Bladder Cancer Decision Support Tool User MANUAL

Jiyong Cho, Yoon Kim, Huong Vu

Inquiries, questions, or requests for further edits, please contact:

jiycho@seas.upenn.edu
yoonk@seas.upenn.edu
huongvu@seas.upenn.edu

USER'S MANUAL

TABLE OF CONTENTS

1.0 GENERAL INFORMATION

1.1 Project Overview

For this project we used past data from the physicians and statisticians at University of Pennsylvania Perelman School of Medicine to provide insight to a user about recommended treatment given certain characteristics of their health condition. To make it easier for a patient to interpret the information, we show how the preference for Chemo-RT treatment over Surgery change over time by drawing a graph of the sum of the differences between the survival rates of two treatments. The point where the graph reaches zero is where the advantages of surgery break even with the advantages of Chemo-RT. The graph also includes two benchmarks for decision-making, which are the median survival time for patients with similar characteristics of each type of treatments. Based on the graph, we provide a recommended treatment and a detailed interpretation of the graph supporting this recommendation.

2.0   SYSTEM SUMMARY

2.1   System Configuration

In order to run our application, Python must be installed. If you do not have Python already installed already you can download it here. The version we used is Python 2.7.13.

You will also have to install some Python libraries after downloading Python. Follow the instructions in the links for installing the following libraries.
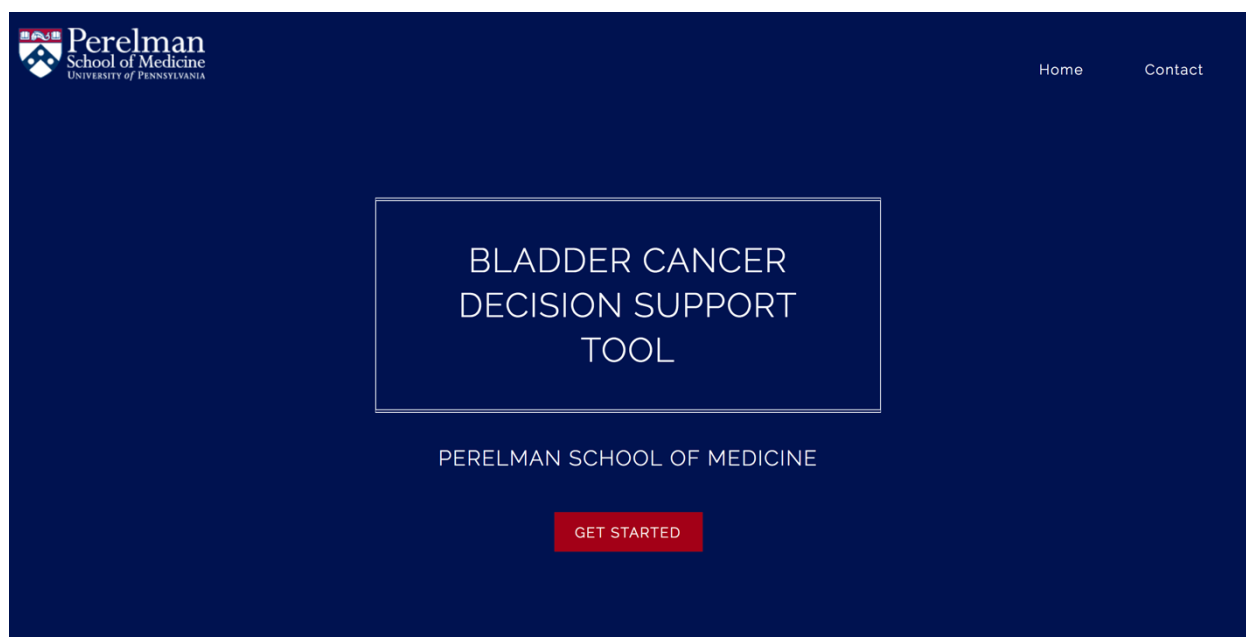Install rp2.
Install plotly.
Install Flask.
Install numpy.

Once Python and other necessary packages are installed, make sure you have downloaded our project folder.

