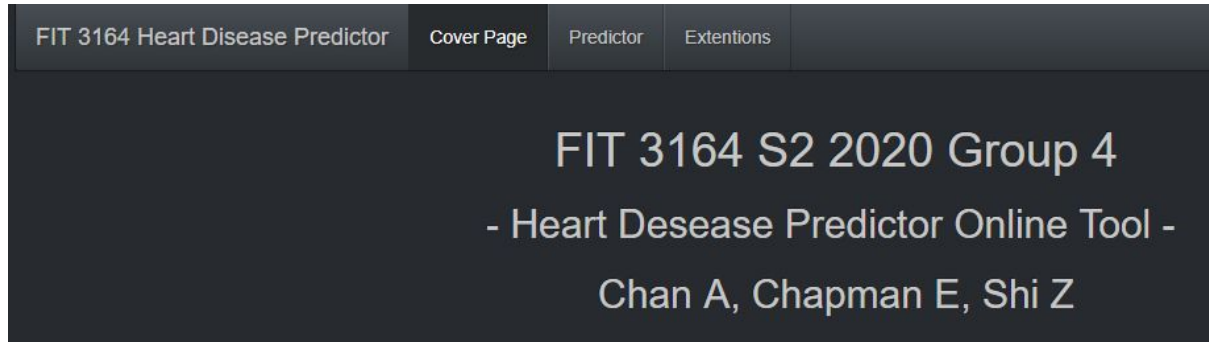


FIT 3164 -Group 4 User Guide

- **Intro**

Our Shiny Apps page represents the work we have put towards both FIT3182 and FIT3164 over the past year. a main page with information on our work and the app, the Predictor page where our final model can be used to get a prediction on input data, and an extension page detailing some work that was ultimately removed from our project scope as well as an outline where our project could be extended from here. These tabs are explorable from the nav-bar at the top of the page.



- **Prediction Page**

This page comprises a simple implementation of our prediction model, this page implements it in a simple and explorable context. It takes as input the 12 attributes used between our top 5 prediction models which then make predictions and a final result is decided via an election algorithm. This final model makes predictions with 86.8% accuracy meaning for any given prediction there is a 86.8% chance it is correct, not that you have an 86.8% chance of being in the predicted group. for more info on this concept please see the following video.

The screenshot shows the predictor page of the FIT 3164 Heart Disease Predictor. The page has a dark background with white text. At the top, there is a navigation bar with four tabs: "FIT 3164 Heart Disease Predictor", "Cover Page", "Predictor", and "Extensions". The main content area is titled "Heart Disease Predictor". On the left side, there are four sections for inputting data: "Demographic Features", "Symptoms and Examination", and "Blood Test Results". Each section contains a slider or radio button for inputting a value. The "Demographic Features" section includes sliders for Age (set to 50) and Sex (set to Male). The "Symptoms and Examination" section includes radio buttons for Diabetes (set to No), Hypertension (set to No), Typical Chest Pain (set to No), Atypical Chest Pain (set to No), and Non-anginal Chest Pain (set to No). The "Blood Test Results" section includes sliders for Low-Density Lipoprotein (LDL) (set to 150) and High-Density Lipoprotein (HDL) (set to 50). On the right side, there is a large text area that says "Our machine learning model has found you are Unlikely to have CAD". Below this, there is a section titled "How to use" with instructions on how to make a prediction. At the bottom, there is a table showing the input data and the predicted result.

Attribute / Result	Has HD	No Hd
Age	53	66
Sex	male	female
Diabetes	no	no
Hypertension	yes	yes
Typical Chest Pain	no	no
Atypical Chest Pain	no	no
Non-anginal Chest Pain	no	yes
Low-Density Lipoprotein (LDL)	155	55
High-Density Lipoprotein (HDL)	30	27
T-inversion	yes	no
Ejection Fraction	50	55
Regional wall motion abnormality	0	0

- **Extensions page**

This page will walk you through a small number of extensions that were considered and partially implemented, more info is available in the page itself.