University of Pittsburgh

iMedBot System User's Manual

1. Introduction

1.1 Breast cancer is a multifactorial disease, genetic and environmental factors will affect its incidence probability. Breast cancer metastasis is one of the main causes of breast cancer related deaths reported by the American Cancer Society (ACS).

1.2 The iMedBot can provide two main services: 1. it can predict 5-, 10-, or 15-year breast cancer metastasis based on a set of clinical information provided by a user. The prediction is done by using a set of DFNN models that were pretrained, and 2. It can train DFNN models for a user using user-provided dataset. The model trained will be evaluated using AUC and both the AUC value and the AUC ROC curve will be provided.

1.3 The iMedBot web application provides a user-friendly interface for user agent interaction in conducting personalized prediction and model training. It is an initial attempt to convert results of deep learning research into an online tool that may stir further research interests in this direction.

2 Registration System

The official website is directed to: http://imedbot.odpac.net/

2.1 Sign-up Page

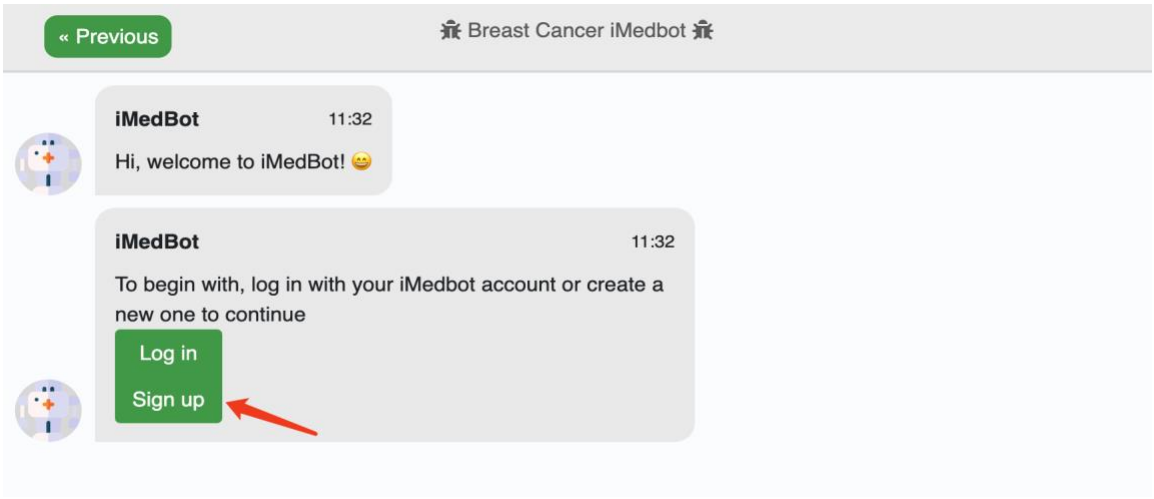

Fig. 1

a) Once logged into the website home page, click sign up bottom, you will be directed to the sign-up page.

b) Please follow the sign-up instruction, fill out the information needed.

