

Table 1: Statistical analysis results on QA badges for Section 5.1

#Bug-fixing commits					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	-2.620e-05	1.426e-06	-18.37	<2e-16	***
LOC	3.694e-05	2.166e-06	17.05	<2e-16	***
#Commits	4.960e-02	1.227e-04	404.40	<2e-16	***
#Contributors	-1.953e-01	1.066e-02	-18.33	<2e-16	***
#Issues	3.223e+00	2.977e+00	1.083	0.279	
Age	-1.148e-07	5.023e-09	-22.86	<2e-16	***
(Intercept)	-6.436e-06	3.503e-07	-18.37	<2e-16	***
#Bug issues					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	-4.016e-02	1.937e-03	-20.735	< 2e-16	***
LOC	6.136e-02	3.638e-04	168.657	< 2e-16	***
#Commits	2.154e-01	3.981e-02	5.412	6.29e-08	***
#Issues	5.430e+01	2.619e+00	20.732	< 2e-16	***
#Contributors	5.430e+01	2.619e+00	20.732	< 2e-16	***
#Issues	3.636e-02	1.535e-04	236.813	< 2e-16	***
Age	7.858e-06	1.207e-06	6.513	7.53e-11	***
(Intercept)	1.303e-03	6.285e-05	20.737	< 2e-16	***
Lines of Testing Code (TLOC)					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	7.191e-03	2.662e-04	27.02	<2e-16	***
LOC	6.034e-02	4.042e-04	149.28	<2e-16	***
#Commits	-1.127e+00	2.289e-02	-49.24	<2e-16	***
#Contributors	5.373e+01	1.989e+00	27.02	<2e-16	***
#Issues	-1.788e-01	1.417e+00	-0.126	0.900	
Age	1.351e-05	9.373e-07	14.41	<2e-16	***
(Intercept)	1.766e-03	6.537e-05	27.02	<2e-16	***
#Commits containing testing code					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	1.556e-04	8.979e-06	17.33	<2e-16	***
LOC	-2.184e-04	1.364e-05	-16.01	<2e-16	***
#Commits	2.775e-02	7.722e-04	35.94	<2e-16	***
#Contributors	1.163e+00	6.710e-02	17.33	<2e-16	***
#Issues	3.733e-07	2.064e-07	1.809	0.0705	.
Age	6.339e-07	3.162e-08	20.05	<2e-16	***
(Intercept)	3.822e-05	2.206e-06	17.33	<2e-16	***
#Stars					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	2.739e-03	2.449e-05	111.86	< 2e-16	***
LOC	-2.916e-04	3.720e-05	-7.84	4.58e-15	***
#Commits	-1.350e-01	2.106e-03	-64.11	< 2e-16	***
#Contributors	2.047e+01	1.830e-01	111.86	< 2e-16	***
#Issues	7.847e+00	1.211e+01	0.648	0.516846	
Age	3.540e-06	8.624e-08	41.05	< 2e-16	***
(Intercept)	6.729e-04	6.015e-06	111.86	< 2e-16	***
#Forks					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	7.128e-04	6.315e-06	112.866	< 2e-16	***
LOC	-7.822e-05	9.592e-06	-8.155	3.56e-16	***
#Commits	-3.300e-02	5.431e-04	-60.772	< 2e-16	***
#Contributors	5.326e+00	4.719e-02	112.868	< 2e-16	***
#Issues	5.239e+00	3.724e+00	1.407	0.159	
Age	6.614e-07	2.224e-08	29.742	< 2e-16	***
(Intercept)	1.751e-04	1.551e-06	112.866	< 2e-16	***
#Watchers					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	9.174e-05	9.742e-07	94.178	< 2e-16	***
LOC	-7.846e-06	1.480e-06	-5.303	1.15e-07	***
#Commits	-4.207e-03	8.377e-05	-50.220	< 2e-16	***
#Contributors	6.856e-01	7.279e-03	94.180	< 2e-16	***
#Issues	7.149e-07	1.488e-06	0.481	0.631	
Age	2.054e-07	3.431e-09	59.874	< 2e-16	***
(Intercept)	2.254e-05	2.393e-07	94.178	< 2e-16	***

* Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1

Table 2: Longitudinal analysis results on QA badges for Section 5.2

#Bug-fixing commits					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	-2.314e-08	9.766e-11	-236.976	< 2e-16	***
LOC	6.972e-06	1.633e-06	4.269	1.97e-05	***
#Commits	3.636e-02	1.534e-04	236.979	< 2e-16	***
Age	-8.257e-08	5.749e-09	-14.363	< 2e-16	***
#Issues	-5.038e-07	2.840e-07	-1.774	0.0761	.
(Intercept)	1.280e-07	5.403e-10	236.981	< 2e-16	***
#Bug issues					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	-2.163e+01	1.208e+01	-1.791	0.0734	.
LOC	-1.251e-04	1.265e-05	-9.888	< 2e-16	***
#Commits	8.914e-02	6.953e-04	128.210	< 2e-16	***
Age	1.527e-07	7.939e-08	1.923	0.0545	.
#Issues	3.851e-09	9.165e-12	420.160	<2e-16	***
(Intercept)	7.306e+01	1.857e+01	3.934	8.37e-05	***
Lines of Testing Code (TLOC)					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	3.431e-07	1.587e-08	21.62	<2e-16	***
LOC	4.854e-02	2.655e-04	182.86	<2e-16	***
#Commits	5.393e-01	2.494e-02	21.63	<2e-16	***
Age	1.739e-05	9.343e-07	18.61	<2e-16	***
#Issues	3.728e+00	2.894e-02	128.79	<2e-16	***
(Intercept)	1.900e-06	8.780e-08	21.64	<2e-16	***
#Commits containing testing code					
Variable	Coeff.	Std. Error	t value	Pr(> t)	Signif.*
Treatment	4.557e-08	3.539e-10	128.794	<2e-16	***
LOC	-6.367e-06	5.918e-06	-1.076	0.282	.
#Commits	7.161e-02	5.560e-04	128.795	<2e-16	***
Age	4.890e-07	2.083e-08	23.478	<2e-16	***
#Issues	1.153e-04	8.951e-07	128.79	<2e-16	***
(Intercept)	2.521e-07	1.957e-09	128.796	<2e-16	***

* Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1