

## PAC(Passive Aggressive Classifier)

Raw data

	precision	recall	f1-score	support
integration	0.00	0.00	0.00	0
objective	0.97	0.45	0.61	729
quality	0.02	0.42	0.04	12
refactoring	0.00	0.00	0.00	0
testing	0.14	0.44	0.21	27
accuracy			0.45	768
macro avg	0.23	0.26	0.17	768
weighted avg	0.92	0.45	0.59	768

Process finished with exit code 0

After dropping duplicates

	precision	recall	f1-score	support
integration	0.23	0.05	0.08	59
objective	0.91	0.38	0.54	624
quality	0.01	0.75	0.03	4
refactoring	0.00	0.00	0.00	0
testing	0.14	0.41	0.21	29
accuracy			0.36	716
macro avg	0.26	0.32	0.17	716
weighted avg	0.81	0.36	0.49	716

Process finished with exit code 0

## SVM

	precision	recall	f1-score	support
integration	0.08	0.50	0.13	2
objective	0.95	0.38	0.54	661
quality	0.04	0.53	0.08	19
refactoring	0.00	0.00	0.00	0
testing	0.17	0.44	0.25	34
accuracy			0.39	716
macro avg	0.25	0.37	0.20	716
weighted avg	0.88	0.39	0.51	716

Process finished with exit code 0

## NB

	precision	recall	f1-score	support
integration	0.15	0.01	0.02	189
objective	0.25	0.43	0.31	155
quality	0.26	0.33	0.29	184
refactoring	0.00	0.00	0.00	4
testing	0.24	0.11	0.15	184
accuracy			0.21	716
macro avg	0.18	0.18	0.16	716
weighted avg	0.22	0.21	0.19	716

Process finished with exit code 0

## DTC

	precision	recall	f1-score	support
integration	0.08	0.09	0.08	11
objective	0.60	0.39	0.47	402
quality	0.40	0.38	0.39	245
refactoring	0.05	1.00	0.10	6
testing	0.23	0.38	0.29	52
accuracy			0.39	716
macro avg	0.27	0.45	0.27	716
weighted avg	0.49	0.39	0.42	716

## AdaBoost

	precision	recall	f1-score	support
integration	0.15	0.13	0.14	15
objective	0.29	0.36	0.32	215
quality	0.59	0.37	0.45	375
refactoring	0.07	0.47	0.12	17
testing	0.46	0.43	0.44	94
accuracy			0.37	716
macro avg	0.31	0.35	0.30	716
weighted avg	0.46	0.37	0.40	716

## SGD

	precision	recall	f1-score	support
integration	0.31	0.05	0.09	80
objective	0.36	0.40	0.38	237
quality	0.50	0.34	0.41	339
refactoring	0.02	0.40	0.03	5
testing	0.24	0.38	0.30	55
accuracy			0.33	716
macro avg	0.28	0.31	0.24	716
weighted avg	0.41	0.33	0.35	716

### SVM (with sampling)

	precision	recall	f1-score	support
integration	0.00	0.00	0.00	0
objective	0.99	0.44	0.61	755
quality	0.01	0.40	0.02	5
refactoring	0.00	0.00	0.00	0
testing	0.04	0.38	0.06	8
accuracy			0.44	768
macro avg	0.21	0.24	0.14	768
weighted avg	0.97	0.44	0.60	768