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Nominal Logistic Fit for converged

Effect Summary

| Source | Logworth | PValue |
|--------------------|----------|-----------|
| app_id | 20.494 | 0.00000 |
| version | 11.354 | 0.00000 |
| rag | 3.044 | 0.00090 |
| app_id*summarized | 1.673 | 0.02122 |
| app_id*version | 1.145 | 0.07162 |
| version*rag | 0.689 | 0.20471 |
| version*summarized | 0.358 | 0.43869 |
| rag*summarized | 0.332 | 0.46506 |
| summarized | 0.001 | 0.99660 ^ |

Converged in Gradient, 5 iterations

Whole Model Test

| Model | -LogLikelihood | DF | ChiSquare | Prob>ChiSq |
|------------|----------------|----|-----------|------------|
| Difference | 108.07316 | 29 | 216.1463 | <.0001* |
| Full | 436.48604 | | | |
| Reduced | 544.55920 | | | |

| | |
|----------------------------|---------|
| RSquare (U) | 0.1985 |
| AICc | 935.436 |
| BIC | 1072.98 |
| Observations (or Sum Wgts) | 786 |

Lack Of Fit

| Source | DF | -LogLikelihood | ChiSquare |
|-------------|----|----------------|------------|
| Lack Of Fit | 30 | 23.03062 | 46.06124 |
| Saturated | 59 | 413.45542 | Prob>ChiSq |
| Fitted | 29 | 436.48604 | 0.0307* |

Parameter Estimates

| Term | Estimate | Std Error | ChiSquare | Prob>ChiSq |
|---|------------|-----------|-----------|------------|
| Intercept | 0.14124467 | 0.1143886 | 1.52 | 0.2169 |
| app_id[WordPress] | 0.95649338 | 0.2133033 | 20.11 | <.0001* |
| app_id[Stack4Things] | -0.6355826 | 0.3978108 | 2.55 | 0.1101 |
| app_id[Open Energy Monitor] | 0.64663456 | 0.2003863 | 10.41 | 0.0013* |
| app_id[JetRacer] | -0.1936462 | 0.1754053 | 1.22 | 0.2696 |
| app_id[eWeLink] | 0.74438085 | 0.2274779 | 10.71 | 0.0011* |
| version[v3] | 1.00486019 | 0.1523846 | 43.48 | <.0001* |
| version[v2] | -0.290505 | 0.1557966 | 3.48 | 0.0622 |
| rag[1] | 0.32621217 | 0.0993236 | 10.79 | 0.0010* |
| summarized[1] | 0.00042005 | 0.0986322 | 0.00 | 0.9966 |
| app_id[WordPress]*version[v3] | -0.8096629 | 0.2937656 | 7.60 | 0.0058* |
| app_id[WordPress]*version[v2] | 0.13984567 | 0.30096 | 0.22 | 0.6422 |
| app_id[Stack4Things]*version[v3] | 0.26350484 | 0.4441957 | 0.35 | 0.5530 |
| app_id[Stack4Things]*version[v2] | 0.4496418 | 0.5281633 | 0.72 | 0.3946 |
| app_id[Open Energy Monitor]*version[v3] | 0.86129709 | 0.3130684 | 7.57 | 0.0059* |
| app_id[Open Energy Monitor]*version[v2] | -0.3888559 | 0.2552742 | 2.32 | 0.1277 |
| app_id[JetRacer]*version[v3] | -0.0030811 | 0.2408567 | 0.00 | 0.9898 |
| app_id[JetRacer]*version[v2] | -0.1717886 | 0.2412467 | 0.51 | 0.4764 |
| app_id[eWeLink]*version[v3] | -0.1746904 | 0.3289429 | 0.28 | 0.5954 |
| app_id[eWeLink]*version[v2] | 0.09050403 | 0.3145865 | 0.08 | 0.7736 |
| app_id[WordPress]*summarized[1] | -0.3114737 | 0.2061904 | 2.28 | 0.1309 |
| app_id[Stack4Things]*summarized[1] | -0.5349031 | 0.2978381 | 3.23 | 0.0725 |
| app_id[Open Energy Monitor]*summarized[1] | 0.23366265 | 0.1808492 | 1.67 | 0.1963 |
| app_id[JetRacer]*summarized[1] | 0.48679126 | 0.1670643 | 8.49 | 0.0036* |
| app_id[eWeLink]*summarized[1] | -0.0872171 | 0.2200239 | 0.16 | 0.6918 |

