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Nominal Logistic Fit for converged

Effect Summary

Source	Logworth	PValue
app_id	28.097	0.00000
version	17.555	0.00000
rag	3.234	0.00058
app_id*summarized	2.788	0.00163
app_id*version	1.925	0.01190
version*summarized	1.007	0.09848
rag*summarized	0.747	0.17887
version*rag	0.676	0.21084
summarized	0.018	0.95851 ^

Converged in Gradient, 5 iterations

Iterations

Iter	Objective	Relative Gradient	Norm Gradient
0	690.37459184	15.854224306	215.6107604
1	554.44330153	3.4608164729	31.981682559
2	547.72250556	0.8430274764	4.9512381577
3	547.344787	0.0908044196	0.4213095905
4	547.34062479	0.0013422089	0.0062225442
5	547.34062389	3.146429e-7	1.4929754e-6

Whole Model Test

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	142.23054	29	284.4611	<.0001*
Full	547.34062			
Reduced	689.57116			

RSquare (U)	0.2063
AICc	1156.61
BIC	1301.79
Observations (or Sum Wgts)	996

Fit Details

Measure	Training	Definition
Entropy RSquare	0.2063	$1 - \text{Loglike}(\text{model}) / \text{Loglike}(0)$
Generalized RSquare	0.3314	$(1 - (L(0)/L(\text{model}))^{(2/n)}) / (1 - L(0)^{(2/n)})$
Mean -Log p	0.5495	$\sum -\text{Log}(p_{ij}) / n$
RASE	0.4305	$\sqrt{\sum (y_{ij} - p_{ij})^2 / n}$
Mean Abs Dev	0.3716	$\sum y_{ij} - p_{ij} / n$
Misclassification Rate	0.2892	$\sum (p_{ij} \neq p_{\text{Max}}) / n$
N	996	n

Lack Of Fit

Source	DF	-LogLikelihood	ChiSquare
Lack Of Fit	30	24.36333	48.72665
Saturated	59	522.97730	Prob>ChiSq
Fitted	29	547.34062	0.0168*

Parameter Estimates

Term	Estimate	Std Error	ChiSquare	Prob>ChiSq
Intercept	0.12052696	0.0962314	1.57	0.2104
app_id[WordPress]	1.01919314	0.1896463	28.88	<.0001*
app_id[Stack4Things]	-0.9922157	0.304667	10.61	0.0011*
app_id[Open Energy Monitor]	0.84017029	0.1767782	22.59	<.0001*
app_id[JetRacer]	-0.070417	0.1535951	0.21	0.6466
app_id[eWeLink]	0.62523412	0.1999081	9.78	0.0018*
version[v3]	1.09100533	0.1321583	68.15	<.0001*
version[v2]	-0.4637881	0.1331601	12.13	0.0005*
rag[1]	0.30232858	0.0886378	11.63	0.0006*

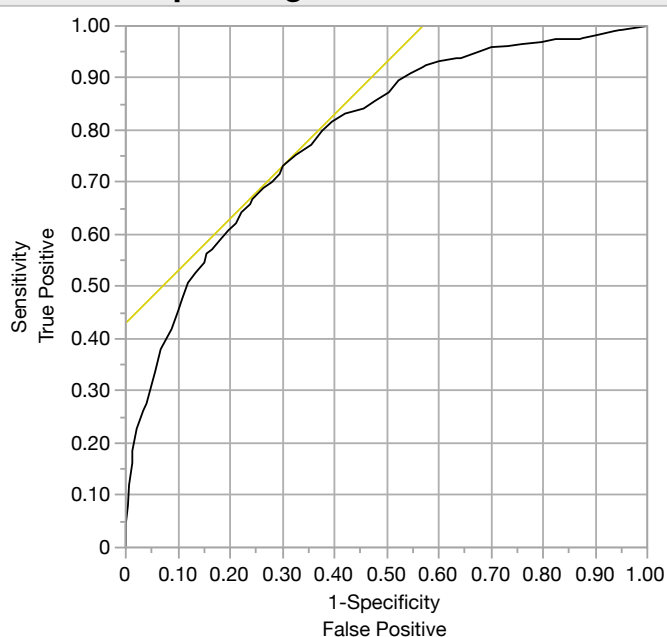
Nominal Logistic Fit for converged**Parameter Estimates**

