

Survey: Is it a good explanation?

Preliminary Instructions

Please, read carefully before starting the quizzes.

What is this Survey?

This survey contains 2 quizzes and questionnaires on 2 different AI-based systems (AI means Artificial Intelligence).

What are the AI-based Systems?

You will be given access to these two AI-based systems: one for "predicting heart diseases", and the other one for "approving loan applications". Each system contains some mechanisms for explaining what's going on there.

The Quiz

We are going to ask you a few questions about the two AI-based systems. In order to answer them, you will have to use only the information that can be reached within the systems (e.g. by following the external links you may find in there). In other words, do not use Google or other external tools.

If you don't know an answer, click on "I don't know". There is only one correct answer for each question. When multiple answers seem to be reasonably correct, select the most precise one.

Every AI-based system has a different quiz with a small questionnaire at the end. The quiz is about the information contained in the system, while the ending questionnaire is meant to be your evaluation of the explanations given by the system.

Why?

To each one of you has been assigned a different explanatory mechanism. With your help we will be able to understand which explanatory mechanism is the best one.

How?

The systems you are going to see are NOT designed for touchscreens. Please use a desktop, laptop.

Quiz 1 - The Credit Approval System

The Link to the Quiz

The first quiz is available here. Do it just once. Click the link, then answer the questions, but before doing that, keep reading what follows:

- <http://www.quiz-maker.com/QJSMDKH19>

The System

During this experiment you will have to answer some questions about a credit approval.

You will have to impersonate Mary, a 35 years old American that asked for a loan to the Bank.

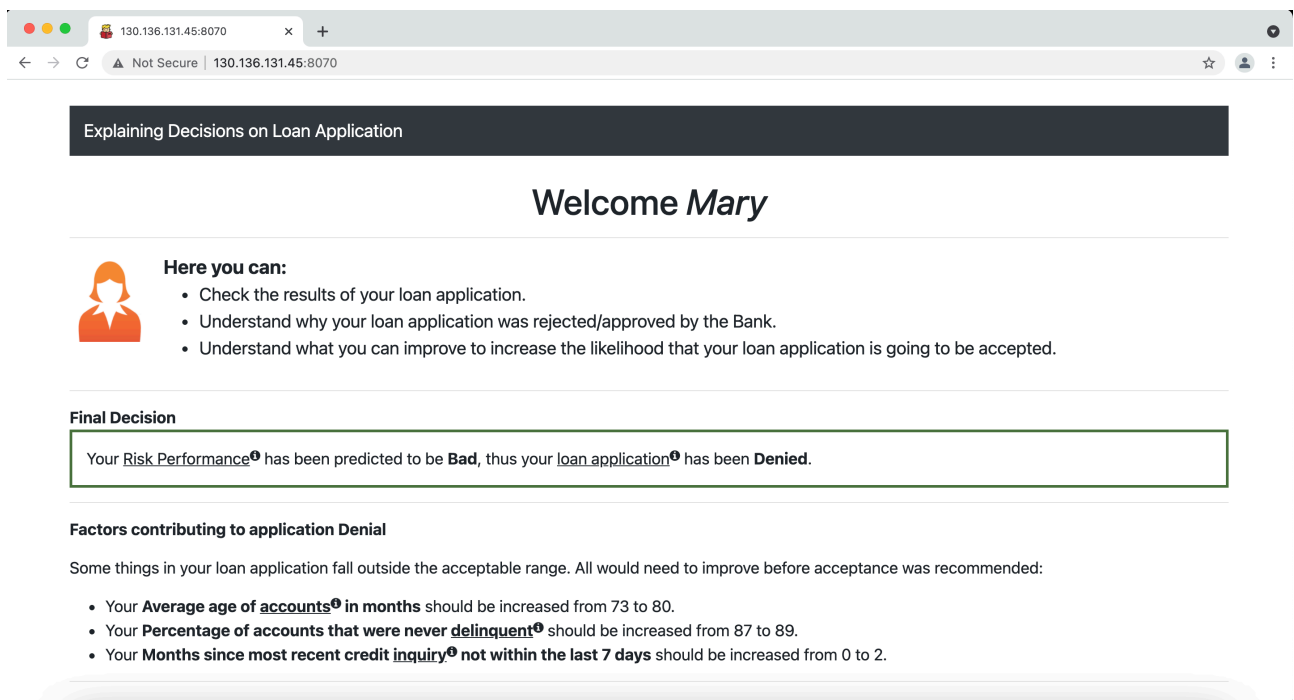
The Bank properly collected information about Mary, feeding it to its Credit Approval System.

Mary received an e-mail from the Bank pointing to a web-page containing the decision produced by its Credit Approval System. Mary opens that web-page, to understand whether and how she is going to receive the loan.

The web-page is:

- <http://130.136.131.45:8070/>

It might take a while for the site (<http://130.136.131.45:8070/>) to show up as in the image below.



You don't have too much time to spend, hurry up. This quiz should NOT take you more than 8 minutes.

Quiz 2 - The Heart Disease Predictor

The Link to the Quiz

The first quiz is available here. Do it just once. Click the link, then answer the questions, but before doing that, keep reading what follows:

- <http://www.quiz-maker.com/QTQ5D37Y8>

The System

You are a first level responder of an online help system for heart-related health problems. You get basic questions from callers/patients. You are not a doctor but you have to decide on the fly whether the caller should speak to a real doctor or not.

