex agent. This uses a model based on mean and standard deviation for features in each class based on past observed data and uses it to make decisions.
   1. Partially observable: the agent can only see past data and the patients temperature and heart rate to make its prediction. It can’t use other data such as visuals to make its prediction.
   2. Single agent: this agent is the only agent in the environment. It makes predictions by itself.
   3. Stochastic: this agent uses probability based off of previous data to make its prediction.
   4. Episodic: the agent’s current action will not affect its future actions (however it’s prediction given current and past data, will affect the “past data” for future predictions).
   5. Static: we can assume that the patient’s measurements will remain constant throughout the prediction as it is given to us.
   6. Discrete: there are only 2 possible predictions the agent can make, healthy and diseased
   7. Known: the agent is provided with prior data and calculates probabilities for each class. Therefore, the agent knows the potential outcomes for each combination of features.
2. Since this is a binary classification problem, we can use accuracy, which is accuracy = #correct predictions / # of predictions to measure its performance.