Table 1: Taxonomy of metrics considered for model construction

Dimension	Metrics	Values	Definition (d) – Rationale
12*Change Metrics	2*Log revision count	2*Numeric	d: The number of prior co
			r: This helps to identify if
	2*New file	2*Boolean (0 -1)	d: Check if the log is adde
			r: This helps to identify w
	2*Total revision count	2*Numeric	d: Total number of commi value is 0 for logs added in
			r: This helps to find out if changes [**?**].
	2*Code churn in commit	2*Numeric	d: The code churn of the c
			r: Log changes are correlat
	2*Variables declared	2*Numeric	d: The number of variable limit to 20 lines before log
			r: When new variables are obtain more information [?
	2*SLOC	2*Numeric	d: The number of lines of
			r: Large files have more fu more log changes [**?**, **?**].
22*Product Metrics	2*Log context	2*Categorical	d: Identify the block in wh 'exception', 'throw', 'new f
			r: Prior research finds that branching, return value ch
	2*Log variable count	2*Numerical	d: Number of variables log
			r: Over 62% of logs add ne log statement might result
	2*Log density	2*Numerical	d: Ratio of number of log
			r: Research has found that code [**?**]. If it is less it sugg
	2*Log level	2*Categorical	d: Identify the log level (ve 'debug', 'trace' and 'trace'
			r: Developers spend signifi logs [**?**].
	2*Log text length	2*Numerical	d: Number of text phrases pair of quotes as one phras
			r: Over 45% of logs have n phrases might be subject t
	2*Resolution time	2*Numerical	d: The time it takes for th since an issue is opened un
			r: More resolution time mi
	2*Number of developers involved	2*Numeric	d: Total number of unique JIRA.
			r: Components with many in turn may lead to more c
	2*Number of comments	2*Numeric	d: Total number of discuss
	1		r: Number of comments is More comments may also i code churn and log change
	2*Developer experience	2*Numeric	d: The number of commits
			r: Research has shown tha complex issues [**?**] and ther
	2*Issue type	2*Categorical	d: Identify the type of issu 'Sub-Task', 'Test'.
			r: Some issue types might and New features might ha and are committed faster.
	2*Priority type	2*Categorical	d: Identify the priority of and 'Trivial'