

# INSTRUCTIONAL ASSISTANTS PROGRAM ANALYSIS FOR

Northeastern University  
Information Technology Services

By Group 21

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# WHAT IS THE IA PROGRAM?



Common Terminologies  
Dispatch - Incident  
Kickoff - Request for Starting a Class

# HYPOTHESIS

## Factors impacting IA Program's performance

- Weather effects on dispatch resolution duration
- Requestor's knowledge and awareness of reporting issues
- Limited scope of ITS IA Program
- Correlation between Classroom technologies, Dispatches, and Buildings
- Dispatches in Hightech Classrooms more vs Regular classrooms
- Weekend and Holiday effects on dispatches
- Resource allotment for the building zones



# EXPLORATORY DATA ANALYSIS

- Data Sets:  
IA Dispatch Log, IA Response Log,  
Boston Weather Data Set
- Key Variables:  
Time of Dispatch, Location of Dispatch , Dispatch  
Issue, Dispatch Resolution, Weather conditions
- Extracting details from dispatch comments  
to populate missing data
- Merging of datasets based on time,  
building, classroom number
- Addition of weather variables to existing  
datasets





	A	B	C	F	G	H	I	J
1	SnC	Start time	Completion time	Building	Room No.	Brief summary of reason for dispatch? Example: Microphone support, computer not responding, Classroom Kickoff	Was this issue in scope of support (AV Support, Zoom Support, Basic Canvas)?	Is escalation to AV Dispatch required?
2	3	9/8/20 14:43:48	9/8/20 14:43:48	Ryder	233	System is not turning on	Yes	No
3	4	9/9/20 7:53:37	9/9/20 7:57:50	Shillman Hall	220	Camera setting , Zoom meeting launch and share screen related issues solved.	Yes	No
4	5	9/9/20 8:23:44	9/9/20 8:24:10	Kariotis	309	Front camera not working. Classroom type is standard	No	Yes
5	6	9/9/20 8:33:30	9/9/20 8:35:11	Ryder	271	Missing USB port to login using token.	Yes	No
6	7	9/9/20 8:33:20	9/9/20 8:35:12	Hastings	204	Professor was not able to access the computer remotely. I tried connecting physically	No	Yes
7	8	9/9/20 8:35:14	9/9/20 8:35:57	Ryder	277	Zoom video was not working.	Yes	No
8	9	9/9/20 8:31:14	9/9/20 8:36:12	Hastings	202	Classroom was off-site where kick-off was required, but this classroom was listed as on-site	Yes	No
9	10	9/9/20 8:37:54	9/9/20 8:38:48	Snell Engineering	168	Helped professor with sharing presentation with students	Yes	No
10	11	9/9/20 8:37:50	9/9/20 8:40:26	East Village	008	Needed help with turning on the computer and initiating zoom call	Yes	No
11	12	9/9/20 8:39:23	9/9/20 8:41:19	Snell Engineering	108	Professor was not acquainted in using Zoom calls and also needed some help to get started	Yes	Yes
12	13	9/9/20 8:43:16	9/9/20 8:43:50	Dodge	370	Audio not working	Yes	Yes
13	14	9/9/20 9:24:41	9/9/20 9:25:06	Ryder	285	The PC was shut down	Yes	Yes
14	15	9/9/20 9:27:20	9/9/20 9:28:01	Ryder	291	System did not allow us to login.	Yes	Yes
15	16	9/9/20 9:41:31	9/9/20 9:43:26	Hastings	100	Kick off class, listed as onsite	Yes	No
16	17	9/9/20 8:40:54	9/9/20 9:44:26	East Village	024	Projector screen did not descend from the ceiling	Yes	Yes
