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Nominal Logistic Fit for converged

Effect Summary

Source	Logworth		PValue
app_id	20.347		0.00000
version	16.462		0.00000
rag	1.483		0.03291
app_id*summarized	1.333		0.04643
app_id*version	1.195		0.06390
summarized	0.709		0.19546 ^
version*rag	0.701		0.19925
rag*summarized	0.384		0.41287
version*summarized	0.337		0.46048

Converged in Gradient, 6 iterations

Whole Model Test

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	117.52650	29	235.053	<.0001*
Full	506.25041			
Reduced	623.77691			

RSquare (U)	0.1884
AICc	1074.64
BIC	1216.57
Observations (or Sum Wgts)	900

Lack Of Fit

Source	DF	-LogLikelihood	ChiSquare
Lack Of Fit	30	29.15265	58.30531
Saturated	59	477.09775	**Prob>ChiSq**
Fitted	29	506.25041	0.0015*

Parameter Estimates

Term	Estimate	Std Error	ChiSquare	Prob>ChiSq	Lower 95%	Upper 95%
Intercept	0.19049358	0.0886261	4.62	0.0316*	0.01872715	0.36703181
app_id[WordPress]	0.7620618	0.2154744	12.51	0.0004*	0.34721513	1.19501431
app_id[Stack4Things]	-0.755421	0.1710935	19.49	<.0001*	-1.0978284	-0.4251991
app_id[Open Energy Monitor]	0.79407814	0.2115782	14.09	0.0002*	0.40640739	1.25467557
app_id[JetRacer]	-0.0575497	0.161065	0.13	0.7209	-0.3731682	0.25949646
app_id[eWeLink]	0.60264323	0.2182564	7.62	0.0058*	0.18192982	1.04159388
version[v3]	1.05070874	0.1350825	60.50	<.0001*	0.79380963	1.32608552
version[v2]	-0.3678497	0.1201579	9.37	0.0022*	-0.605117	-0.1332722
rag[1]	0.18519982	0.0871149	4.52	0.0335*	0.01500153	0.35682064
summarized[1]	0.10883508	0.0841277	1.67	0.1958	-0.0559357	0.27417919
app_id[WordPress]*version[v3]	-0.7453758	0.317515	5.51	0.0189*	-1.3555686	-0.1005079
app_id[WordPress]*version[v2]	0.19973007	0.2988278	0.45	0.5039	-0.3823239	0.79523448
app_id[Stack4Things]*version[v3]	0.28549988	0.2377609	1.44	0.2298	-0.1770065	0.75778357
app_id[Stack4Things]*version[v2]	0.1472736	0.2309389	0.41	0.5237	-0.3091593	0.5986921
app_id[Open Energy Monitor]*version[v3]	1.00030151	0.3678444	7.39	0.0065*	0.3524835	1.83859763
app_id[Open Energy Monitor]*version[v2]	-0.4820576	0.2577275	3.50	0.0614	-1.018351	0.00556604
app_id[JetRacer]*version[v3]	0.01242211	0.2421878	0.00	0.9591	-0.4561876	0.49701187
app_id[JetRacer]*version[v2]	-0.1152225	0.220525	0.27	0.6013	-0.5514831	0.31468267
app_id[eWeLink]*version[v3]	-0.3767911	0.3276185	1.32	0.2501	-0.9998746	0.29769368
app_id[eWeLink]*version[v2]	0.34867231	0.3001029	1.35	0.2453	-0.2366505	0.94615523
app_id[WordPress]*summarized[1]	-0.3266592	0.2124798	2.36	0.1242	-0.7472467	0.08900037
app_id[Stack4Things]*summarized[1]	-0.2860472	0.1665869	2.95	0.0860	-0.615387	0.03927598
app_id[Open Energy Monitor]*summarized[1]	0.19576521	0.1724326	1.29	0.2562	-0.1401345	0.53715082
app_id[JetRacer]*summarized[1]	0.37179742	0.1593476	5.44	0.0196*	0.06248261	0.6883078
app_id[eWeLink]*summarized[1]	-0.1118306	0.2140001	0.27	0.6013	-0.5318624	0.31047182
version[v3]*rag[1]	-0.1169266	0.1260606	0.86	0.3536	-0.3643682	0.13057052

