CALIFORNIA STATE UNIVERSITY BAKERSFIELD

ReadyMedi
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What is ReadyMedi?

ReadyMedi is an illness diagnosis application that can determine a list of possible illnesses based on symptoms and series of questions. Using a database-connected user interface, ReadyMedi utilizes several tools to improve its predictions for future queries and users.

What is the Problem?

There are not many applications available that have an extended database of symptoms, illnesses, and probability of contagiousness is.

Search Engines

When using popular search engines such as Google, Yahoo, or Bing, it is easy to get skewed answers that may be little to not at all related to your search query.

Current Situation

Since the COVID-19 pandemic, many people put health on a higher level of responsibility. It is important to self-diagnose symptoms to ensure that proper steps are taken to treat and/or quarantine depending on the illness and ease of infection.

## Our Solution

Database and History

Using a MariaDB database and a hosted website page, we can close the gap between needing help and taking action for your own health, right from the comfort of your own space.

Artificial Intelligence

1. Inputs X, arrive through the preconnected path
2. Input is modeled using real weights in hidden node layer. The weights are usually randomly selected.
3. Calculate the output for every neuron from the input layer, to the hidden layers, to the output layer.
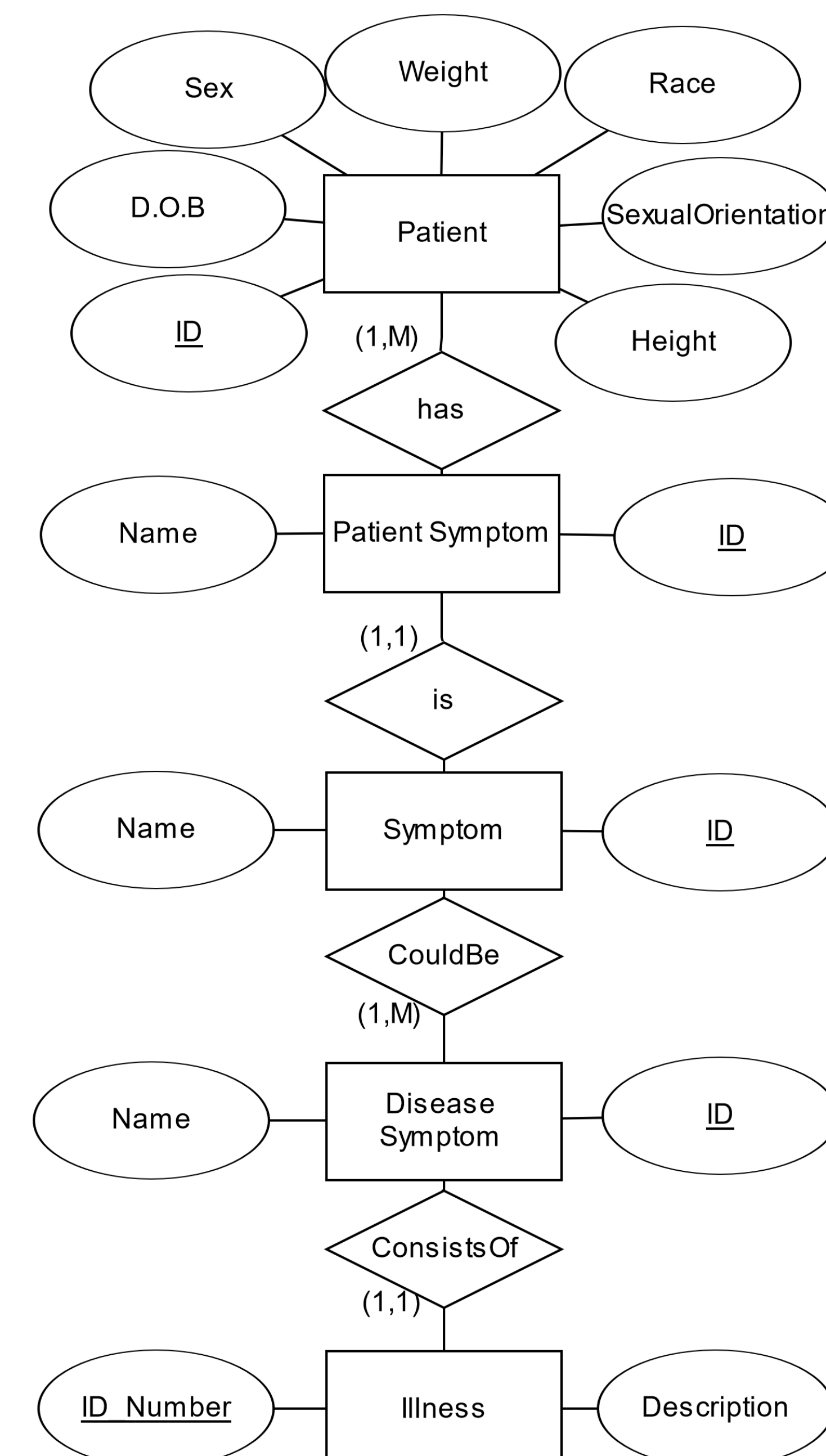4. Calculate the error in the outputs
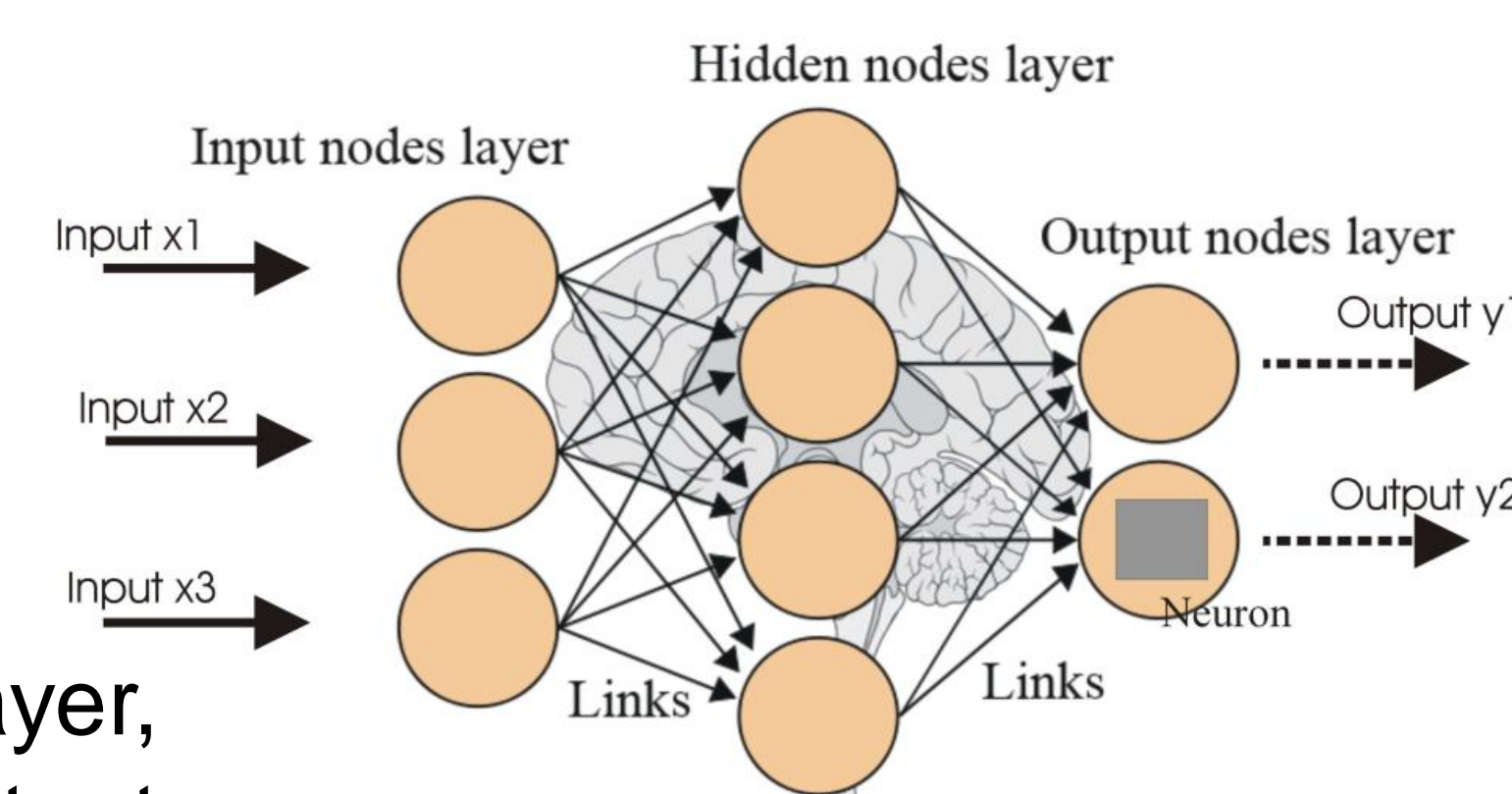
How does it work?
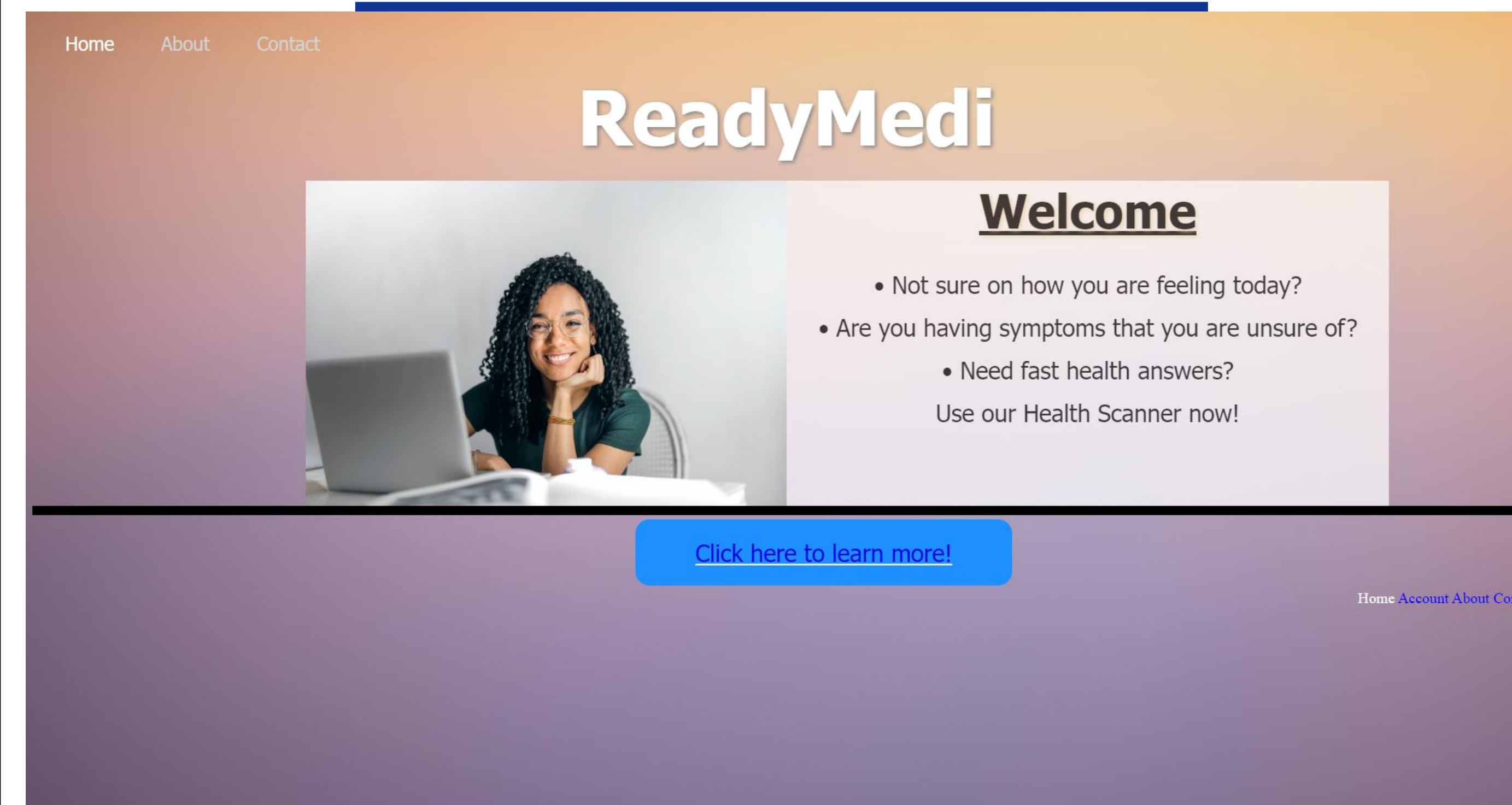
Easily get started through any browser of your choice.
1) *Login or Register your account*
   2) *Select your symptoms*
      3) *View your results!*

Entity-Relationships

Technology Stack

Program Features:

- User interface that is friendly for most.
- Simple questionnaire style
- User options to edit history
- Suggested non-medicinal simple remedies based on results.
- Symptom filtering
  - Personal results with likelihood percentages entirely based on user's responses.

Future Development:

- See past questionnaire results to accurately log symptoms.
- AI Integration:
  - Our AI will be created by a Neural Network with backpropagation. Backpropagation is what trains the Neural Network. This is achieved through an algorithm that updates the neural network weights with gradients. Through backpropagation, we are able to adjust weights from the incorrect previous iterations (wrong answers).