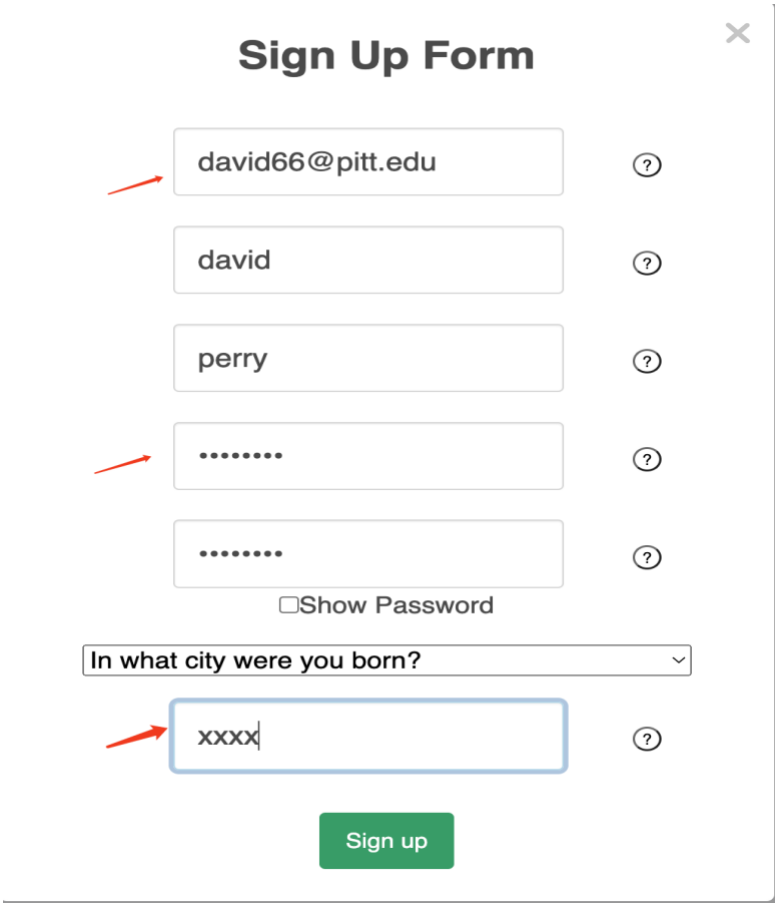

Fig. 2

c) Waiting for the verification code sent to you and fill it up.

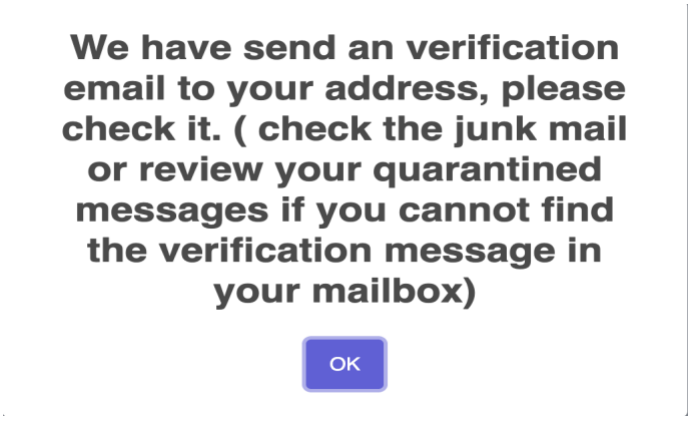

Fig. 3

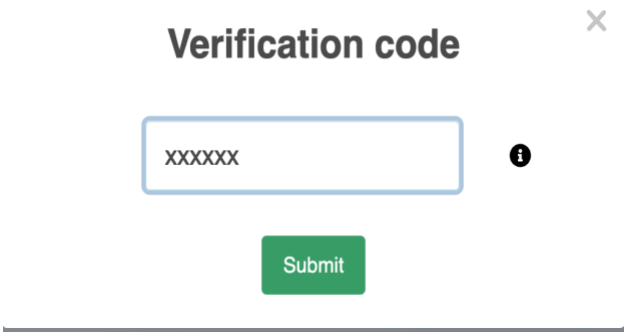

Fig. 4

d) Once you submitted the verification code, your account will be available to use.

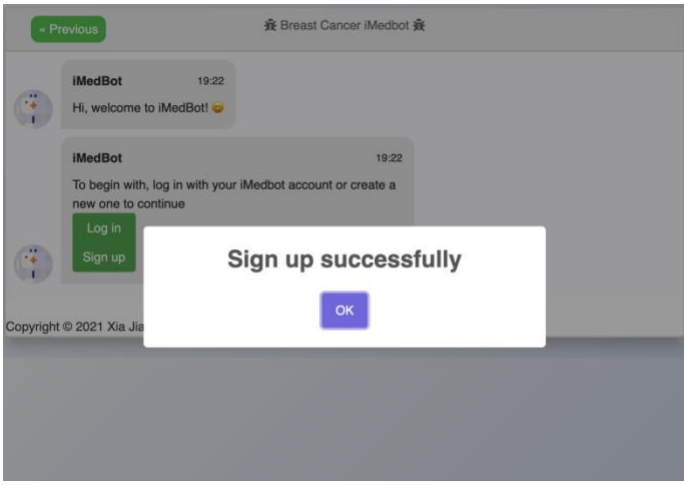

Fig. 5

2.2 Log in page

e) Once you have registered the account, you are have to log into the system to use.

