

Table I: The definitions of variables and their statistics (median/mean) among different project groups. For each variable, the *negative group* is the group of projects where LIME generates negative local explanations for this variable and the *positive group* is the group of projects where LIME generates positive local explanations for this variable. (t=1, m=2, k=1)

	Variable	Definition	Negative Group	Positive Group	r	
Willingness of Participants	Core	#cmt_c	6.00/8.98	40.00/53.37*	0.74↑	
		#pr_c	0.00/0.00	0.33/0.66*	0.21↑	
		#issue_c	3.00/6.33	0.00/0.00*	0.80↓	
		#iss_comment_c	0.00/0.09	5.00/11.92*	0.75↑	
		#cmt_comment_c	0.00/0.03	0.00/0.32*	0.10-	
		#iss_event_c	7.00/20.18	0.00/0.14*	0.77↓	
		#following_c	50.00/127.68	2.00/5.00*	0.75↓	
		#star_pro_c	47.00/142.94	2.00/18.49*	0.68↓	
	Peripheral	#cmt_p	0.00/0.34	1.00/2.26*	0.42↑	
		#pr_p	0.00/0.00	0.00/0.09*	0.05-	
		#issue_p	1.00/3.08	0.00/0.00*	0.47↓	
		#iss_comment_p	0.00/0.01	1.00/3.69*	0.41↑	
		#cmt_comment_p	0.00/0.17	0.00/0.00*	0.06-	
		#iss_event_p	2.50/7.69	0.00/0.00*	0.49↓	
		#following_p	8.33/38.56	0.00/0.00*	0.71↓	
		#star_pro_p	15.50/79.02	0.00/0.00*	0.74↓	
	Non-code	#issue_n	1.70/5.09	0.00/0.69*	0.57↓	
		#iss_comment_n	0.00/0.03	0.90/1.92*	0.75↑	
		#cmt_comment_n	0.00/0.01	0.00/0.07*	0.10-	
		#iss_event_n	1.00/2.96	0.00/0.07*	0.65↓	
		#following_n	29.00/78.77	0.00/1.09*	0.73↓	
		#star_pro_n	0.00/33.01	3.00/77.99*	0.18↑	
		#cmt_actday	3.00/3.00	12.00/12.00*	0.87↑	
		#cmt_median	0.00/0.00	1.50/2.64*	0.62↑	
#cmt_front	The number of commits in the first half of observation period		52.00/69.00	9.00/11.00*	0.70↓	
#cmt_end	The number of commits in the second half of observation period		29.00/46.00	1.00/3.00*	0.74↓	
cmt_day_std	The standard deviation of commits per day		3.43/4.51	0.88/0.90*	0.87↓	
cmt_dev_std	The standard deviation of commits per code contributor		0.00/4.74	0.50/8.81*	0.16↑	
Capacity of Participants	Core	#cmt_all_c	145.0/237.4	1703.0/2155.9*	0.80↑	
		#pr_all_c	24.00/66.91	1.00/42.87*	0.46↓	
		#issue_all_c	54.50/50.89	6.00/12.89*	0.36↓	
		#pro_c	20.00/19.32	6.00/6.26*	0.85↓	
		#pro_oneyear_c	0.00/0.25	3.00/3.57*	0.79↑	
		#pro_twoyear_c	0.00/0.05	2.00/2.75*	0.77↑	
	Peripheral	#follower_c	6.00/8.74	85.67/195.26*	0.85↑	
		#cmt_all_p	0.0/0.9	401.8/1077.0*	0.76↑	
		#pr_all_p	0.00/2.27	9.00/57.97*	0.59↑	
		#issue_all_p	0.00/0.95	6.50/23.87*	0.56↑	
		#pro_p	13.00/12.68	0.00/0.02*	0.76↓	
		#pro_oneyear_p	0.00/0.00	1.67/2.40*	0.60↑	
	Non-code	#pro_twoyear_p	0.00/0.26	0.00/0.10*	0.07-	
		#follower_p	0.00/2.10	10.00/58.70*	0.59↑	
		#cmt_all_n	0.0/200.2	435.7/954.4*	0.61↑	
		#pr_all_n	21.50/66.22	0.00/12.32*	0.64↓	
		#issue_all_n	0.00/5.10	44.50/45.95*	0.56↑	
		#pro_n	20.00/16.76	0.00/2.17*	0.77↓	
	Oppo.	#pro_oneyear_n	1.00/1.57	0.00/0.28*	0.36↓	
		#pro_twoyear_n	0.00/0.63	0.00/0.27*	0.19↓	
		#follower_n	0.00/2.51	59.80/136.24*	0.77↑	
		#iss_open	3.00/8.00	0.00/0.00*	0.57↓	
		iss_open_ratio	0.00/0.03	0.83/0.75*	0.80↑	
		#GFI	0.00/0.00	0.00/0.00*	0.09-	
Control Variables	#line_readme	25.00/43.00	25.00/82.00*	0.28↑		
	#line_contributing	0.00/0.00	0.00/49.00*	0.25↑		
	show_comp_c	0.00/0.07	1.00/0.94*	0.85↑		
	#org_c	2.00/2.87	0.00/0.09*	0.79↓		
	show_comp_p	0.00/0.00	1.00/0.78*	0.64↑		
	#org_p	0.00/0.21	0.00/0.33*	0.05-		
	show_comp_n	0.00/0.04	0.80/0.68*	0.69↑		
	#org_n	0.60/1.35	0.00/0.19*	0.41↓		
	type	The type of project owner account (0: organization, 1: user)		1.00/1.00	0.00/0.00*	0.87↓
	#star	The number of stars three months after project creation		2.00/14.00	0.00/31.00*	0.39↓
#fork	The number of forks three months after project creation		0.00/0.00	4.00/13.00*	0.48↑	
#member	The number of project members three months after project creation		0.00/0.00	1.00/3.00*	0.62↑	