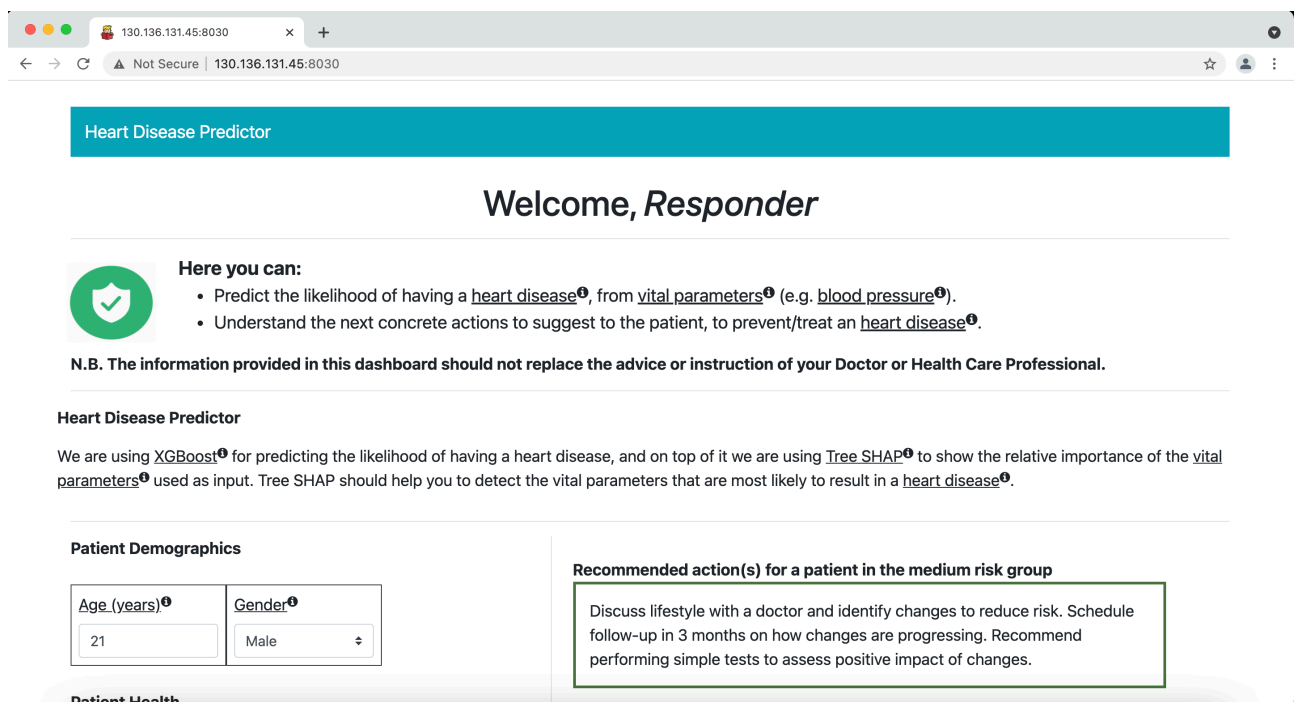
So, you quickly ask to the caller some questions and use the XAI system (<http://130.136.131.45:8030/>) by yourself, trying to figure out how to explain the output to the guy and whether or not to forward his case to a doctor.

Your system is used by you, the responder, not by the patient.

The web-page is:

- <http://130.136.131.45:8030/>

It might take a while for the site (<http://130.136.131.45:8030/>) to show up as in the image below.



The screenshot shows a web browser window with the address bar displaying "130.136.131.45:8030". The page title is "Heart Disease Predictor". The main heading is "Welcome, Responder". Below this, there is a section titled "Here you can:" with a green shield icon. It lists two bullet points: "Predict the likelihood of having a heart disease[Ⓢ], from vital parameters[Ⓢ] (e.g. blood pressure[Ⓢ]).", and "Understand the next concrete actions to suggest to the patient, to prevent/treat an heart disease[Ⓢ]". Below this is a note: "N.B. The information provided in this dashboard should not replace the advice or instruction of your Doctor or Health Care Professional." The main content area is titled "Heart Disease Predictor" and contains a paragraph: "We are using XGBoost[Ⓢ] for predicting the likelihood of having a heart disease, and on top of it we are using Tree SHAP[Ⓢ] to show the relative importance of the vital parameters[Ⓢ] used as input. Tree SHAP should help you to detect the vital parameters that are most likely to result in a heart disease[Ⓢ]." Below this is a form titled "Patient Demographics" with two input fields: "Age (years)[Ⓢ]" with the value "21" and "Gender[Ⓢ]" with the value "Male". To the right of the form is a box titled "Recommended action(s) for a patient in the medium risk group" containing the text: "Discuss lifestyle with a doctor and identify changes to reduce risk. Schedule follow-up in 3 months on how changes are progressing. Recommend performing simple tests to assess positive impact of changes." The bottom of the page has a section titled "Patient Health".

You don't have too much time to spend, hurry up. This quiz should NOT take you more than 17 minutes.