Structure :

Objective : is to show the tradeoff between Fairness(Model performance) and Privacy.

What we are doing? :

1. Preserve the privacy
   1. Using DP & FL
   2. Evaluate :
      1. Privacy :
         1. using Epsilon and Sensitivity (Metric M)
         2. Figure out how to quantify this sensitivity
         3. Establish some x amount of privacy (95% private)
         4. 3 Models : (1. Simple : FFNN , 2. CNN, 3. Etc etc)
         5. Different amount of model performance (in our case fairness is the model performance)
2. How do we
3. How are we proving the objective?
   1. We are just showing the drop in Model Performance when privacy is applied.
      1. We are not showing if prvacy is oreerved on ntest data!
      2. Even after implementing fairness techniques, model performance drops
   2. What we actually need to show : Increase in Fairness when decrease in privacy, and vice versa.