$Y_i \sim \text{Bernoulli}(p)$

$E(Y_i) = \mu_i = p$

$$\log\left[\frac{P(Y=1)}{1-P(Y=1)}\right] = X\beta$$ logistic regressio

$E(Y_i) = \mu_i$

$$\log\left[\frac{\mu_i}{1-\mu_i}\right] = X\beta$$

$g(\mu_i) = \eta_i = X\beta$, $g(\mu_i) = \log\left(\frac{\mu_i}{1-\mu_i}\right)$

$g(x) = \log\left(\frac{x}{1-x}\right)$ logit function

$\log(\mu_i) = X\beta$

$g(\mu_i) = X\beta$, $g(\mu_i) = \log(\mu_i)$ log-lin