For this project I really wanted to focus on demonstrating what was taught for the majority of the bootcamp. Thus this lead me to focusing on a smaller problem and implementing as many ML techniques as possible to properly solve the problem.

For the design of my application I chose to simply use Flask and React to deploy my prediction model as a basic web application. I chose not to attach a form of persistent data through use of a database or to accept new data from end users.

I chose to do this for a couple reasons. The first one being time and purpose. Adding this functionality did not fit with the purpose of the project from my perspective. 2nd the legality of collecting health data from end users. Third simplicity, purpose was to focus on learning Machine learning techniques.

The application takes form data from the end user and passes it to the flask database where it will be transformed into data that the model can use to predict. Since no new data will be taken in all predictions will be one off prediction based on the original dataset. This also means retraining is not required although I have thought about the metrics I would consider before retraining was necessary.

I’m aiming for free cost to deploy however that may not be possible based on the slug size of my application which sits around 576M. My preferred deployment platform is Heroku for its simplicity and cost however they only allow a slug of 500M thus there may be a small cost to host the application online which would depend on the number of requests and additional cost of storage. Still I’m looking at less than $5 dollars to deploy and host for some time.

I believe I’ve thoroughly answered the checklist of defining a problem, adequately preparing both original data and data fed from end user, evaluating and improving my model.