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Parameter Estimates

Term	Estimate	Std Error	ChiSquare	Prob>ChiSq	Lower 95%	Upper 95%
version[v2]*rag[1]	-0.1046328	0.1195139	0.77	0.3813	-0.3391793	0.129821
version[v3]*summarized[1]	0.13599715	0.1176389	1.34	0.2477	-0.0933219	0.36866325
version[v2]*summarized[1]	-0.1064053	0.1073312	0.98	0.3215	-0.3171811	0.10399332
rag[1]*summarized[1]	-0.0710449	0.0868194	0.67	0.4132	-0.2417118	0.09894484

Confidence limits are likelihood-based.

For log odds of 1/0

Effect Likelihood Ratio Tests

Source	Nparm	DF	L-R ChiSquare	Prob>ChiSq
app_id	5	5	105.072578	<.0001*
version	2	2	75.8111504	<.0001*
rag	1	1	4.55020894	0.0329*
summarized	1	1	1.67596813	0.1955
app_id*version	10	10	17.5057277	0.0639
app_id*summarized	5	5	11.2618194	0.0464*
version*rag	2	2	3.22639469	0.1992
version*summarized	2	2	1.55095223	0.4605
rag*summarized	1	1	0.67050953	0.4129

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	8.230726	<.0001*	4.468942	15.15904
Stack4Things	BookInfo	1.804695	0.0213*	1.092038	2.982427
Open Energy Monitor	BookInfo	8.498507	<.0001*	4.720678	15.29963
JetRacer	BookInfo	3.626481	<.0001*	2.23114	5.894458
eWeLink	BookInfo	7.017841	<.0001*	3.788537	12.99977
BookInfo	eWeLink	0.142494	<.0001*	0.076924	0.263954
WordPress	eWeLink	1.172829	0.6282	0.615166	2.236025
Stack4Things	eWeLink	0.257158	<.0001*	0.140297	0.471358
Open Energy Monitor	eWeLink	1.210986	0.5774	0.617551	2.374683
JetRacer	eWeLink	0.516752	0.0279*	0.286837	0.930954
eWeLink	JetRacer	1.935166	0.0279*	1.074167	3.486297
BookInfo	JetRacer	0.275749	<.0001*	0.169651	0.448201
WordPress	JetRacer	2.269618	0.0059*	1.267076	4.065398
Stack4Things	JetRacer	0.497644	0.0040*	0.309496	0.800169
Open Energy Monitor	JetRacer	2.343459	0.0030*	1.336013	4.110586
JetRacer	Open Energy Monitor	0.42672	0.0030*	0.243274	0.748495
eWeLink	Open Energy Monitor	0.825773	0.5774	0.421109	1.6193
BookInfo	Open Energy Monitor	0.117668	<.0001*	0.065361	0.211834
WordPress	Open Energy Monitor	0.968491	0.9252	0.49632	1.889857
Stack4Things	Open Energy Monitor	0.212354	<.0001*	0.118983	0.378999
Open Energy Monitor	Stack4Things	4.709111	<.0001*	2.638533	8.404567
JetRacer	Stack4Things	2.009471	0.0040*	1.249736	3.231061
eWeLink	Stack4Things	3.888658	<.0001*	2.121528	7.127724
BookInfo	Stack4Things	0.55411	0.0213*	0.335297	0.915719
WordPress	Stack4Things	4.56073	<.0001*	2.503565	8.308258
Stack4Things	WordPress	0.219263	<.0001*	0.120362	0.39943
Open Energy Monitor	WordPress	1.032534	0.9252	0.529141	2.014828
JetRacer	WordPress	0.440603	0.0059*	0.245978	0.789219
eWeLink	WordPress	0.852639	0.6282	0.447222	1.625577
BookInfo	WordPress	0.121496	<.0001*	0.065967	0.223767

