HTML5 ON DIFFERENT BROWSERS - RESPONSE TIME

Action		Vehicles	Browser				
			Chrome	Firefox	Opera	Microsoft Internet Explorer 10	Microsoft Edge
Login			7.64	8.82	6.94	10.21	8.22
			7.41	9.46	5.97	10.56	8.15
			7.67	8.73	6.84	9.27	9.62
			6.86	9.34	6.43	12.98	9.09
Average			**7.40**	**9.09**	**6.55**	**10.76**	**8.77**
Today's path on map		MK XX 100 FLS	4.20	4.67	4.42	5.16	4.55
		BG XXXX CB	3.89	4.16	3.50	3.78	3.31
		UK XX01 XXX	3.81	3.59	3.04	3.52	3.28
		MZ XXX-000-XX	3.67	4.60	2.71	8.59	3.89
Average			**3.89**	**4.26**	**3.42**	**5.26**	**3.76**
Yesterday's path on map		MK XX 100 FLS	4.63	4.87	3.06	4.90	4.44
		BG XXXX CB	3.55	3.21	3.72	5.41	4.41
		UK XX01 XXX	3.35.	4.02	3.15	5.80	3.93
		MZ XXX-000-XX	3.43	3.97	2.73	10.38	5.31
Average			**3.87**	**4.02**	**3.17**	**6.62**	**4.52**
Last 4 days' path on map		MK XX 100 FLS	4.86	5.42	4.17	20.24	9.22
		BG XXXX CB	6.91	4.57	4.15	23.42	19.08
		UK XX01 XXX	4.96	3.67	4.14	7.91	4.77
		MZ XXX-000-XX	5.38	4.65	6.69	17.10	8.70
Average			**5.53**	**4.58**	**4.79**	**17.17**	**10.44**
Today's graph		MK XX 100 FLS	3.73	4.23	3.58	4.52	6.13
		BG XXXX CB	3.03	2.37	1.77	3.49	3.30
		UK XX01 XXX	2.31	2.00	1.89	3.03	2.32
		MZ XXX-000-XX	2.30	2.63	2.18	2.78	2.76
Average			**2.84**	**2.81**	**2.36**	**3.46**	**3.63**
Yesterday's graph		MK XX 100 FLS	4.48	4.26	4.05	4.72	4.26
		BG XXXX CB	2.92	2.20	2.06	2.54	2.47
		UK XX01 XXX	2.53	2.16	1.99	2.90	3.23
		MZ XXX-000-XX	2.08	2.38	1.84	2.58	3.70
Average			**3.00**	**2.75**	**2.49**	**3.19**	**3.42**
Last 4 days' graph		MK XX 100 FLS	8.00	8.57	7.66	8.54	12.82
		BG XXXX CB	6.18	7.76	6.85	6.26	7.12
		UK XX01 XXX	2.58	2.78	2.02	3.39	3.30
		MZ XXX-000-XX	2.94	3.25	2.88	3.32	3.59
Average			**4.93**	**5.59**	**4.85**	**5.38**	**6.71**
Average response time			**4.53**	**4.69**	**4.00**	**7.33**	**5.81**

This table shows the time it took to complete each action. All times in mm:ss.

Vehicle used	Vehicle class
MK XX 100 FLS	Heavy vehicle
BG XXXX CB	Heavy vehicle
UK XX01 XXX	Light vehicle
MZ XXX-000-XX	Light vehicle

HTML5 vs. Silverlight - RESPONSE TIME

Action		Vehicles	Browser - Firefox	
			Frotcom HTML5	Frotcom Silverlight
Login			8.33	10.48
			8.89	15.82
			8.33	9.16
			7.30	10.63
Average			**8.21**	**11.52**
Today's path on map		MK XX 100 FLS	3.26	5.13
		BG XXXX CB	2.92	5.79
		UK XX01 XXX	3.24	4.46
		MZ XXX-000-XX	3.94	7.00
Average			**3.34**	**5.60**
Yesterday's path on map		MK XX 100 FLS	7.29	6.19
		BG XXXX CB	3.36	5.84
		UK XX01 XXX	2.62	6.22
		MZ XXX-000-XX	4.54	8.66
Average			**4.45**	**6.73**
Last 7 days' path on map		MK XX 100 FLS	9.59	7.17
		BG XXXX CB	11.14	6.06
		UK XX01 XXX	7.23	8.36
		MZ XXX-000-XX	5.48	10.44
Average			**8.36**	**8.01**
Today's graph		MK XX 100 FLS	3.1	5.3
		BG XXXX CB	2.63	4.08
		UK XX01 XXX	2.16	1.73
		MZ XXX-000-XX	2.04	2.25
Average			**2.48**	**3.34**
Yesterday's graph		MK XX 100 FLS	3.7	3.53
		BG XXXX CB	2.33	3.85
		UK XX01 XXX	1.97	3.14
		MZ XXX-000-XX	2.45	2.92
Average			**2.61**	**3.36**
Last 7 days' graph		MK XX 100 FLS	19.45	10.59
		BG XXXX CB	19.19	7.62
		UK XX01 XXX	3.47	3.68
		MZ XXX-000-XX	4.59	6.81
Average			**11.68**	**7.18**
Average response time			**5.89**	**6.38**

This table shows the time it took to complete each action. All times in mm:ss.