Nominal Logistic Fit for converged

Parameter Estimates

| Term | Estimate | Std Error | ChiSquare | Prob>ChiSq |
|---------------------------|------------|-----------|-----------|------------|
| version[v3]*rag[1] | -0.1350429 | 0.138735 | 0.95 | 0.3304 |
| version[v2]*rag[1] | -0.1197178 | 0.1379609 | 0.75 | 0.3855 |
| version[v3]*summarized[1] | 0.12599768 | 0.1263405 | 0.99 | 0.3186 |
| version[v2]*summarized[1] | -0.1429269 | 0.1190985 | 1.44 | 0.2301 |
| rag[1]*summarized[1] | -0.0727541 | 0.099629 | 0.53 | 0.4652 |

For log odds of 1/0

Effect Likelihood Ratio Tests

| Source | Nparm | DF | L-R | Prob>ChiSq |
|--------------------|-------|----|------------|------------|
| | | | ChiSquare | |
| app_id | 5 | 5 | 105.769105 | <.0001* |
| version | 2 | 2 | 52.2886561 | <.0001* |
| rag | 1 | 1 | 11.0167763 | 0.0009* |
| summarized | 1 | 1 | 1.81363e-5 | 0.9966 |
| app_id*version | 10 | 10 | 17.1260849 | 0.0716 |
| app_id*summarized | 5 | 5 | 13.2411591 | 0.0212* |
| version*rag | 2 | 2 | 3.17231026 | 0.2047 |
| version*summarized | 2 | 2 | 1.64794173 | 0.4387 |
| rag*summarized | 1 | 1 | 0.5336892 | 0.4651 |

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 | 11.87902 | <.0001* | 6.359613 | 22.18861 |
| Stack4Things | BookInfo | 2.417412 | 0.0852 | 0.88488 | 6.604153 |
| Open Energy Monitor | BookInfo | 8.713858 | <.0001* | 4.916426 | 15.44441 |
| JetRacer | BookInfo | 3.760808 | <.0001* | 2.227975 | 6.348222 |
| eWeLink | BookInfo | 9.608623 | <.0001* | 5.001889 | 18.45815 |
| BookInfo | eWeLink | 0.104073 | <.0001* | 0.054177 | 0.199924 |
| WordPress | eWeLink | 1.236287 | 0.4981 | 0.669264 | 2.28371 |
| Stack4Things | eWeLink | 0.251588 | 0.0090* | 0.089327 | 0.70859 |
| Open Energy Monitor | eWeLink | 0.906879 | 0.7611 | 0.482927 | 1.703009 |
| JetRacer | eWeLink | 0.391399 | 0.0017* | 0.218047 | 0.702571 |
| eWeLink | JetRacer | 2.554936 | 0.0017* | 1.423343 | 4.586173 |
| BookInfo | JetRacer | 0.2659 | <.0001* | 0.157524 | 0.448838 |
| WordPress | JetRacer | 3.158634 | <.0001* | 1.817147 | 5.490457 |
| Stack4Things | JetRacer | 0.642791 | 0.3738 | 0.2427 | 1.702429 |
| Open Energy Monitor | JetRacer | 2.317017 | 0.0012* | 1.391274 | 3.858743 |
| JetRacer | Open Energy Monitor | 0.431589 | 0.0012* | 0.259152 | 0.718766 |
| eWeLink | Open Energy Monitor | 1.102683 | 0.7611 | 0.587196 | 2.070705 |
| BookInfo | Open Energy Monitor | 0.11476 | <.0001* | 0.064748 | 0.2034 |
| WordPress | Open Energy Monitor | 1.363233 | 0.3120 | 0.747601 | 2.485822 |
| Stack4Things | Open Energy Monitor | 0.277422 | 0.0120* | 0.101981 | 0.754678 |
| Open Energy Monitor | Stack4Things | 3.604623 | 0.0120* | 1.325069 | 9.805756 |
| JetRacer | Stack4Things | 1.555717 | 0.3738 | 0.587396 | 4.120312 |
| eWeLink | Stack4Things | 3.974756 | 0.0090* | 1.411254 | 11.19478 |
| BookInfo | Stack4Things | 0.413666 | 0.0852 | 0.15142 | 1.130097 |
| WordPress | Stack4Things | 4.913939 | 0.0022* | 1.775063 | 13.60335 |
| Stack4Things | WordPress | 0.203503 | 0.0022* | 0.073511 | 0.56336 |
| Open Energy Monitor | WordPress | 0.733551 | 0.3120 | 0.402281 | 1.337612 |
| JetRacer | WordPress | 0.316593 | <.0001* | 0.182134 | 0.550313 |
| eWeLink | WordPress | 0.808874 | 0.4981 | 0.437884 | 1.494178 |