3.0   USING THE APPLICATION
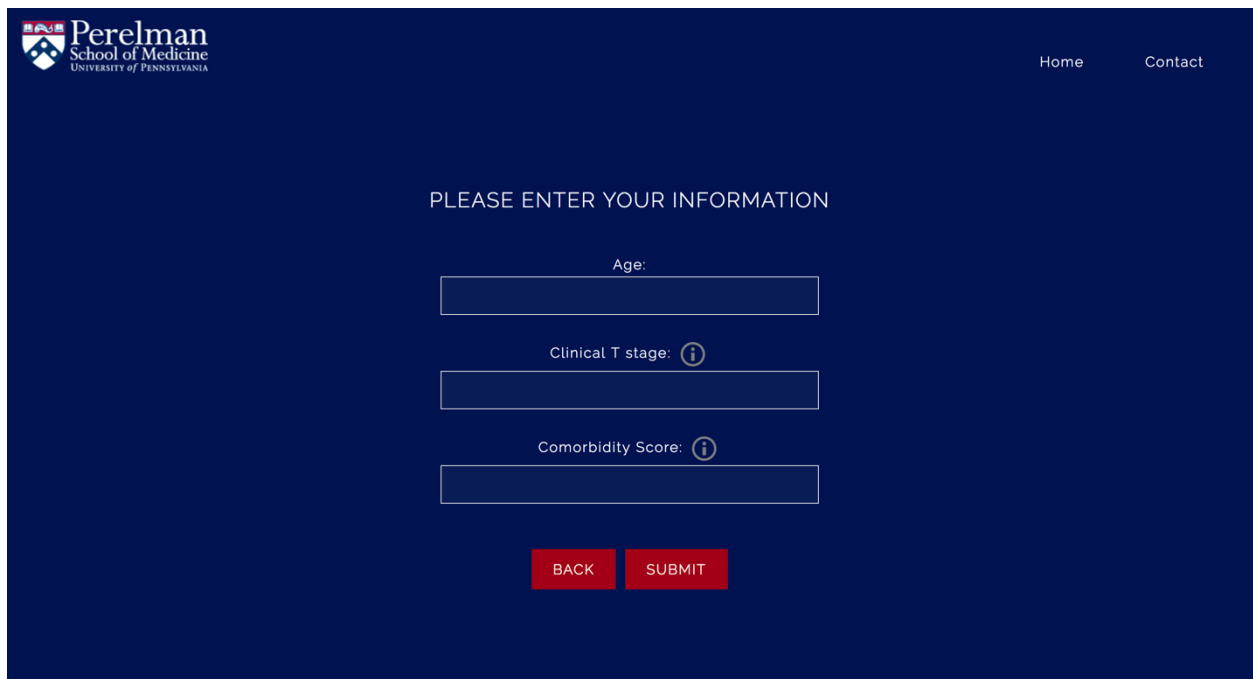
3.1   Home Screen

Below is the homepage when you go to the website. You can click on "Get Started" to use the tool.

3.2   Form Page

Below is the page where you fill out the form about patient information. You can put in information regarding the age of the patient (from 65 and above), the clinicalT stage (2 or 3), and the comorbidity score (1: no comorbidity, 2: one comorbidity, 3: more than one comorbidity). After filling out the form, you can click submit to get the graph.

When you hover the cursor over this icon ⊕ you can see information regarding what you should put in for each box.

3.3   Result Graph

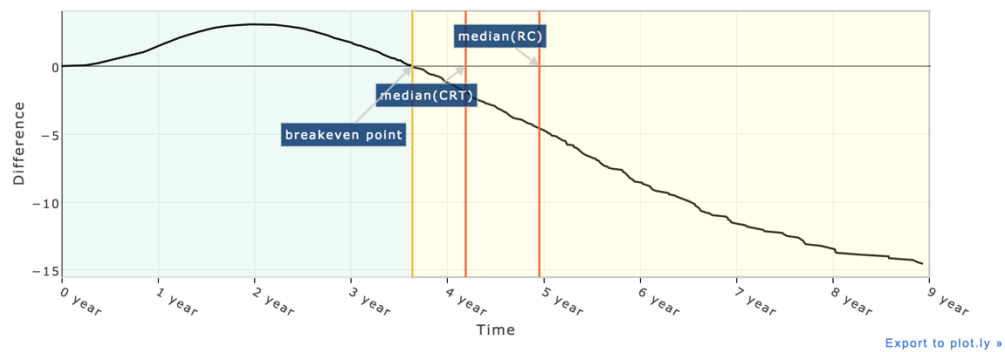Once you click "Submit", it will redirect you to this page with a result graph and interpretation.