17	18	9/9/20 9:43:01	9/9/20 9:44:58	ISEC	138	Audio issues	Yes	No
18	19	9/9/20 9:44:31	9/9/20 9:45:00	Hastings	100	Class kickoff	Yes	No
19	20	9/9/20 9:45:52	9/9/20 9:46:08	ISEC	142	Issues with Screen	No	Yes
20	21	9/9/20 9:46:53	9/9/20 9:47:51	Shillman	220	Mic was not working and even Zoom	Yes	No
21	22	9/9/20 9:48:44	9/9/20 9:49:05	Shillman	420	Kickoff	Yes	Yes
22	23	9/9/20 9:45:18	9/9/20 9:49:37	East Village	002	The professor wants the Camera focusing on White board. I cannot find any camera in the room	Facilities	Yes
23	24	9/9/20 10:01:11	9/9/20 10:01:46	ISEC	102	Projector Interruptions	Yes	Yes
24	25	9/9/20 10:06:34	9/9/20 10:08:29	Hurtig Hall	129	Computer was showing blank screen and restarting the computer fixed the problem	No	No
25	26	9/9/20 10:06:32	9/9/20 10:09:34	Shillman Hall	SH 320	Camera not working. Tried to follow basic fixing steps but still problem was there.	Yes	Yes
26	27	9/9/20 10:37:57	9/9/20 10:38:18	Hayden	222	Starting a zoom meeting	Yes	No
27	28	9/9/20 10:42:44	9/9/20 10:43:25	Ryder	429	Starting the Zoom meeting	Yes	No
28	29	9/9/20 10:45:47	9/9/20 10:46:23	West Village F	010	Kick-Off	Yes	No
29	30	9/9/20 10:54:41	9/9/20 10:56:22	Ryder	207	Starting the zoom meeting	Yes	No
30	31	9/9/20 11:21:55	9/9/20 11:23:13	Dodge	DG050	Kickoff	No	No
31	32	9/9/20 10:56:18	9/9/20 11:31:17	Ryder	124	Issue with Audio. Solved before IA got there	Yes	No
32	33	9/9/20 11:39:41	9/9/20 11:41:15	Dodge	DG140	Prof requires to kick-off	Yes	No
33	34	9/9/20 11:44:09	9/9/20 11:44:37	Ryder	243	Mic volume was low	Yes	No
34	35	9/9/20 11:50:24	9/9/20 11:50:59	Dockser	042	Camera wasn't working	Yes	No
35	36	9/9/20 11:52:17	9/9/20 11:52:47	Ryder	297	Started the Zoom meeting	Yes	No
36	37	9/9/20 12:03:20	9/9/20 12:03:41	Ryder	203	Help starting the meeting	Yes	No
37	38	9/9/20 12:02:18	9/9/20 12:04:02	Richards	236	Unable to login(classroom computer), unable to start a zoom call due to system issues	No	No
38	39	9/9/20 12:10:54	9/9/20 12:13:44	Hayden	HA424	The zoom link was different from the one shared with us, hence asked a student to help	No	No
39	40	9/9/20 12:16:01	9/9/20 12:17:21	Hastings	204	Not able to connect classroom PC to the internet	Yes	Yes
40	41	9/9/20 12:18:01	9/9/20 12:19:23	Dodge	370	The students were hearing the lecture from the different classroom i.e 430 and not 430	No	No
41	42	9/9/20 12:24:12	9/9/20 12:25:31	Ryder	RY271	No signal on Zoom call and camera went blank	No	Yes
42	43	9/9/20 12:25:28	9/9/20 12:25:52	Robinson	411	Setting up the system.	Yes	No
43	44	9/9/20 12:26:17	9/9/20 12:26:43	West Village F	020	Kick-Off	Yes	No
44	45	9/9/20 12:28:53	9/9/20 12:29:43	Hayden	HA322	The mic was off hence students couldn't hear well	No	No
45	46	9/9/20 12:31:52	9/9/20 12:35:03	Shillman	210	Professor was using 2 devices. He wanted to present from his personal device and not the classroom computer	Yes	No
46	47	9/9/20 12:35:27	9/9/20 12:37:09	Shillman	305	Computer was slow. Had issues with network. Hdmi was not working.	Yes	No