* p -value<0.00078; r represents the effect size ($r = z/\sqrt{N}$); ↑, ↓, ↑ means the positive group has higher median for this variable and the effect size is small, medium, and large, respectively (↓, ↓, ↓ vice versa).

Table II: The definitions of variables and their statistics (median/mean) among different project groups. For each variable, the *negative group* is the group of projects where LIME generates negative local explanations for this variable and the *positive group* is the group of projects where LIME generates positive local explanations for this variable. (t=3, m=2, k=2)

	Variable	Definition	Negative Group	Positive Group	r
Willingness of Participants	Core	#cmt_c	17.00/21.10	90.00/121.18*	0.71↑
		#pr_c	0.00/0.00	0.33/0.76*	0.27↑
		#issue_c	3.00/7.74	0.00/0.50*	0.79↓
		#iss_comment_c	0.00/0.55	9.40/20.35*	0.70↑
		#cmt_comment_c	0.00/0.50	0.00/0.09*	0.12↓
		#iss_event_c	1.00/11.13	0.00/14.56*	0.08-
	Peripheral	#following_c	35.50/94.71	2.00/4.30*	0.74↓
		#star_pro_c	25.92/97.45	11.00/82.98*	0.09-
		#cmt_p	0.00/0.24	3.60/6.13*	0.74↑
		#pr_p	0.00/0.00	0.00/0.20*	0.13↑
		#issue_p	0.50/1.80	0.00/0.06*	0.43↓
		#iss_comment_p	1.00/3.80	0.00/0.09*	0.48↓
	Non-code	#cmt_comment_p	0.00/0.26	0.00/0.01*	0.10-
		#iss_event_p	2.50/8.55	0.00/0.01*	0.64↓
		#following_p	0.00/2.04	4.00/25.53*	0.46↑
		#star_pro_p	20.67/84.78	0.00/1.68*	0.69↓
		#issue_n	4.00/9.57	0.00/0.47*	0.70↓
		#iss_comment_n	0.00/0.08	1.10/2.54*	0.79↑
Capacity of Participants	Core	#cmt_comment_n	0.00/0.03	0.00/0.09*	0.08-
		#iss_event_n	1.70/4.93	0.00/0.21*	0.63↓
		#following_n	11.00/41.27	0.00/14.83*	0.62↓
		#star_pro_n	0.00/21.32	41.80/124.23*	0.53↑
		#cmt_actday	6.00/6.00	23.00/27.00*	0.87↑
		#cmt_median	1.00/1.49	0.00/0.01*	0.29↓
	Peripheral	#cmt_front	63.00/95.00	13.00/16.00*	0.74↓
		#cmt_end	4.00/27.00	11.00/34.00*	0.21↑
		cmt_day_std	2.74/3.64	0.82/0.83*	0.85↓
		cmt_dev_std	2.16/16.48	3.40/14.64	0.00-
		#cmt_all_c	185.5/264.6	1749.0/2187.4*	0.82↑
		#pr_all_c	23.00/60.84	1.00/66.39*	0.34↓
	Non-code	#issue_all_c	21.00/28.58	11.00/37.32*	0.01-