Vehicle used	Vehicle class
MK XX 100 FLS	Heavy vehicle
BG XXXX CB	Heavy vehicle
UK XX01 XXX	Light vehicle
MZ XXX-000-XX	Light vehicle

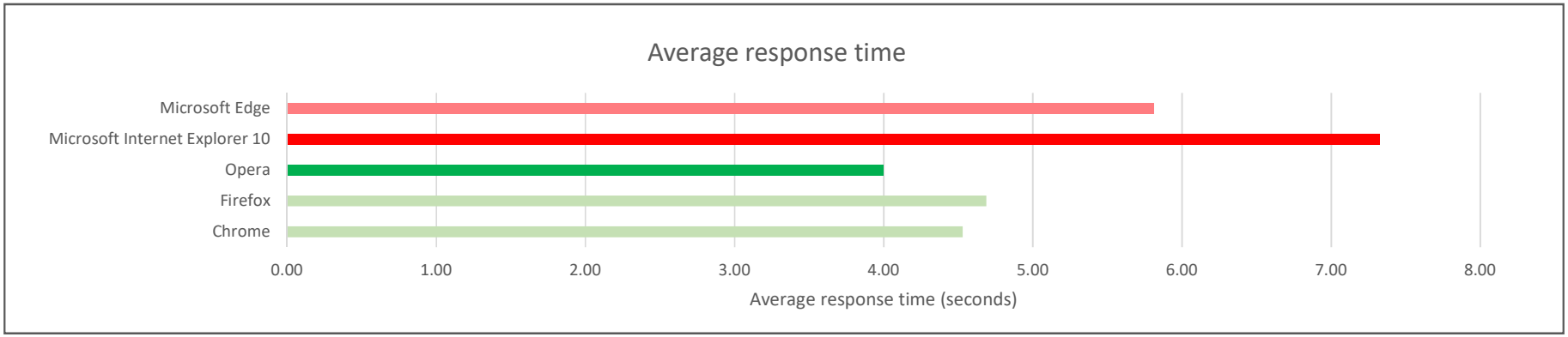
Conclusions

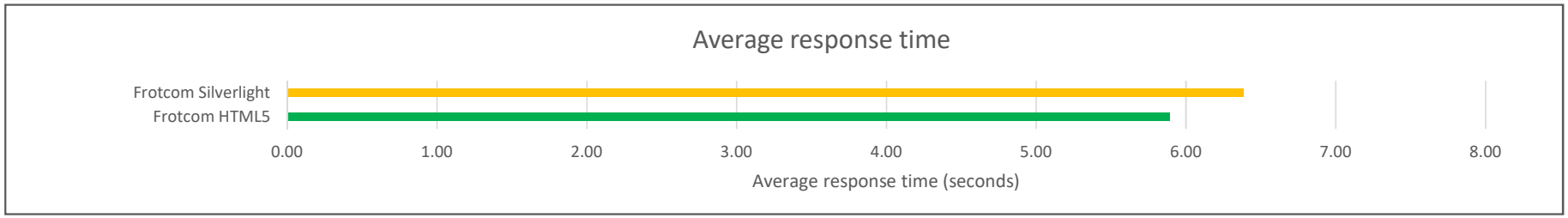
Some conclusions can be taken from the time measurements provided:

1. The browser that ran Frotcom HTML5 faster was Opera
2. The browser that ran Frotcom HTML5 slower was Microsoft Internet Explorer 10
3. Microsoft Edge also presented slower than average results
4. Firefox and Chrome presented average results
5. Frotcom HTML5 is running slightly faster than Frotcom Silverlight

Recommendations

1. Avoid using Microsoft Internet Explorer or Microsoft Edge when using Frotcom HTML5, the response will be slower.
2. Speed is now an additional reason to use Frotcom HTML5 over Frotcom Silverlight.





Technical Info

Hardware, operating system, internet connection and browsers used

The computer used was an Asus - UX303LN 1.0 with 2.40 gigahertz Intel Core i5-4210U with 8GB memory
The operating system was Windows 10 Home (x64) Version 1607 (build 14393.105)
The computer was connected to the Internet via Wifi, through a Wifi router. The Wifi router was connected to a cable modem
(contract: 400Mbps download/40Mbps upload; measured in the computer with speedmeter 26Mbps download/20Mbps upload)
The browsers used were
Chrome version 53.0.2785.116 m
Firefox version 49.0.1
Opera version 40.0.2308.62
Microsoft Internet Explorer 10 version 11.103.14393.0
Microsoft Edge version 38.14393.0.0, Microsoft EdgeHTML 14.14393

HTML5 and Silverlight releases

Frotcom HTML5 release used was 8d3dd64c8be8442 - 2016-09-15 12:35:32
Frotcom Silverlight release used was 1.10.11680.0

Time and location

Measurements for different browsers running Frotcom HTML5 were conducted on September 22nd, 2016, a Thursday.
Measurements for Firefox running Frotcom HTML5 and Frotcom Silverlight were conducted on September 28th, 2016, a Wednesday.
The location was Frotcom International's office in Linda-a-Velha, Portugal

Procedures

Different vehicles (2 with long haul and 2 with local activity only) were selected for the tests
Time measurements were performed once for each of vehicle. In the end, the average of the four measures was calculated

The time measurements with the different browsers running Frotcom HTML5 were conducted as close to each other as possible (withing a few minutes), to make sure the tests would not be affected by different number of vehicle records, different internet connection speeds or different memory load in the computer.

Similarly, the time measurements with Frotcom HTML5 vs. Frotcom Silverlight were conducted as close to each other as possible (withing a few minutes), to make sure the tests would not be affected by different number of vehicle records, different internet connection speeds or different memory load in the computer.
For the HTML5 vs. Silverlight comparison, the Firefox browser was selected.