# VISUALIZATION - 1

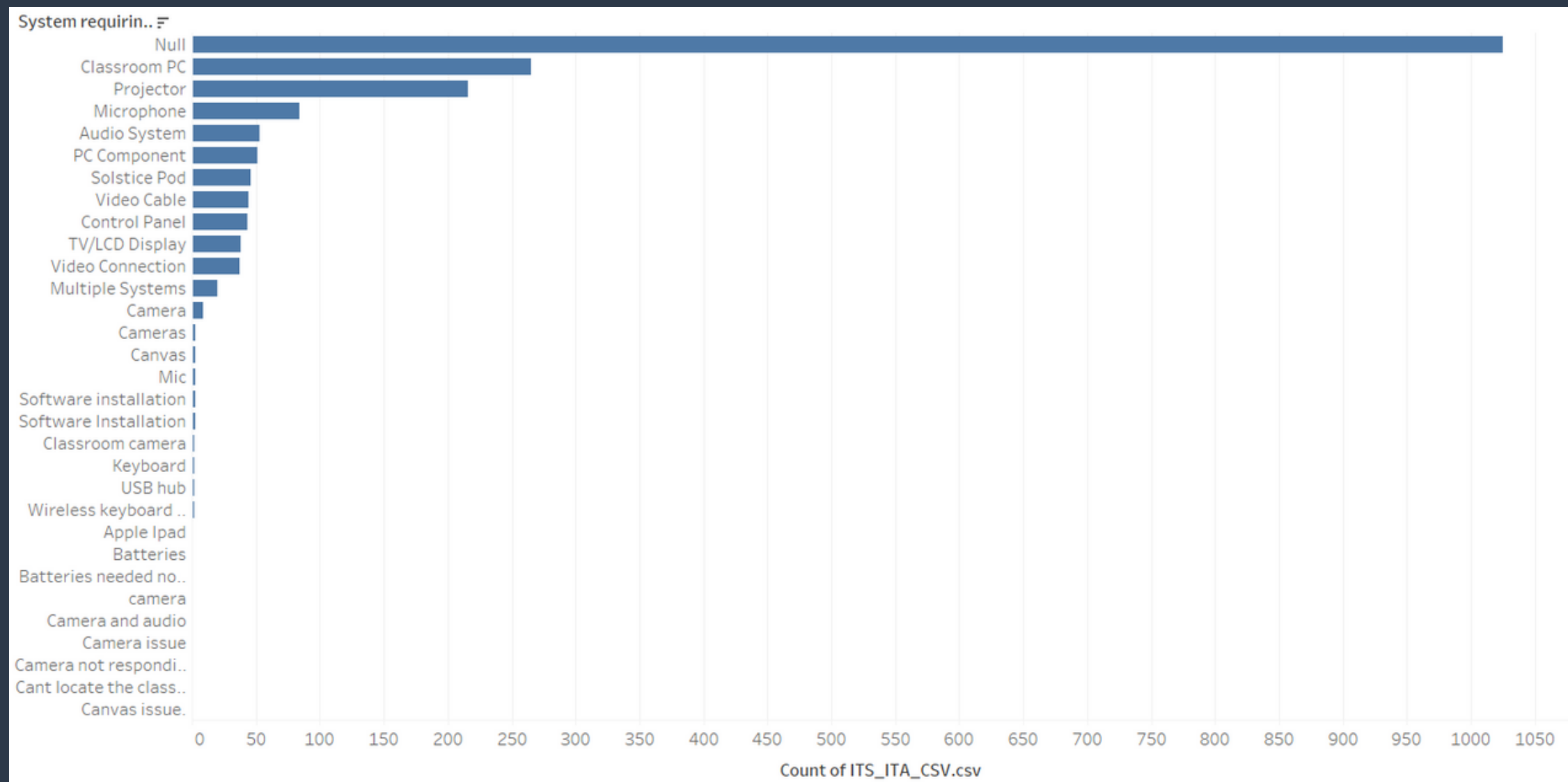
Building	September	October	November	December
140 The Fenway	1	2	1	
Behrakis	42	34	17	4
Canhers Hall	1			3
Cargill	5	9	2	1
Churchill	11	11	6	
Dockser	10	7	3	1
Dodge	86	46	23	10
East Village	30	17	15	6
Egan	1		3	1
Ell	18	11	8	2
Forsyth	48	28	22	7
Hastings	38	28	12	4
Hayden	36	13	10	1
Holmes	7	6	2	
Hurtig	23	7	8	
International Village	7	19	7	3
ISEC	17	13	4	3
Kariotis	48	21	8	5
Knowles	17	6	4	
Lake				1
Mugar	2	3	5	
Renaissances Park	3	1		
Richards	66	54	27	5
Robinson	14	10	4	
Ruggles	1	3	1	
Ryder	195	102	51	21
Shillman	73	31	19	7
Snell Engineering	12	9	5	
Snell Library	115	61	34	13
Stetson East	1	8		2
West Village C	1	2	1	
West Village F	22	11	4	2
West Village G	32	20	6	
West Village H	7	11	6	
Grand Total	990	604	318	102

## Buildings Vs Dispatches in Fall Semester 2021

- We noticed a high number of dispatches in September 2021 in the Ryder Zone but it decreases as the semester progresses
- Few buildings such as Canhers hall, Holmes, Egan, Lake, Mugar West Village C, Stetson East has low number of dispatches
- Dispatches month on month decreased exponentially
- There are around 7-8 buildings with the highest number of dispatches



