Report for Logistic Regression Model Logistic_Regression_Model

Basic Summary

Call:

glm(formula = Credit.Application.Result ~ Account.Balance +
Payment.Status.of.Previous.Credit + Purpose + Credit.Amount +
Length.of.current.employment + Instalment.per.cent + Most.valuable.available.asset,
family = binomial(logit), data = the.data)

Deviance Residuals:

Min	1Q	Median	3Q	Max
-2.289	-0.713	-0.448	0.722	2.454

Coefficients:

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-2.9621914	6.837e-01	-4.3326	1e-05***
Account.BalanceSome Balance	-1.6053228	3.067e-01	-5.2344	1.65e-07***
Payment.Status.of.Previous.CreditPaid Up	0.2360857	2.977e-01	0.7930	0.42775
Payment.Status.of.Previous.CreditSome Problems	1.2154514	5.151e-01	2.3595	0.0183*
PurposeNew car	-1.6993164	6.142e-01	-2.7668	0.00566**
PurposeOther	-0.3257637	8.179e-01	-0.3983	0.69042
PurposeUsed car	-0.7645820	4.004e-01	-1.9096	0.05618.
Credit.Amount	0.0001704	5.733e-05	2.9716	0.00296**
Length.of.current.employment4-7 yrs	0.3127022	4.587e-01	0.6817	0.49545
Length.of.current.employment< 1yr	0.8125785	3.874e-01	2.0973	0.03596*
Instalment.per.cent	0.3016731	1.350e-01	2.2340	0.02549*
Most.valuable.available.asset	0.2650267	1.425e-01	1.8599	0.06289.

Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial taken to be 1)

Null deviance: 413.16 on 349 degrees of freedom
Residual deviance: 328.55 on 338 degrees of freedom
McFadden R-Squared: 0.2048, AIC: 352.5
Number of Fisher Scoring iterations: 5

Type II Analysis of Deviance Tests

Response: Credit.Application.Result

	LR Chi-Sq	DF	Pr(>Chi-Sq)
Account.Balance	31.129	1	2.41e-08***
Payment.Status.of.Previous.Credit	5.687	2	0.05823.
Purpose	12.225	3	0.00665**
Credit.Amount	9.882	1	0.00167**
Length.of.current.employment	5.522	2	0.06324.
Instalment.per.cent	5.198	1	0.02261*
Most.valuable.available.asset	3.509	1	0.06104.

Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Basic Diagnostic Plots

Residuals vs Fitted

Residuals

Predicted values

Normal Q-Q

Std. deviance resid.

Theoretical Quantiles

Scale-Location

√|Std. deviance resid|

Predicted values

Residuals vs Leverage

Std. Pearson resid.

Cook's distance

Leverage