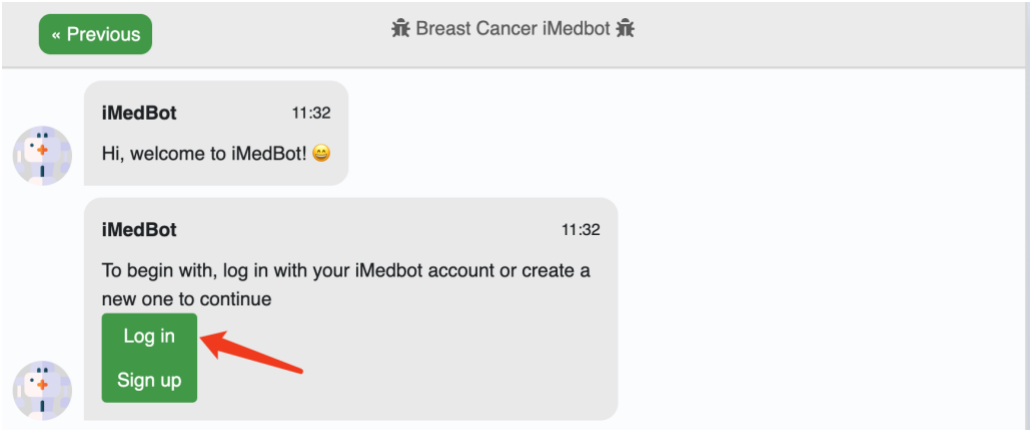

Fig. 6

f) Enter the username and password to log in.

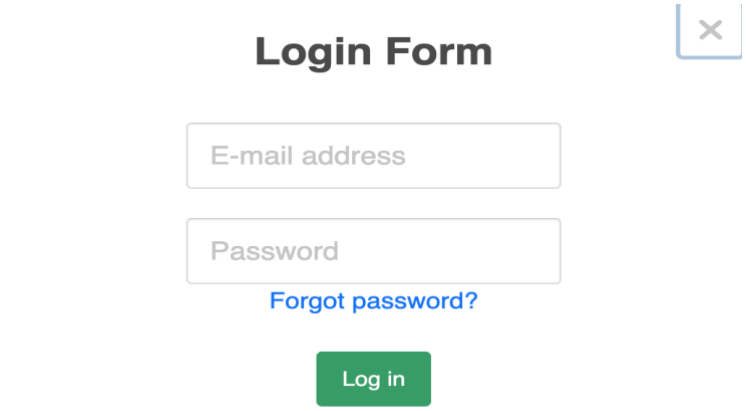

Fig. 7

g) Once you received the pop-up message, you will look into the dashboard.

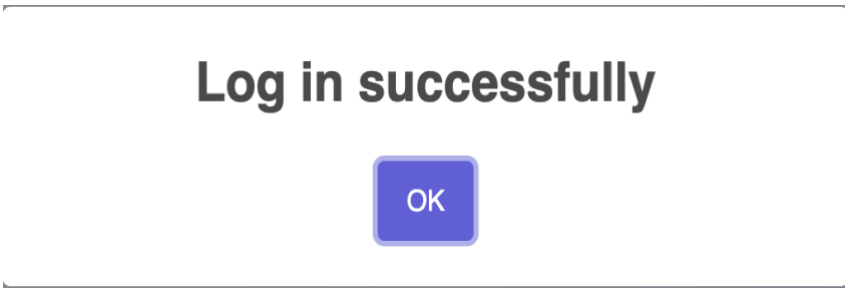

Fig. 8

h) Now, you can use our system to do predict or model training.