		#pro_c	20.00/18.64	6.00/6.45*	0.81↓
		#pro_oneyear_c	0.00/0.27	3.00/3.74*	0.81↑
		#pro_twoyear_c	0.00/0.59	1.00/1.80*	0.46↑
		#follower_c	6.00/7.47	80.00/186.08*	0.86↑
		#cmt_all_p	0.0/11.9	519.0/1113.9*	0.78↑
Oppo.	Core	#pr_all_p	24.33/77.27	0.00/0.20*	0.82↓
		#issue_all_p	0.00/0.34	27.80/38.00*	0.74↑
		#pro_p	13.50/12.87	0.00/0.30*	0.81↓
		#pro_oneyear_p	0.00/0.00	1.50/2.18*	0.73↑
		#pro_twoyear_p	0.00/0.03	0.50/0.99*	0.44↑
		#follower_p	0.00/21.55	1.00/32.53*	0.20↑
	Peripheral	#cmt_all_n	0.0/187.9	912.8/1290.3*	0.54↑
		#pr_all_n	32.20/78.01	0.00/7.11*	0.79↓
		#issue_all_n	1.00/14.08	36.70/42.57*	0.39↑
		#pro_n	18.60/16.73	0.00/2.11*	0.83↓
		#pro_oneyear_n	0.00/0.55	0.50/1.20*	0.30↑
		#pro_twoyear_n	0.00/0.37	0.00/0.75*	0.17↑
	Non-code	#follower_n	0.00/17.48	38.90/103.98*	0.51↑
		#iss_open	0.00/0.00	8.00/15.00*	0.73↑
		iss_open_ratio	0.00/0.10	0.78/0.73*	0.74↑
		#GFI	0.00/0.00	0.00/0.00*	0.05-
		#line_readme	88.00/130.00	2.00/14.00*	0.76↓
		#line_contributing	0.00/4.00	0.00/10.00*	0.05-
Control Variables	Core	show_comp_c	0.00/0.07	1.00/0.90*	0.84↑
		#org_c	1.00/2.05	0.00/0.45*	0.52↓
		show_comp_p	0.00/0.00	0.75/0.73*	0.75↑
		#org_p	0.00/0.08	0.50/1.21*	0.45↑
		show_comp_n	0.00/0.05	0.80/0.70*	0.79↑
	Peripheral	#org_n	0.00/0.17	1.00/1.84*	0.58↑
		type	1.00/1.00	0.00/0.00*	0.87↓
		#star	5.00/56.00	0.00/3.00*	0.75↓
		#fork	2.00/8.00	0.00/4.00*	0.58↓
		#member	0.00/0.00	1.00/3.00*	0.65↑

* p -value<0.00078; r represents the effect size ($r = z/\sqrt{N}$); ↑, ↓, ↑ means the positive group has higher median for this variable and the effect size is small, medium, and large, respectively (↓, ↓, ↓ vice versa).

Table III: The definitions of variables and their statistics (median/mean) among different project groups. For each variable, the *negative group* is the group of projects where LIME generates negative local explanations for this variable and the *positive group* is the group of projects where LIME generates positive local explanations for this variable. (t=3, m=2, k=6)