Term	Estimate	Std Error	ChiSquare	Prob>ChiSq
summarized[1]	0.00458076	0.0880498	0.00	0.9585
app_id[WordPress]*version[v3]	-0.9349207	0.254043	13.54	0.0002*
app_id[WordPress]*version[v2]	0.26207014	0.276418	0.90	0.3431
app_id[Stack4Things]*version[v3]	0.50085932	0.3441304	2.12	0.1455
app_id[Stack4Things]*version[v2]	0.2100421	0.4029729	0.27	0.6022
app_id[Open Energy Monitor]*version[v3]	0.76198994	0.2836062	7.22	0.0072*
app_id[Open Energy Monitor]*version[v2]	-0.4008247	0.2263233	3.14	0.0766
app_id[JetRacer]*version[v3]	-0.125994	0.2128619	0.35	0.5539
app_id[JetRacer]*version[v2]	0.0047845	0.2137432	0.00	0.9821
app_id[eWeLink]*version[v3]	-0.0260423	0.287104	0.01	0.9277
app_id[eWeLink]*version[v2]	0.01993729	0.2785931	0.01	0.9429
app_id[WordPress]*summarized[1]	-0.2945887	0.1838773	2.57	0.1091
app_id[Stack4Things]*summarized[1]	-0.5937802	0.2502835	5.63	0.0177*
app_id[Open Energy Monitor]*summarized[1]	0.28111996	0.1624333	3.00	0.0835
app_id[JetRacer]*summarized[1]	0.53401893	0.1502435	12.63	0.0004*
app_id[eWeLink]*summarized[1]	-0.0579872	0.1960566	0.09	0.7674
version[v3]*rag[1]	-0.0376697	0.1237682	0.09	0.7609
version[v2]*rag[1]	-0.1704807	0.1238495	1.89	0.1687
version[v3]*summarized[1]	0.19610203	0.1122106	3.05	0.0805
version[v2]*summarized[1]	-0.2112435	0.1079831	3.83	0.0504
rag[1]*summarized[1]	-0.1198802	0.0892051	1.81	0.1790

For log odds of 1/0

Effect Likelihood Ratio Tests

Source	Nparm	DF	ChiSquare	Prob>ChiSq
app_id	5	5	141.645823	<.0001*
version	2	2	80.8437988	<.0001*
rag	1	1	11.8267467	0.0006*
summarized	1	1	0.00270601	0.9585
app_id*version	10	10	22.7027385	0.0119*
app_id*summarized	5	5	19.3852175	0.0016*
version*rag	2	2	3.11327659	0.2108
version*summarized	2	2	4.63579234	0.0985
rag*summarized	1	1	1.80702111	0.1789