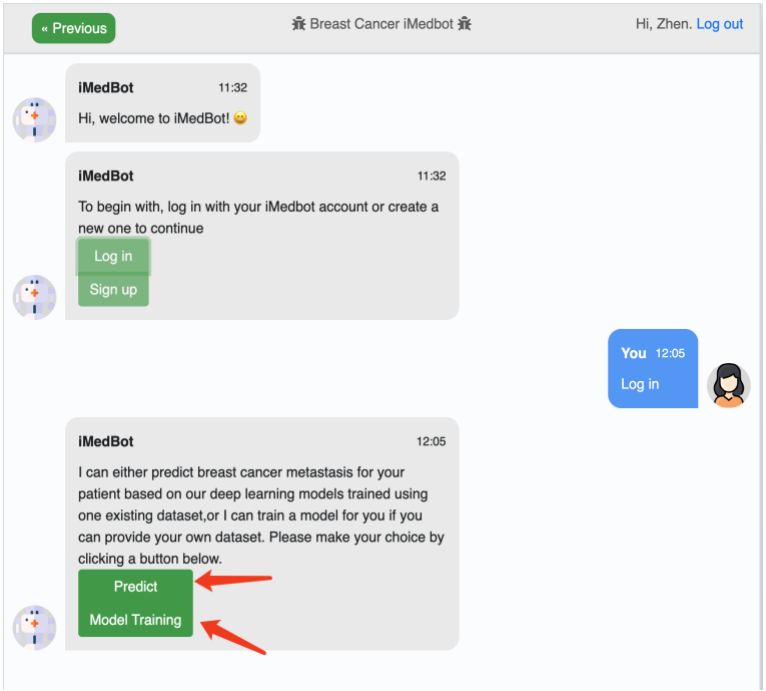

Fig. 9

2.3 Log out

i) Click the greeting sentence in the upper right corner.

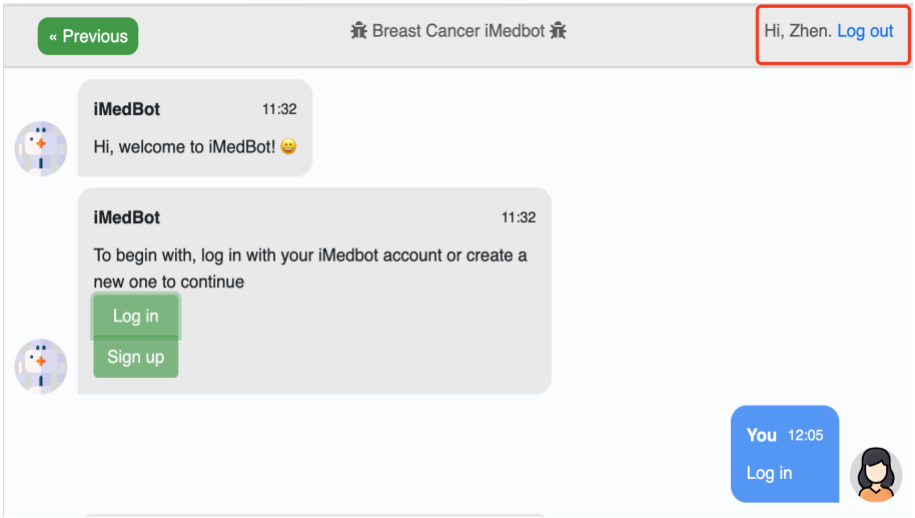

Fig. 10

j) Once you clicked it, the pop-up window shows that you have successfully logged out, then you are good to go.

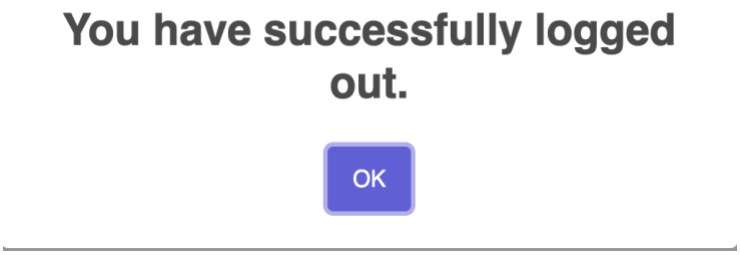

Fig. 11

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