	Variable	Definition	Negative Group	Positive Group	r
Willingness of Participants	Core	#cmt_c	18.00/21.68	96.33/130.58*	0.72↑
		#pr_c	0.00/0.00	0.25/0.68*	0.25↑
		#issue_c	5.00/9.41	0.00/0.13*	0.80↓
		#iss_comment_c	5.00/13.60	0.00/1.70*	0.59↓
		#cmt_comment_c	0.00/0.76	0.00/0.06*	0.20↓
		#iss_event_c	1.50/8.91	0.00/16.17*	0.12↓
		#following_c	2.67/5.00	32.00/85.60*	0.56↑
		#star_pro_c	61.00/162.69	3.00/14.38*	0.71↓
		#cmt_p	0.00/0.41	2.50/4.73*	0.56↑
		#pr_p	0.00/0.00	0.00/0.15*	0.11↑
		#issue_p	0.50/1.79	0.00/0.06*	0.43↓
		#iss_comment_p	0.00/0.55	0.00/1.36*	0.12↑
	Peripheral	#cmt_comment_p	0.00/0.15	0.00/0.02*	0.06-
		#iss_event_p	2.00/7.75	0.00/0.04*	0.59↓
		#following_p	6.00/28.66	0.00/1.62*	0.58↓
		#star_pro_p	20.75/85.24	0.00/1.23*	0.72↓
	Non-code	#issue_n	1.70/5.92	0.00/2.55*	0.56↓
		#iss_comment_n	0.00/0.17	1.30/2.77*	0.56↑
		#cmt_comment_n	0.00/0.04	0.00/0.06*	0.02-
		#iss_event_n	0.33/1.74	0.00/2.21*	0.09-
		#following_n	20.33/60.34	0.00/2.18*	0.72↓
		#star_pro_n	1.00/14.30	62.20/142.39*	0.40↑
		#cmt_actday	6.00/6.00	24.00/28.00*	0.84↑
		#cmt_median	0.00/0.00	1.00/2.25*	0.38↑
		#cmt_front	42.00/60.00	19.00/50.00*	0.22↓
		#cmt_end	1.00/2.00	30.00/61.00*	0.87↑
		cmt_day_std	2.94/3.85	0.90/0.93*	0.84↓
		cmt_dev_std	4.50/12.83	0.00/18.10*	0.03-
Capacity of Participants	Core	#cmt_all_c	285.5/407.4	2104.0/2319.3*	0.59↑
		#pr_all_c	20.00/30.35	6.00/91.58*	0.08-
		#issue_all_c	9.25/24.79	28.37/41.48*	0.24↑
		#pro_c	20.00/18.06	5.00/5.78*	0.78↓
		#pro_oneyear_c	0.00/0.31	3.00/3.85*	0.79↑
		#pro_twoyear_c	0.00/0.50	1.00/1.91*	0.44↑
		#follower_c	6.00/7.41	80.00/185.75*	0.86↑
		#cmt_all_p	0.0/19.6	724.5/1305.7*	0.65↑
		#pr_all_p	13.00/61.10	0.00/7.97*	0.58↓
		#issue_all_p	0.00/2.08	12.00/26.59*	0.53↑
		#pro_p	14.00/13.22	0.00/0.39*	0.80↓
		#pro_oneyear_p	0.00/0.11	0.67/1.39*	0.47↑
	Peripheral	#pro_twoyear_p	0.00/0.01	1.00/1.27*	0.54↑
		#follower_p	0.00/0.59	35.00/95.11*	0.76↑
	Non-code	#cmt_all_n	131.1/265.1	460.9/1099.7*	0.17↑
		#pr_all_n	35.00/81.28	0.00/2.13*	0.84↓
		#issue_all_n	17.00/26.06	3.60/29.32*	0.07-
		#pro_n	18.50/16.74	0.00/1.89*	0.84↓
		#pro_oneyear_n	0.00/0.45	0.67/1.35*	0.32↑
		#pro_twoyear_n	0.00/0.66	0.00/0.43*	0.08-
		#follower_n	0.00/4.44	62.00/133.19*	0.78↑
Oppo.	#iss_open	The number of open issues three months after project creation	0.00/0.00	10.00/18.00*	0.72↑
	iss_open_ratio	The ratio of open issues three months after project creation	0.00/0.07	0.71/0.70*	0.78↑
	#GFI	The number of “good first issues” three months after project creation	0.00/0.00	0.00/0.00	0.00-
	#line_readme	The number of README.md lines	3.00/26.00	82.00/118.00*	0.55↑
	#line_contributing	The number of CONTRIBUTING.md lines	0.00/0.00	0.00/40.00*	0.24↑
Control Variables	show_comp_c	The ratio of core developers showing their affiliated companies/institutions	0.00/0.13	1.00/0.85*	0.73↑
	#org_c	The average number of GitHub organizations core developers belong to	2.00/2.85	0.00/0.14*	0.76↓
	show_comp_p	The ratio of peripheral developers showing their affiliated companies/institutions	0.00/0.00	0.75/0.73*	0.76↑
	#org_p	The average number of GitHub organizations peripheral developers belong to	0.00/0.04	1.00/1.49*	0.55↑
	show_comp_n	The ratio of non-code contributors showing their affiliated companies/institutions	0.00/0.08	0.80/0.67*	0.71↑
	#org_n	The average number of GitHub organizations non-code contributors belong to	1.00/1.64	0.00/0.23*	0.49↓
	type	The type of project owner account (0: organization, 1: user)	1.00/1.00	0.00/0.00*	0.87↓
	#star	The number of stars three months after project creation	5.00/57.00	0.00/0.00*	0.77↓
	#fork	The number of forks three months after project creation	2.00/5.00	0.00/7.00*	0.40↓
	#member	The number of project members three months after project creation	0.00/0.00	1.00/3.00*	0.66↑

