

# Task -2: Titanic Classification

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To build a system that tells whether a person will be saved from sinking, we would need to consider a variety of factors, including:

- Socio-economic status: People with higher socio-economic status are more likely to have access to life jackets and other safety equipment, and they are also more likely to be able to afford to travel on ships with better safety records.
- Age: Children and the elderly are more vulnerable in sinking accidents, as they may have difficulty swimming or finding their way to safety.
- Gender: Women are more likely to survive sinking accidents than men. This is thought to be due to a number of factors, including women's natural body fat, which helps to insulate them from the cold water, and women's tendency to be more risk-averse and less likely to take unnecessary risks.
- Other factors: Other factors that may affect a person's chances of survival in a sinking accident include their swimming ability, their physical fitness, and their knowledge of safety procedures.

To build a system that predicts a person's chances of survival in a sinking accident, we could use a machine learning algorithm such as logistic regression or support vector machines. The algorithm would be trained on a dataset of historical data, including information about people who have survived and perished in sinking accidents. The algorithm would then learn to identify the factors that are most predictive of survival.

Once the algorithm is trained, it could be used to predict a person's chances of survival in a sinking accident based on their individual characteristics. The system could be used to help people make informed decisions about their safety, such as whether to wear a life jacket or to stay calm and follow safety instructions.

It is important to note that no system can perfectly predict whether or not a person will survive a sinking accident. However, a well-trained machine learning algorithm can be a valuable tool for assessing a person's risk and helping them to make informed decisions about their safety.