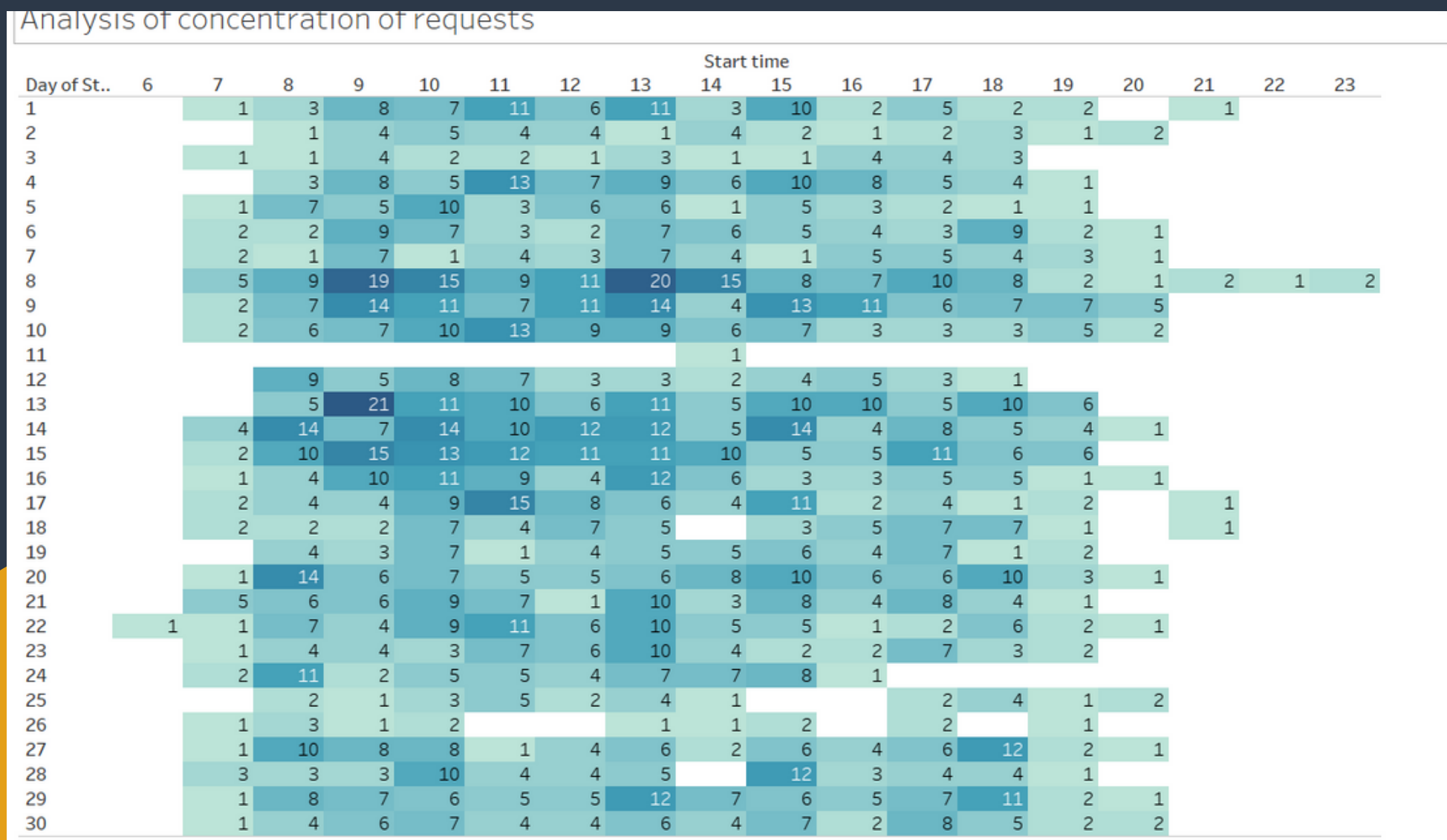
# VISUALIZATION - 2



Number of reported incidents for each device

- More number of reported incidents pertains to classroom PC which is the most used device
- It would be advisable to periodically check the functioning of PCs on the starting day of week to prevent raising more incidents.
- Another suggestion would be to check the functioning of monitors after any club event or gathering