* p -value<0.00078; r represents the effect size ($r = z/\sqrt{N}$); ↑, ↑, ↑ means the positive group has higher median for this variable and the effect size is small, medium, and large, respectively (↓, ↓, ↓ vice versa).

Table IV: The definitions of variables and their statistics (median/mean) among different project groups. For each variable, the *negative group* is the group of projects where LIME generates negative local explanations for this variable and the *positive group* is the group of projects where LIME generates positive local explanations for this variable. (t=3, m=1, k=1)

	Variable	Definition	Negative Group	Positive Group	r		
Willingness of Participants	Core	#cmt_c	15.00/19.07	83.00/114.24*	0.77↑		
		#pr_c	0.00/0.00	0.50/0.90*	0.30↑		
		#issue_c	4.00/8.66	0.00/0.07*	0.82↓		
		#iss_comment_c	0.00/5.81	0.50/7.67*	0.07-		
		#cmt_comment_c	0.00/0.60	0.00/0.08*	0.15↓		
		#iss_event_c	6.00/24.99	0.00/3.86*	0.54↓		
		#following_c	25.00/74.44	1.00/2.55*	0.80↓		
		#star_pro_c	90.00/191.98	10.00/18.12*	0.40↓		
	Peripheral	#cmt_p	0.00/0.85	1.50/3.64*	0.45↑		
		#pr_p	0.00/0.00	0.00/0.30*	0.17↑		
		#issue_p	1.00/2.94	0.00/0.00*	0.62↓		
		#iss_comment_p	0.10/2.76	0.00/0.20*	0.36↓		
		#cmt_comment_p	0.00/0.53	0.00/0.00*	0.17↓		
		#iss_event_p	0.25/4.49	0.00/0.35*	0.37↓		
		#following_p	10.00/37.26	0.00/0.20*	0.74↓		
		#star_pro_p	0.00/40.95	0.00/19.17*	0.21↓		
	Non-code	#issue_n	5.10/10.75	0.00/0.59*	0.62↓		
		#iss_comment_n	0.00/0.14	1.70/3.34*	0.74↑		
		#cmt_comment_n	0.00/0.01	0.00/0.20*	0.23↑		
		#iss_event_n	2.60/6.58	0.00/0.19*	0.73↓		
		#following_n	2.60/21.46	1.50/32.11*	0.03-		
		#star_pro_n	28.90/112.34	0.00/34.40*	0.38↓		
		#cmt_actday	6.00/6.00	23.00/27.00*	0.87↑		
		#cmt_median	0.00/0.00	1.00/2.40*	0.39↑		
	#cmt_front	The number of commits in the first half of observation period	37.00/53.00	16.00/57.00*	0.22↓		
	#cmt_end	The number of commits in the second half of observation period	3.00/45.00	10.00/13.00*	0.05-		
	cmt_day_std	The standard deviation of commits per day	2.82/3.75	0.85/0.85*	0.87↓		
	cmt_dev_std	The standard deviation of commits per code contributor	0.00/6.26	14.24/26.27*	0.38↑		
	Capacity of Participants	Core	#cmt_all_c	190.0/274.8	1778.0/2204.4*	0.81↑	
#pr_all_c			46.00/100.00	1.00/7.46*	0.74↓		
#issue_all_c			7.00/24.93	30.00/41.07*	0.28↑		
#pro_c			20.00/18.39	5.50/6.20*	0.80↓		
