For your next vacation, you decided to spend a week with five of your friends from school. It is a very convenient house with many things to do nearby. But the most important benefit is that everybody has commited to be happy when they are in the house. So anyone wanting to enter the house must prove their current state of happiness.

Figure 1 : **the Happy House**

As a deep learning expert, to make sure the "Happy" rule is strictly applied, you are going to build an algorithm which that uses pictures from the front door camera to check if the person is happy or not. The door should open only if the person is happy.

You have gathered pictures of your friends and yourself, taken by the front-door camera. The dataset is labbeled.

Happy House Members

Labels

$$y = \begin{cases} 0 & \longrightarrow \text{"not happy"} \\ 1 & \longrightarrow \text{"happy"} \end{cases}$$