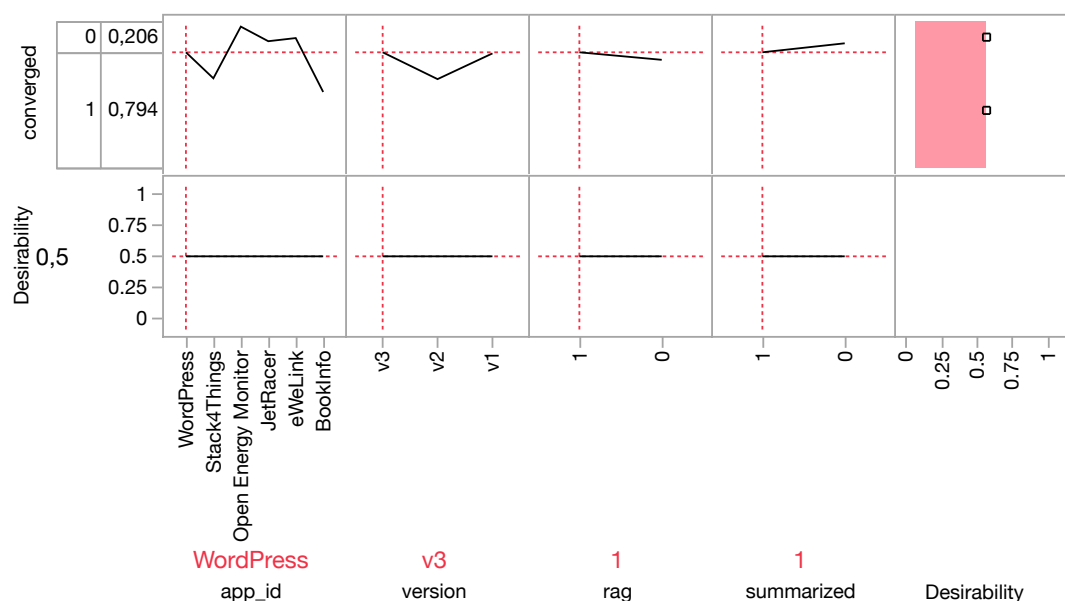
Receiver Operating Characteristic

Using converged='1' to be the positive level

AUC

Nominal Logistic Fit for converged

Prediction Profiler



Odds Ratios

For converged odds of 1 versus 0

Odds Ratios for app_id

Level1	/Level2	Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald)	
				Lower	Upper
WordPress	BookInfo	11.48633	<.0001*	6.605431	19.97385
Stack4Things	BookInfo	1.536872	0.2800	0.704713	3.351687
Open Energy Monitor	BookInfo	9.603573	<.0001*	5.764457	15.99953
JetRacer	BookInfo	3.863401	<.0001*	2.427387	6.148944
eWeLink	BookInfo	7.746174	<.0001*	4.365555	13.74469
BookInfo	eWeLink	0.129096	<.0001*	0.072755	0.229066
WordPress	eWeLink	1.48284	0.1644	0.850979	2.583865
Stack4Things	eWeLink	0.198404	0.0001*	0.087237	0.45123
Open Energy Monitor	eWeLink	1.239783	0.4542	0.706183	2.176575
JetRacer	eWeLink	0.49875	0.0092*	0.29555	0.841656
eWeLink	JetRacer	2.005014	0.0092*	1.188134	3.383525
BookInfo	JetRacer	0.258839	<.0001*	0.16263	0.411966
WordPress	JetRacer	2.973115	<.0001*	1.801645	4.9063
Stack4Things	JetRacer	0.397803	0.0168*	0.186917	0.846618
Open Energy Monitor	JetRacer	2.485782	0.0001*	1.56441	3.949804
JetRacer	Open Energy Monitor	0.402288	0.0001*	0.253177	0.639219
eWeLink	Open Energy Monitor	0.806593	0.4542	0.459437	1.416063
BookInfo	Open Energy Monitor	0.104128	<.0001*	0.062502	0.173477
WordPress	Open Energy Monitor	1.196048	0.5176	0.69542	2.057076
Stack4Things	Open Energy Monitor	0.160031	<.0001*	0.072988	0.350882
Open Energy Monitor	Stack4Things	6.248778	<.0001*	2.849963	13.70096
JetRacer	Stack4Things	2.513808	0.0168*	1.181171	5.349971
eWeLink	Stack4Things	5.04022	0.0001*	2.216163	11.46298
BookInfo	Stack4Things	0.650672	0.2800	0.298357	1.419018
WordPress	Stack4Things	7.473839	<.0001*	3.334548	16.75137
Stack4Things	WordPress	0.1338	<.0001*	0.059697	0.299891
Open Energy Monitor	WordPress	0.836087	0.5176	0.486127	1.43798
JetRacer	WordPress	0.336348	<.0001*	0.20382	0.555048
eWeLink	WordPress	0.674382	0.1644	0.387017	1.175118
BookInfo	WordPress	0.08706	<.0001*	0.050065	0.151391

Nominal Logistic Fit for converged

Odds Ratios

Odds Ratios for version

Level1	/Level2	Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald)	
				Lower	Upper
v3	v1	5.574611	<.0001*	3.48317	8.921842
v2	v1	1.177542	0.4988	0.733376	1.890714
v1	v2	0.849227	0.4988	0.528901	1.363556
v3	v2	4.734108	<.0001*	3.051457	7.344618
v2	v3	0.211233	<.0001*	0.136154	0.327712
v1	v3	0.179385	<.0001*	0.112084	0.287095

Odds Ratios for rag

Level1	/Level2	Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald)	
				Lower	Upper
1	0	1.830624	0.0006*	1.293308	2.591174
0	1	0.546262	0.0006*	0.385926	0.773211

Odds Ratios for summarized

Level1	/Level2	Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald)	
				Lower	Upper
1	0	1.009204	0.9585	0.714632	1.425198
0	1	0.99088	0.9585	0.701657	1.399321

Normal approximations used for ratio confidence limits effects: app_id version rag summarized
Tests and confidence intervals on odds ratios are Wald based.