This Bachelor thesis describes a binary logistic regression model. By means of the term loss function a parameter estimation for the model is derived. A „rich“ set of „proper“ loss functions – beta family of Fisher-consistent loss functions – is defined. In the second part of the thesis, four basic goodness-of-fit criteria - Gini coefficient, C-statistics, Kolmogorov-Smirnov statistics and coefficient of determination R^2 are defined. Further on, a possibility of parameter estimation by maximizing the Gini coefficient is analysed. Several algorithms are designed for this purpose. They are compared with so far existing methods in one simulated data set and three real ones.