#pro_oneyear_c			0.00/0.33	3.00/4.08*	0.80↑		
#pro_twoyear_c			0.00/0.08	2.00/2.51*	0.82↑		
Peripheral		#follower_c	5.50/7.23	78.00/182.68*	0.86↑		
		#cmt_all_p	0.0/15.2	650.9/1243.4*	0.76↑		
		#pr_all_p	23.00/75.11	0.00/0.76*	0.82↓		
		#issue_all_p	0.00/4.07	7.33/23.35*	0.50↑		
		#pro_p	15.00/13.97	0.00/0.55*	0.78↓		
		#pro_oneyear_p	0.00/0.00	1.40/2.16*	0.72↑		
Non-code		#pro_twoyear_p	0.50/0.96	0.00/0.04*	0.42↓		
		#follower_p	0.00/24.39	0.00/28.46*	0.11↑		
		#cmt_all_n	0.0/319.6	558.4/1088.0*	0.38↑		
		#pr_all_n	37.18/83.84	0.00/1.91*	0.84↓		
		#issue_all_n	0.00/6.22	52.00/52.60*	0.73↑		
		#pro_n	19.70/17.16	0.00/3.46*	0.78↓		
		#pro_oneyear_n	0.50/1.38	0.00/0.40*	0.27↓		
		#pro_twoyear_n	0.90/1.36	0.00/0.11*	0.56↓		
		#follower_n	0.00/3.69	52.00/120.46*	0.78↑		
		Oppo.	#iss_open	The number of open issues three months after project creation	0.00/0.00	7.00/14.00*	0.69↑
			iss_open_ratio	The ratio of open issues three months after project creation	0.00/0.11	0.67/0.61*	0.60↑
#GFI			The number of “good first issues” three months after project creation	0.00/0.00	0.00/0.00*	0.01-	
#line_readme	The number of README.md lines		0.00/10.00	71.00/110.00*	0.70↑		
#line_contributing	The number of CONTRIBUTING.md lines		0.00/14.00	0.00/3.00*	0.09-		
Control Variables	show_comp_c	The ratio of core developers showing their affiliated companies/institutions	0.00/0.09	1.00/0.93*	0.85↑		
	#org_c	The average number of GitHub organizations core developers belong to	2.00/2.66	0.00/0.23*	0.62↓		
	show_comp_p	The ratio of peripheral developers showing their affiliated companies/institutions	0.00/0.00	0.75/0.73*	0.75↑		
	#org_p	The average number of GitHub organizations peripheral developers belong to	0.00/0.35	0.00/0.43*	0.04-		
	show_comp_n	The ratio of non-code contributors showing their affiliated companies/institutions	0.00/0.12	0.70/0.60*	0.59↑		
	#org_n	The average number of GitHub organizations non-code contributors belong to	1.00/1.61	0.00/0.21*	0.42↓		
	type	The type of project owner account (0: organization, 1: user)	1.00/1.00	0.00/0.00*	0.87↓		
	#star	The number of stars three months after project creation	5.00/62.00	0.00/0.00*	0.77↓		
	#fork	The number of forks three months after project creation	1.00/0.00	6.00/19.00*	0.58↑		
	#member	The number of project members three months after project creation	0.00/0.00	1.00/2.00*	0.38↑		