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	5.660815	<.0001*	3.639891	8.803787
v2	v1	1.370272	0.1122	0.928917	2.021327
v1	v2	0.729782	0.1122	0.494724	1.076522
v3	v2	4.131161	<.0001*	2.653481	6.431735
v2	v3	0.242063	<.0001*	0.155479	0.376863
v1	v3	0.176653	<.0001*	0.113587	0.274734

Odds Ratios for rag

Level1	/Level2	^ Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald) Lower	Upper
1	0	1.448313	0.0335*	1.029338	2.037827
0	1	0.690458	0.0335*	0.490719	0.971499

Odds Ratios for summarized

Level1	/Level2	^ Odds Ratio	Prob>Chisq	95% Confidence Interval (Wald) Lower	Upper
1	0	1.243177	0.1958	0.893951	1.72883
0	1	0.804391	0.1958	0.578426	1.11863

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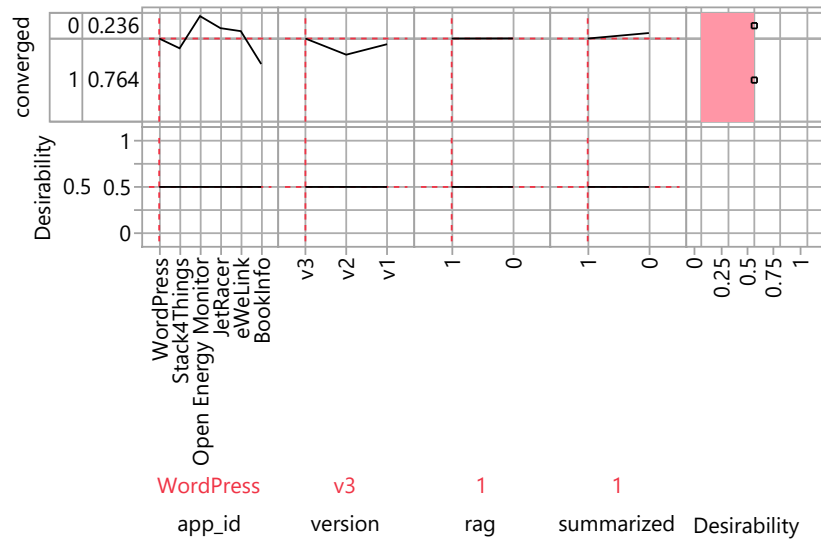
Tests and confidence intervals on odds ratios are Wald based.

Receiver Operating Characteristic
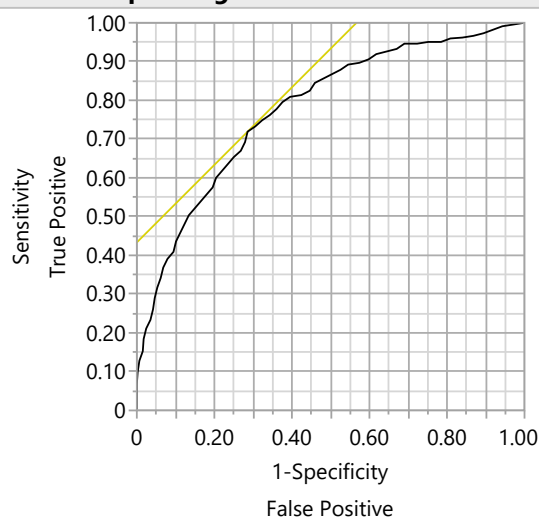
Using converged='1' to be the positive level

AUC
0.77866

Nominal Logistic Fit for converged

Prediction Profiler

	app_id	version	rag	summarized	Desirability
	WordPress	v3	1	1	

Precision-Recall Curve on Training Data

converged	Area
1	0.7799
0	0.7566