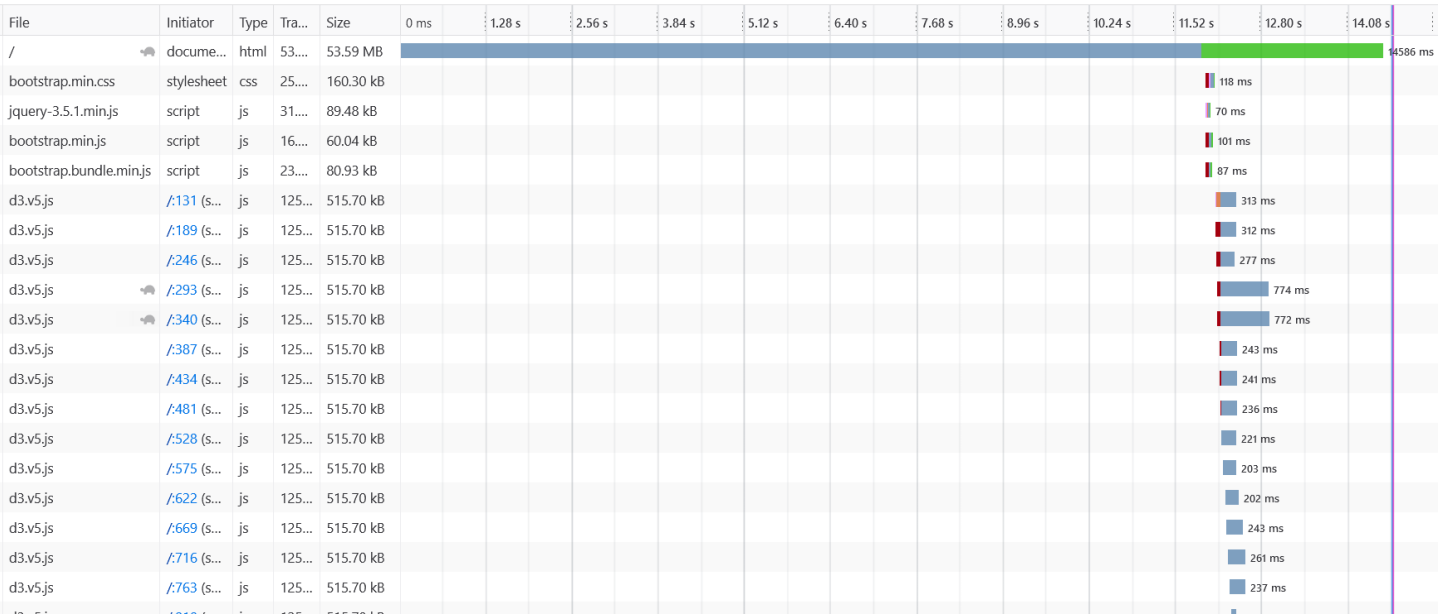


# Performance Testing

## Local Testing (Cache Disabled)

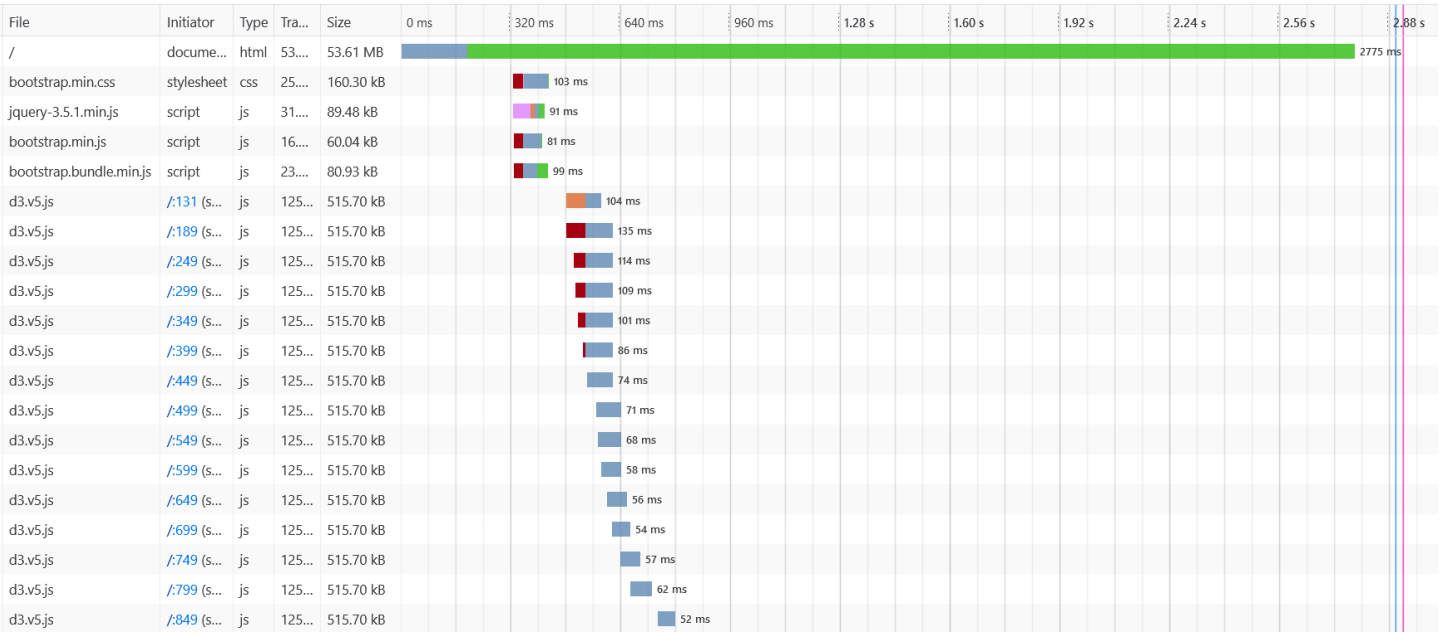
Home page (Using real-time heatmaps):