* $p\text{-value} < 0.00078$; r represents the effect size ($r = z/\sqrt{N}$); ↑, ↓, ↑ means the positive group has higher median for this variable and the effect size is small, medium, and large, respectively (↓, ↓, ↓ vice versa).

Table V: The definitions of variables and their statistics (median/mean) among different project groups. For each variable, the *negative group* is the group of projects where LIME generates negative local explanations for this variable and the *positive group* is the group of projects where LIME generates positive local explanations for this variable. (t=5, m=2, k=1)

	Variable	Definition	Negative Group	Positive Group	r
Willingness of Participants	Core	#cmt_c	23.50/28.01	123.00/170.78*	0.75↑
		#pr_c	0.00/0.01	0.00/0.52*	0.22↑
		#issue_c	4.00/9.22	0.00/0.03*	0.86↓
		#iss_comment_c	0.00/1.49	9.00/22.06*	0.59↑
		#cmt_comment_c	0.00/0.58	0.00/0.18*	0.12↓
		#iss_event_c	12.00/37.85	0.00/2.77*	0.64↓
		#following_c	29.00/79.98	1.50/4.35*	0.69↓
	Peripheral	#star_pro_c	15.00/125.08	22.00/66.20*	0.03-
		#cmt_p	0.00/0.43	4.00/6.52*	0.66↑
		#pr_p	0.00/0.00	0.33/0.63*	0.31↑
		#issue_p	1.00/2.81	0.00/0.00*	0.69↓
		#iss_comment_p	0.00/1.50	0.00/0.94*	0.09-
		#cmt_comment_p	0.00/0.22	0.00/0.02*	0.10-
		#iss_event_p	2.20/8.41	0.00/0.04*	0.69↓
	Non-code	#following_p	10.00/31.92	0.00/0.12*	0.81↓
		#star_pro_p	23.00/88.26	0.00/0.44*	0.83↓
		#issue_n	6.50/13.50	0.22/0.63*	0.76↓
		#iss_comment_n	0.00/0.20	1.70/3.69*	0.71↑
		#cmt_comment_n	0.00/0.12	0.00/0.03*	0.12↓
		#iss_event_n	0.33/4.26	0.43/1.20*	0.08-
		#following_n	13.00/49.41	1.50/9.80*	0.31↓
Capacity of Participants	Core	#star_pro_n	37.50/132.05	7.00/32.04*	0.25↓
		#cmt_actday	9.00/8.00	33.00/40.00*	0.87↑
		#cmt_median	0.00/0.02	0.00/0.57*	0.13↑
		#cmt_front	139.00/204.00	26.00/31.00*	0.74↓
		#cmt_end	68.00/124.00	7.00/10.00*	0.58↓
		cmt_day_std	2.13/2.90	0.63/0.67*	0.77↓
		cmt_dev_std	18.50/33.07	0.00/13.40*	0.57↓
	Peripheral	#cmt_all_c	241.0/339.7	2021.0/2382.2*	0.80↑
		#pr_all_c	32.00/72.59	2.50/64.09*	0.38↓
		#issue_all_c	4.00/26.47	33.00/42.84*	0.35↑
		#pro_c	20.00/18.67	6.50/6.79*	0.81↓
		#pro_oneyear_c	0.00/0.33	3.00/3.87*	0.80↑
		#pro_twoyear_c	0.00/0.22	1.90/2.46*	0.76↑
		#follower_c	5.00/7.57	74.00/176.13*	0.83↑
	Non-code	#cmt_all_p	0.0/45.0	918.5/1421.6*	0.62↑
		#pr_all_p	15.50/63.47	0.00/13.13*	0.58↓
		#issue_all_p	0.00/0.79	23.50/33.83*	0.79↑
		#pro_p	13.33/12.65	0.00/0.49*	0.83↓
		#pro_oneyear_p	0.00/0.04	1.33/2.04*	0.70↑
		#pro_twoyear_p	0.00/0.04	0.50/1.06*	0.52↑
		#follower_p	0.00/0.51	20.00/68.76*	0.84↑
Control Variables	Core	#cmt_all_n	0.0/313.1	747.9/1217.2*	0.65↑
		#pr_all_n	34.00/77.94	0.00/15.19*	0.70↓
		#issue_all_n	14.00/32.97	20.20/30.08*	0.06-
		#pro_n	19.00/17.48	0.00/3.23*	0.84↓
		#pro_oneyear_n	0.00/0.45	1.00/1.46*	0.38↑
		#pro_twoyear_n	0.00/0.55	0.00/0.72*	0.13↑
		#follower_n	0.70/9.93	66.60/131.77*	0.62↑
	Peripheral	#iss_open	0.00/2.00	4.00/10.00*	0.38↑
		iss_open_ratio	0.00/0.16	0.59/0.53*	0.50↑
		#GFI	0.00/0.00	0.00/0.00*	0.04-
		#line_readme	7.00/25.00	111.00/144.00*	0.61↑
		#line_contributing	0.00/1.00	0.00/29.00*	0.18↑
	Non-code	show_comp_c	0.00/0.15	1.00/0.83*	0.70↑
		#org_c	2.00/3.10	0.00/0.20*	0.72↓
		show_comp_p	0.00/0.01	0.67/0.69*	0.79↑
		#org_p	0.00/0.05	1.00/1.55*	0.63↑
		show_comp_n	0.00/0.18	0.60/0.58*	0.51↑
		#org_n	0.00/0.28	1.00/1.81*	0.52↑
		type	1.00/1.00	0.00/0.00*	0.87↓
Oppo.	Control Variables	#star	8.00/83.00	0.00/0.00*	0.76↓
		#fork	2.00/2.00	3.00/14.00*	0.01-
		#member	1.00/2.00	0.00/0.00*	0.56↓

* p -value<0.00078; r represents the effect size ($r = z/\sqrt{N}$); ↑, ↓, ↑ means the positive group has higher median for this variable and the effect size is small, medium, and large, respectively (↓, ↓, ↓ vice versa).