6/6/23, 5:24 PM Notebooks

knows about the data) for more.

The following are the features we'll use to predict our target variable (heart disease or no heart disease).

- 1. age age in years
- 2. sex (1 = male; 0 = female)
- 3. cp chest pain type
  - 0: Typical angina: chest pain related decrease blood supply to the heart
  - 1: Atypical angina: chest pain not related to heart
  - 2: Non-anginal pain: typically esophageal spasms (non heart related)
  - 3: Asymptomatic: chest pain not showing signs of disease
- 4. trestbps resting blood pressure (in mm Hg on admission to the hospital)
  - anything above 130-140 is typically cause for concern
- 5. chol serum cholestoral in mg/dl
  - serum = LDL + HDL + .2 \* triglycerides
  - above 200 is cause for concern
- 6. fbs (fasting blood sugar > 120 mg/dl) (1 = true; 0 = false)
  - '>126' mg/dL signals diabetes
- 7. restecg resting electrocardiographic results
  - 0: Nothing to note
  - 1: ST-T Wave abnormality
    - can range from mild symptoms to severe problems
    - signals non-normal heart beat
  - 2: Possible or definite left ventricular hypertrophy
    - Enlarged heart's main pumping chamber
- 8. thalach maximum heart rate achieved
- 9. exang exercise induced angina (1 = yes; 0 = no)
- 10. oldpeak ST depression induced by exercise relative to rest
  - looks at stress of heart during excercise
  - unhealthy heart will stress more
- 11. slope the slope of the peak exercise ST segment
  - 0: Upsloping: better heart rate with excercise (uncommon)
  - 1: Flatsloping: minimal change (typical healthy heart)
  - 2: Downslopins: signs of unhealthy heart
- 12. ca number of major vessels (0-3) colored by flourosopy
  - colored vessel means the doctor can see the blood passing through
  - the more blood movement the better (no clots)
- 13. thal thalium stress result
  - 1,3: normal
  - 6: fixed defect: used to be defect but ok now
  - 7: reversable defect: no proper blood movement when excercising
- 14. target have disease or not (1=yes, 0=no) (= the predicted attribute)