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 | 5.580149 | <.0001* | 3.161523 | 9.849069 |
| v2 | v1 | 1.527833 | 0.1512 | 0.85652 | 2.725298 |
| v1 | v2 | 0.654522 | 0.1512 | 0.366932 | 1.167515 |
| v3 | v2 | 3.652329 | <.0001* | 2.224013 | 5.997947 |
| v2 | v3 | 0.273798 | <.0001* | 0.166724 | 0.449638 |
| v1 | v3 | 0.179207 | <.0001* | 0.101532 | 0.316303 |

Odds Ratios for rag

| Level1 | /Level2 | Odds Ratio | Prob>Chisq | 95% Confidence Interval (Wald) | |
|--------|---------|------------|------------|--------------------------------|----------|
| | | | | Lower | Upper |
| 1 | 0 | 1.92019 | 0.0010* | 1.300934 | 2.834217 |
| 0 | 1 | 0.520782 | 0.0010* | 0.352831 | 0.768678 |

Odds Ratios for summarized

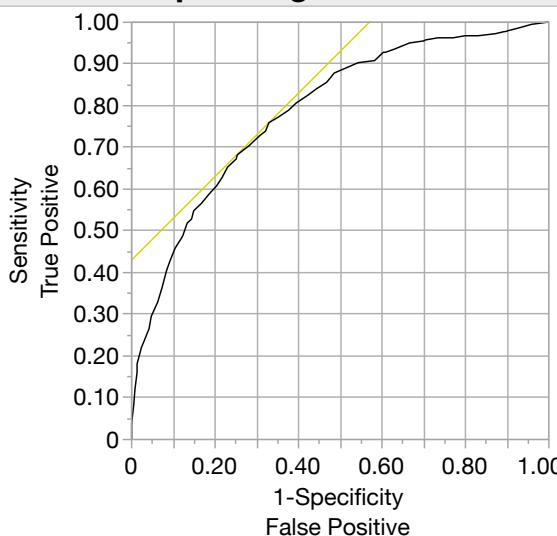
| Level1 | /Level2 | Odds Ratio | Prob>Chisq | 95% Confidence Interval (Wald) | |
|--------|---------|------------|------------|--------------------------------|----------|
| | | | | Lower | Upper |
| 1 | 0 | 1.00084 | 0.9966 | 0.679913 | 1.473251 |
| 0 | 1 | 0.99916 | 0.9966 | 0.678771 | 1.470777 |

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

0.78817

Nominal Logistic Fit for converged**Prediction Profiler**