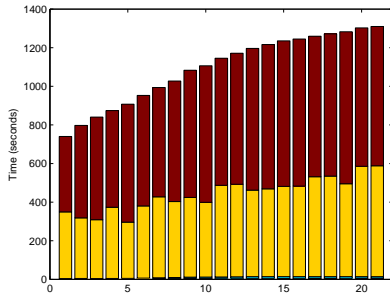
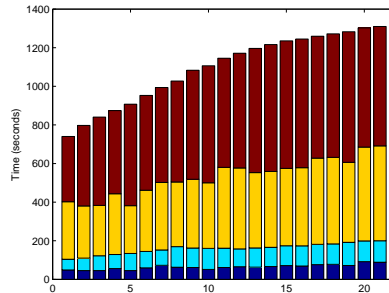


	Name	Container	Delay	min		max		med		std	
				F	L	F	L	F	L	F	L
$m_1$	setZip()	/jpetstore/domain/Account	5	5	6	34	43	10	11	10.3	6.4
$m_2$	getProductId()	/jpetstore/domain/Product	5	1	1	320	216	3	2.5	71.4	50.5
$m_3$	getCategoryId()	/jpetstore/domain/Product	5	1	1	112	81	6	5	33.4	24.7
$m_4$	getName()	/jpetstore/domain/Product	5	1	1	273	171	3	2	74.1	30.3
$m_5$	getItemListByProduct()	/jpetstore/persistence/sqlmapdao/ItemSqlMapDao	5	6	4	41	32	8.5	8	8.0	5.4
$m_6$	getProductListByCategory()	/jpetstore/persistence/sqlmapdao/ProductSqlMapDao	5	1	2	118	149	4	5	27.7	27.3
$m_7$	getUsername()	/jpetstore/presentation/AccountBean	5	1	3	52	90	6	8	10.6	15.6
$m_8$	setPassword()	/jpetstore/presentation/AccountBean	5	3	3	89	49	8	10	22.9	9.2
$m_9$	getAccount()	/jpetstore/presentation/AccountBean	5	1	1	304	230	2	2	71.9	51.1
$m_I$	getPrimitiveResultMappingValue	/sqlmap/engine/mapping/result/BasicResultMap	0	3	3	65	71	16	14	10.5	14.0
$m_{II}$	executeQuery	/sqlmap/engine/execution/SqlExecutor	0	5	6	96	54	11	14	16.7	10.0
$m_{III}$	getResults	/sqlmap/engine/mapping/result/BasicResultMap	0	7	3	76	94	16	14	12.5	21.9
$m_{IV}$	printStackTrace	/common/exception/NestedRuntimeException	0	2	5	119	63	12	13	23.5	13.2

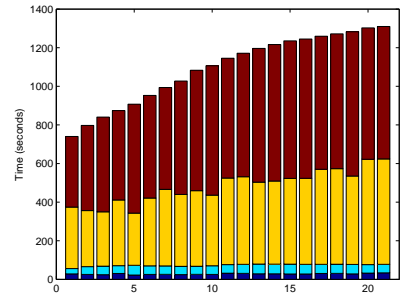
**Table 1: Descriptive statistics of ranks of artificial bottlenecks for JPetStore. We list the method name, container name and injected delay length measured in milliseconds. We list nine artificial bottlenecks and four natural bottlenecks. We report minimum, maximum, median and standard deviation of first generation (F) and last generation (L) for each bottleneck.**



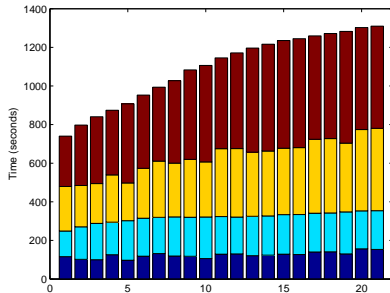
(a)  $m_1$



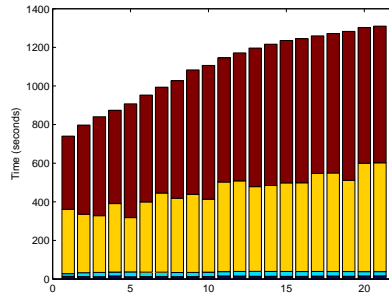
(b)  $m_2$



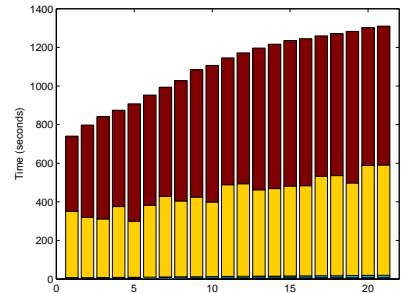
(c)  $m_3$



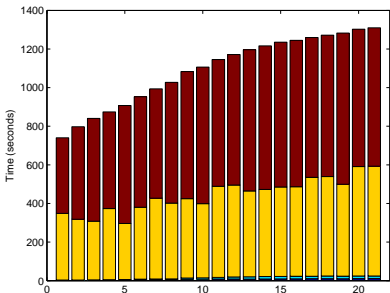
(d)  $m_4$



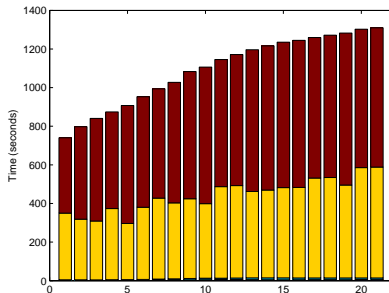
(e)  $m_5$



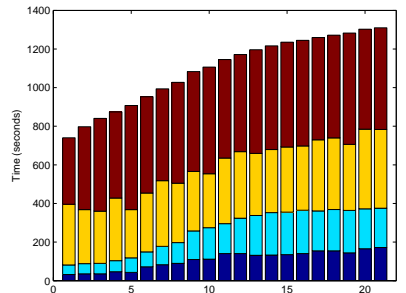
(f)  $m_6$



(g)  $m_7$



(h)  $m_8$



(i)  $m_9$

**Figure 1: Time contribution of bottlenecks in JPetStore. The x-axis corresponds to generations, and y-axis corresponds to the total elapsed time for one generation, measured in seconds. Figure 1(a) through 1(i) show the time contribution of artificial bottleneck  $m_1$  through  $m_9$ . In each figure, the contribution of the method is shown in dark blue (good traces) and light blue (bad traces). The contribution of all remaining methods is shown in yellow (good traces) and red (bad traces).**