Total requests: 54  
Load time: 16.38s  
Slow Requests: 3



Home page (Using pre-calculated heatmaps):

Total requests: 42  
Load time: 3.17s  
Slow Requests: 0



We found that using pre-calculated tweet frequency heatmaps improved performance significantly. This can be attributed to the large size of our dataset, numbering around ~400,000 tweets, and the processing required to get the data into a format suitable for heatmaps.

### Daily Page:

Total requests: 72  
Load time: 1.16s  
Slow Requests: 0

File	Initiator	Type	Trans...	Size	0 ms	160 ms	320 ms	480 ms	640 ms	800 ms	960 ms	1.12 s	1.28 s
/daily/	document	html	353.3...	353.08 kB	12 ms								
bootstrap.r	stylesheet	css	25.86...	160.30 kB	78 ms								
jquery-3.5.	script	js	31.32...	89.48 kB	50 ms								
bootstrap.r	script	js	16.40...	60.04 kB	74 ms								
bootstrap.k	script	js	23.29...	80.93 kB	58 ms								
d3.v5.js	/daily/:163...	js	125.7...	515.70 kB		51 ms							
d3.v5.js	/daily/:224...	js	125.7...	515.70 kB		51 ms							
d3.v5.js	/daily/:281...	js	125.7...	515.70 kB		58 ms							
d3.v5.js	/daily/:338...	js	125.7...	515.70 kB		62 ms							
d3.v5.js	/daily/:395...	js	125.7...	515.70 kB		47 ms							
d3.v5.js	/daily/:454...	js	125.7...	515.70 kB		50 ms							
d3.v5.js	/daily/:511...	js	125.7...	515.70 kB		50 ms							
d3.v5.js	/daily/:568...	js	125.7...	515.70 kB		45 ms							
d3.v5.js	/daily/:625...	js	125.7...	515.70 kB		61 ms							

### Key Dates Page:

Total requests: 34  
Load time: 1.7s  
Slow Requests: 1

File	Initiator	Type	Trans...	Size	0 ms	320 ms	640 ms	960 ms	1.28 s	1.60 s	
/keyd...	document	html	166.3...	166.04 kB	1224 ms						
bootstrap.r	stylesheet	css	25.86...	160.30 kB					51 ms		
jquery-3.5.	script	js	31.32...	89.48 kB					41 ms		
bootstrap.r	script	js	16.40...	60.04 kB					33 ms		
bootstrap.t	script	js	23.29...	80.93 kB					49 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					39 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					44 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					40 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					49 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					44 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					42 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					49 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					46 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					42 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					45 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					47 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					50 ms		
d3.v5.js	/keydates/...	js	125.7...	515.70 kB					52 ms		
d3.v5.js	/keyvdates/...	is	125.7...	515.70 kB					55 ms		

Models Page:

Total requests: 14  
Load time: 2.77s  
Slow Requests: 1

File	Initiator	Type	Trans...	Size	0 ms	640 ms	1.28 s	1.92 s	2.56 s	
/mode...	document	html	141.4...	141.11 kB	2134 ms					
bootstrap.r	stylesheet	css	25.86...	160.30 kB					420 ms	
jquery-3.5.	script	js	31.32...	89.48 kB					223 ms	
bootstrap.r	script	js	16.40...	60.04 kB					227 ms	
bootstrap.t	script	js	23.29...	80.93 kB					234 ms	
1*LB-G6Wf	img	png	22.79...	21.88 kB					373 ms	
tree.png	img	png	14.94...	14.49 kB					539 ms	
image7_a1	img	png	72.74...	72.06 kB					369 ms	
k-nearest-r	img	png	7.61 kB	6.85 kB					390 ms	
d3.v5.js	/models/1...	js	125.7...	515.70 kB					42 ms	
d3.v5.js	/models/2...	js	125.7...	515.70 kB					43 ms	
mpld3.v0.5	/models/2...	js	15.99...	63.82 kB					32 ms	
mpld3.v0.5	/models/2...	js	15.99...	63.82 kB					38 ms	
favicon.ico	FaviconLo...	html	3.26 kB	2.96 kB					4 ms	

About Page:

Total requests: 6  
Load time: 236ms  
Slow Requests: 0

File	Initiator	Ty...	Tra...	Size	0 ms	80 ms	160 ms	240 ms
/about/	docum...	ht...	5.1...	4.84 kB	1 ms			
bootstrap.min.css	stylesh...	css	25....	160.30 kB			155 ms	
jquery-3.5.1.min.js	script	js	31....	89.48 kB		73 ms		
bootstrap.min.js	script	js	16....	60.04 kB		120 ms		
bootstrap.bundle.min	script	js	23....	80.93 kB		101 ms		
favicon.ico	Favico...	ht...	3.4...	3.13 kB				10 ms