# VISUALIZATION - 3



Concentration of requests raised filtered based on Day of month & Hour of a day

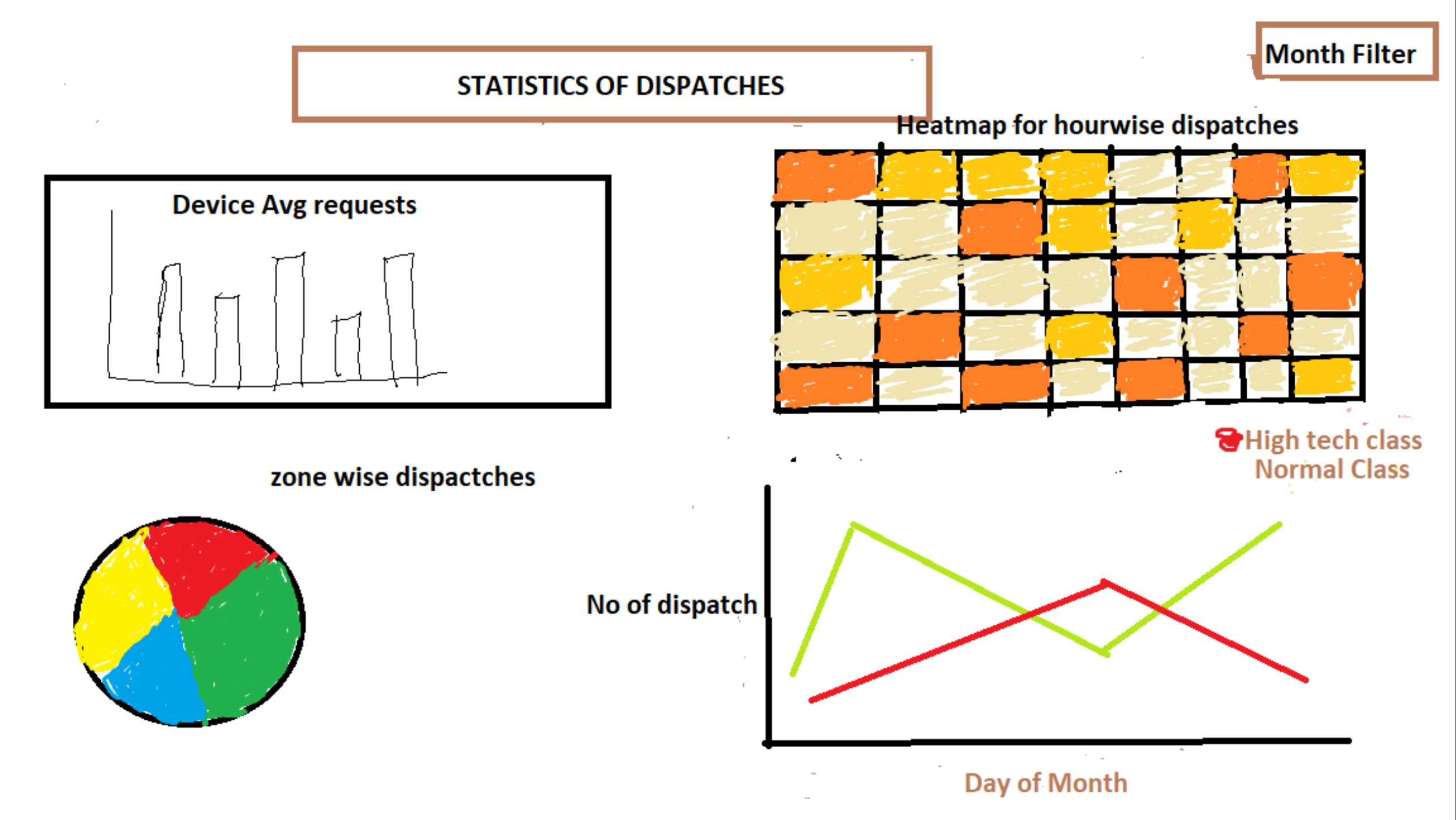
- More number of requests raised during the initial working hours of day
- During the lunch hours less number of requests are raised as there are less number of classes being organized



## Recommendations to IA team :

- Analyzing reported incidents we can provide suggestions to the IA team to improve student class room experience.
- Identification of the knowledge gap and resolution of the same
- IA team can be prepared for the inflow of incidents that repeat periodically

# Dashboard Pencil Sketch





**Q/A**

**THANK YOU!!!**